



14995-A
SEPTEMBER 2010

Heavy Duty V-Belt Drive Design Manual



RUN WITH US
HIGH PERFORMANCE BELT DRIVES

Heavy Duty V-Belt Drive Design Manual

PREFACE

This manual includes tables, specifications and procedures necessary to design drives using the following Gates Heavy Duty Industrial Belts:

- **Super HC® V-Belts and Super HC PowerBand® Belts**
- **Super HC Molded Notch V-Belts and Super HC Molded Notch PowerBand Belts**
- **Hi-Power® II V-Belts and Hi-Power II PowerBand Belts**
- **Tri-Power® Molded Notch V-Belts**
- **Predator® and Predator PowerBand Belts**

Included are sections on special drives such as:

- **Speedup**
- **V-Flat**
- **Idler**
- **Quarter-Turn**
- **Variable Pitch V-Belt**

SAFETY POLICY

WARNING! Be Safe! Gates belt drive systems are very reliable when used safely and within Gates application recommendations. However, there are specific **USES THAT MUST BE AVOIDED** due to the risk of serious injury or death. These prohibited misuses include:

Primary In-Flight Aircraft Systems

Do not use Gates belts or sheaves on aircraft, propeller or rotor drive systems or in-flight accessory drives. Gates belt drive systems are not intended for aircraft use.

Lift Systems

Do not use Gates belts or sheaves in applications that depend solely upon the belt to raise/lower, support or sustain a mass without an independent safety backup system. Gates belt drive systems are not intended for use in applications requiring special "Lift" or "Proof" type chains with minimum tensile strength or certified/test tensile strength requirements.

Braking Systems

Do not use Gates belts or sheaves in applications that depend solely upon the belt to slow or stop a mass, or to act as a brake without an independent safety backup system. Gates belt drive systems are not intended to function as a braking device in "emergency stop" systems.



Online Drive Design and Engineering Tools at www.gates.com/drivedesign

Fast and easy resources for selecting and maintaining Gates belt drive systems.

- quickly find the product information you need
- get answers, solve problems and develop solutions
- create drive designs in minutes

Design Flex[®] Pro[™]



Design Flex[®] Pro[™]

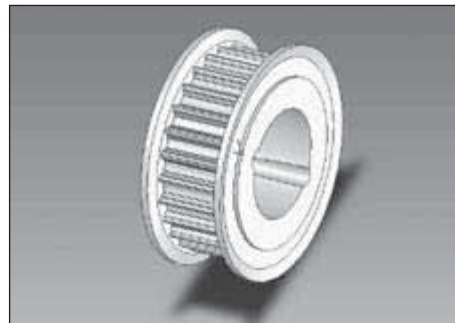
If you currently design 2-point drives using manuals, then you know how long it can take and that you only get one solution. With Gates Design Flex[®] Pro[™] program, you can design a drive in minutes, and get every possible drive solution that fits your design parameters. Plus, you can print, email and create a PDF of the design specifications. Use Design Flex Pro to:

- convert rollerchain drives to Poly Chain[®] GT[®] Carbon[™] belt drive systems
- quickly and correctly design 2-point drives
- get multiple design solutions
- see both V-belt and synchronous options
- design using different languages for customers outside the US
- save time and money

Drive Design Manuals, Catalogs and Charts and more

View and download PDF versions of Gates Power Transmission Systems Catalog, Belt Number & Identification Chart and Drive Design Manuals.

Part View[™]



Part View[™]

This software program offers a faster, easier way to obtain complete dimensions, CAD drawings and 3D solid models of Gates belts and hardware. You can also generate detailed information sheets for most belts in a PDF format.

Design IQ[™]



Design IQ[™]

This program provides a blank slate for designing multi-point and complex serpentine belt drives. Utilizing a specific Gates product that you have identified, as well as your drive specifications, the software will calculate belt tension, shaft load, belt length and more.

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SECTION A

Introduction to Heavy Duty V-Belt Drives

Product Features

Product Features

This Manual Guides You in Designing Drives Using These Gates V-Belts



Super HC[®] V-Belts

3V250 through 3V1400
5V500 through 5V3550
8V1000 through 8V6000

Super HC[®] Molded Notch V-Belts

3VX250 through 3VX1400
5VX350 through 5VX2000
8VX1000 through 8VX2000

Super HC[®] PowerBand[®] Belts

2/3V300 through 6/3V1400
2/5V500 through 5/5V3550
3/8V1000 through 5/8V6000

Super HC[®] Molded Notch PowerBand Belts

2/3VX250 through 6/3VX1400
2/5VX500 through 6/5VX2000

Hi-Power[®] II V-Belts

A20 through A200
B24 through B472
C44 through C450
D90 through D660

Product Features

This Manual Guides You in Designing Drives Using These Gates V-Belts



Tri-Power® Belts

AX21 through AX173
BX24 through BX300
CX51 through CX360

Hi-Power® II PowerBand® Belts

2/A42 through 2/A180
2/B35 through 6/B315
2/C60 through 5/C420
2/D144 through 5/D660

Predator® Single Length Belts

5VP800 through 5VP3550
8VP1600 through 8VP3550
AP31 through AP91
BP32 through BP195
CP85 through CP240
SPB1260P through SPB8000P
SPC2000P through SPC9000P

Predator® PowerBand Belts

2/3VP450 through 5/3VP1400
2/5VP600 through 5/5VP3550
3/8VP1000 through 5/8VP6000
3/CP85 through 4/CP360

Product Features

Super HC® V-Belts

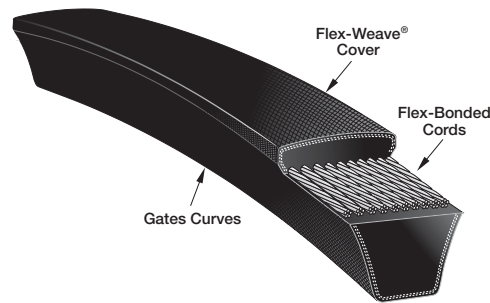
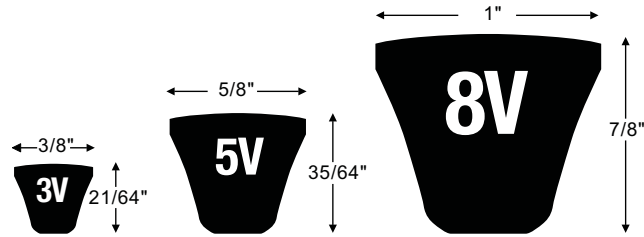
Pioneered by Gates, these “narrow” cross-sections can transmit up to three times the horsepower of the classical cross-sections (A, B, C, and D) in the same amount of drive space.

Markets/Applications

Suitable for all industrial applications, particularly where space, weight and horsepower capacity are critical.

Features/Advantages

- **Gates Curves** provide proper cord support and full contact with the sheave-groove for uniform loading, uniform wear, and increased belt life.
- **Flex-Bonded Cords** are strongly bonded to the body of the belt resulting in equal load distribution and the absorption of bending stress without cord deterioration.
- The **Flex-Weave Cover** is a patented construction for longer cover life, providing extended protection to the core of the belt from oil, dirt, and heat.
- Meets RMA **oil and heat resistant** standards.
- Meets RMA **static conductivity** requirements.



Super HC® Molded Notch Belts

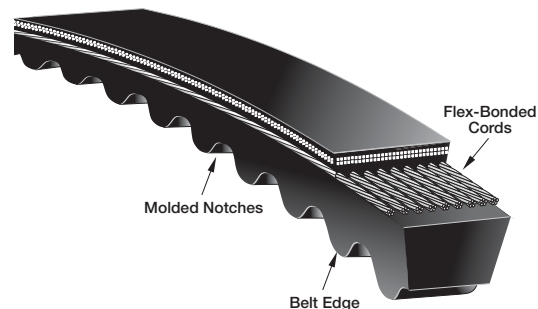
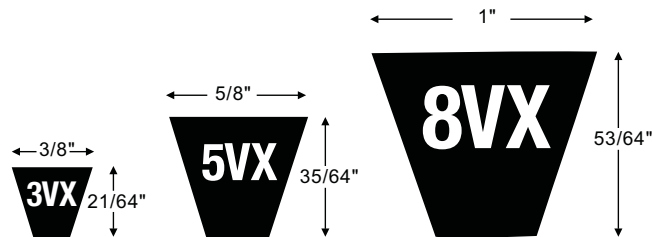
Constructed with Gates proprietary construction, this belt has a superior combination of flex and load carrying capacity, as well as transmitting more horsepower than the classical cross sections in the same amount of drive space.

Markets/Applications

Suitable for all industrial applications, particularly where space, weight and horsepower capacity are critical.

Features/Advantages

- Gates patented EPDM rubber compound technology.
- **Notches molded** into the belt during manufacturing make this belt well suited for drives with smaller diameter sheaves.
- **Belt Edge** is machined for even sheave groove contact resulting in less slip and wear.
- **Flex-Bonded Cords** are strongly bonded to the body of the belt resulting in equal load distribution and the absorption of bending stress without cord deterioration.
- Meets RMA **oil and heat resistant** standards.
- Meets RMA **static conductivity** requirements.



Product Features

Super HC® PowerBand® Belts

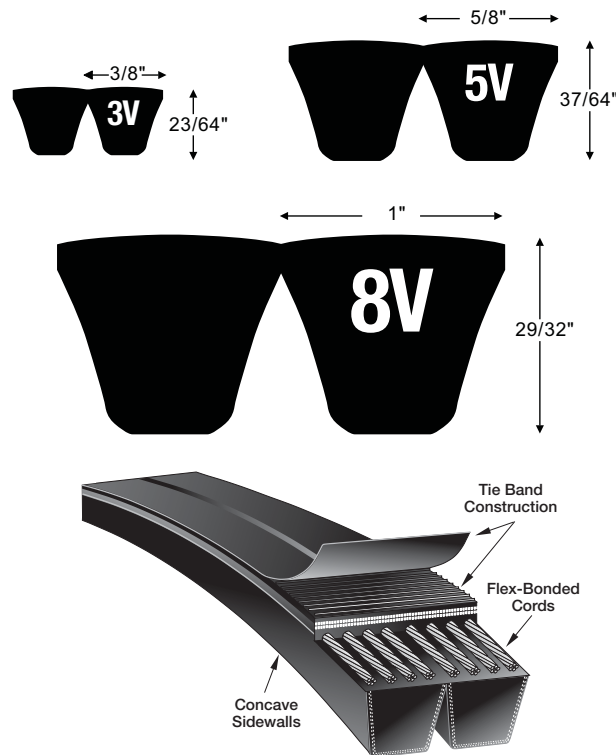
The PowerBand construction allows multiple belts to function as a single unit, with even load distribution and each strand fitting securely in the sheave groove.

Markets/Applications

Recommended for multiple V-belt drives exposed to pulsating or heavy shock loads which can make belts whip, turn over or jump off the drive.

Features/Advantages

- The **Tie Band** assures high lateral rigidity, guiding the belt in a straight line and preventing it from coming off the drive.
- **Concave sidewalls** provide proper cord support and full contact with the sheave-groove for equal loading and uniform wear.
- **Flex-Bonded Cords** are strongly bonded to the body of the belt resulting in equal load distribution and absorption of bending stress without cord deterioration.
- Meets RMA **oil and heat resistant** standards.
- Meets RMA **static conductivity** requirements.



Super HC® Molded Notch PowerBand® Belts

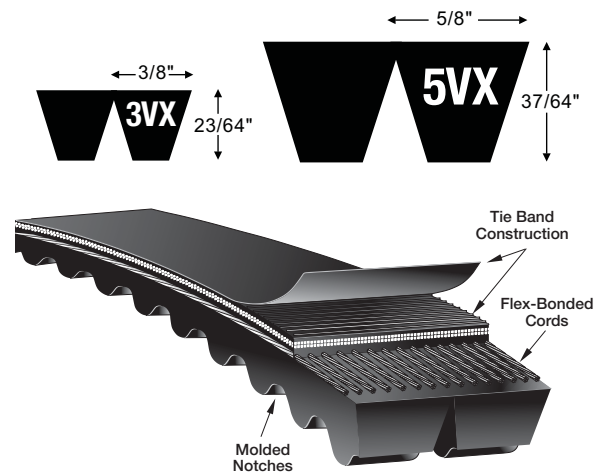
The PowerBand construction allows multiple belts to function as a single unit, with even load distribution and each strand fitting securely in the sheave groove.

Markets/Applications

Recommended for multiple V-belt drives exposed to pulsating or heavy shock loads which can make belts whip, turn over or jump off the drive.

Features/Advantages

- Gates patented EPDM rubber compound technology.
- The **Tie Band** assures high lateral rigidity, guiding the belt in a straight line and preventing it from coming off the drive.
- **Notches molded** into the belt during manufacturing make this belt well suited for drives with smaller diameter sheaves.
- **Flex-Bonded Cords** are strongly bonded to the body of the belt resulting in equal load distribution and absorption of bending stress without cord deterioration.
- Meets RMA **oil and heat resistant** standards.
- Meets RMA **static conductivity** requirements.



Product Features

Hi-Power II® Belts

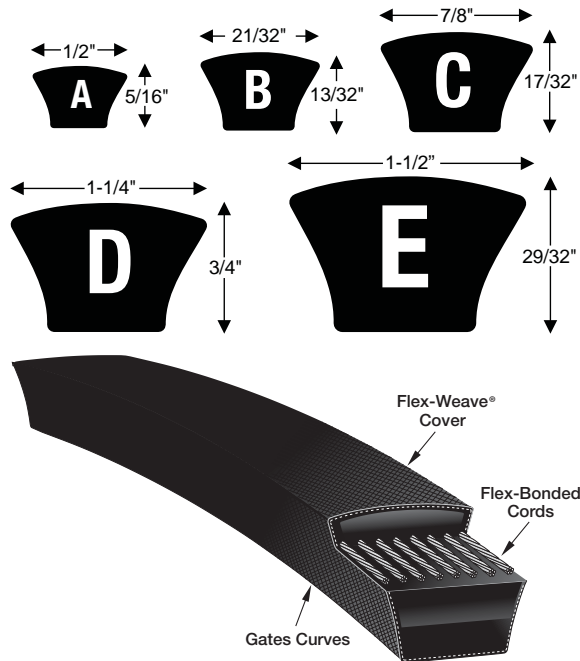
Featuring a composite, multi-purpose construction, these belts resist oil and heat, ozone, sunlight, weather, and aging.

Markets/Applications

Suitable for all industrial applications, including v-flat drives.

Features/Advantages

- **Gates Curves** provide proper cord support and full contact with the sheave-groove for uniform loading, uniform wear, and increased belt life.
- **Flex-Bonded Cords** are strongly bonded to the body of the belt resulting in equal load distribution and the absorption of bending stress without cord deterioration.
- The **Flex-Weave Cover** is a patented construction for longer cover life, providing extended protection to the core of the belt from oil, dirt, and heat.
- Meets RMA **oil and heat resistant** standards.
- Meets RMA **static conductivity** requirements.



Tri-Power® Belts

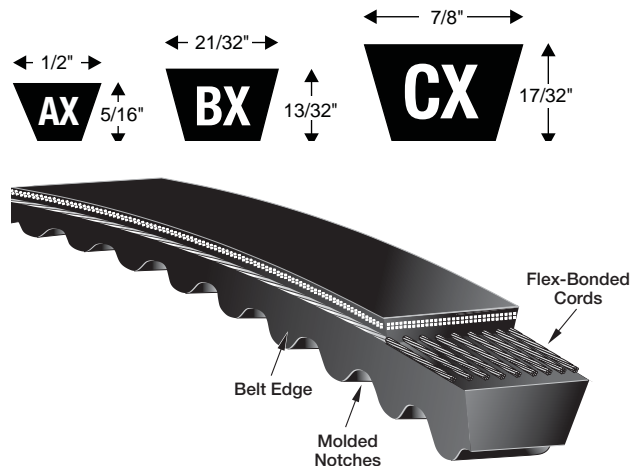
Featuring a composite, multi-purpose construction, these belts resist oil and heat, ozone, sunlight, weather, and aging.

Markets/Applications

Suitable for all industrial applications, including v-flat drives.

Features/Advantages

- Gates patented EPDM rubber compound technology.
- **Gates Curves** provide proper cord support and full contact with the sheave-groove for uniform loading, uniform wear, and increased belt life.
- **Flex-Bonded Cords** are strongly bonded to the body of the belt resulting in equal load distribution and the absorption of bending stress without cord deterioration.
- The **Flex-Weave Cover** is a patented construction for longer cover life, providing extended protection to the core of the belt from oil, dirt, and heat.
- Meets RMA **oil and heat resistant** standards.
- Meets RMA **static conductivity** requirements.



Product Features

Hi-Power II® PowerBand® Belts

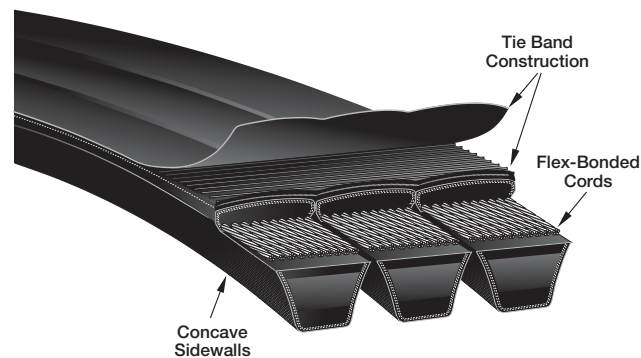
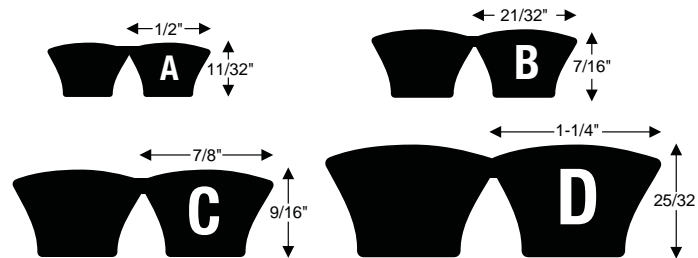
The PowerBand construction allows multiple belts to function as a single unit, with even load distribution and each strand fitting securely in the sheave groove.

Markets/Applications

Recommended for drives where single belts vibrate, turn over or jump off the drive.

Features/Advantages

- The **Tie Band** assures high lateral rigidity, guiding the belt in a straight line and preventing it from coming off the drive.
- **Concave sidewalls** provide proper cord support and full contact with the sheave-groove for equal loading and uniform wear.
- **Flex-Bonded Cords** are strongly bonded to the body of the belt resulting in equal load distribution and absorption of bending stress without cord deterioration.
- Meets RMA **oil and heat resistant** standards.
- Meets RMA **static conductivity** requirements.



Predator® Single Belts

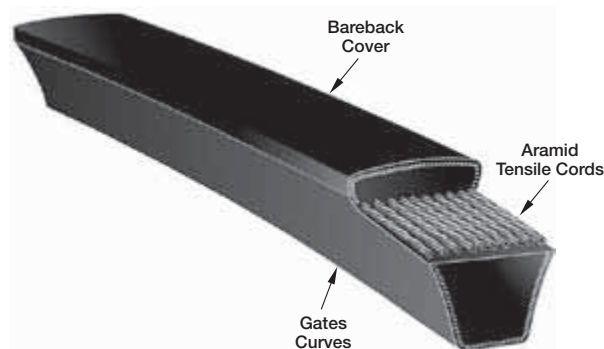
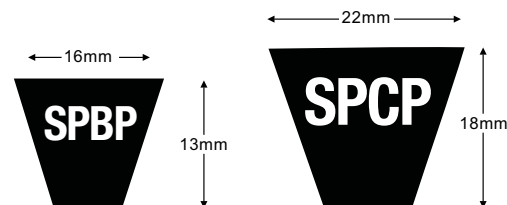
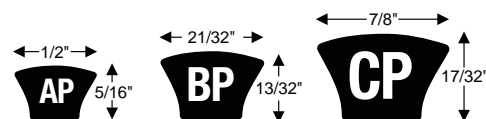
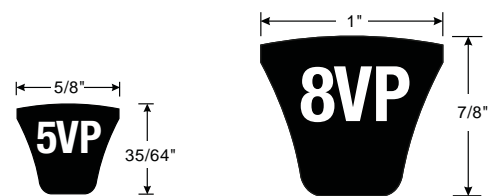
Specifically designed for aggressive applications, this extra heavy-duty belt construction provides extraordinary high impact strength, capacity, and wear resistance.

Markets/Applications

Predator belts are well suited as replacement belts for applications exposed to pulsating loads or heavy shock loads, such as mining, agriculture, wood processing, oil field equipment, heavy construction and sand/gravel operations.

Features/Advantages

- Aramid Tensile Cords combine limited stretch with extraordinary strength and durability that is pound-for-pound stronger than steel.
- Bareback Cover resists debris and allows the belt to slip un-der extreme shock load conditions, reducing heat buildup and prolonging belt life.
- Gates Curves provide proper cord support and full contact with the sheave-groove for equal loading, uniform wear, and increased belt life.
- Meets RMA oil and heat resistant standards.



Product Features

Predator® PowerBand® Belts

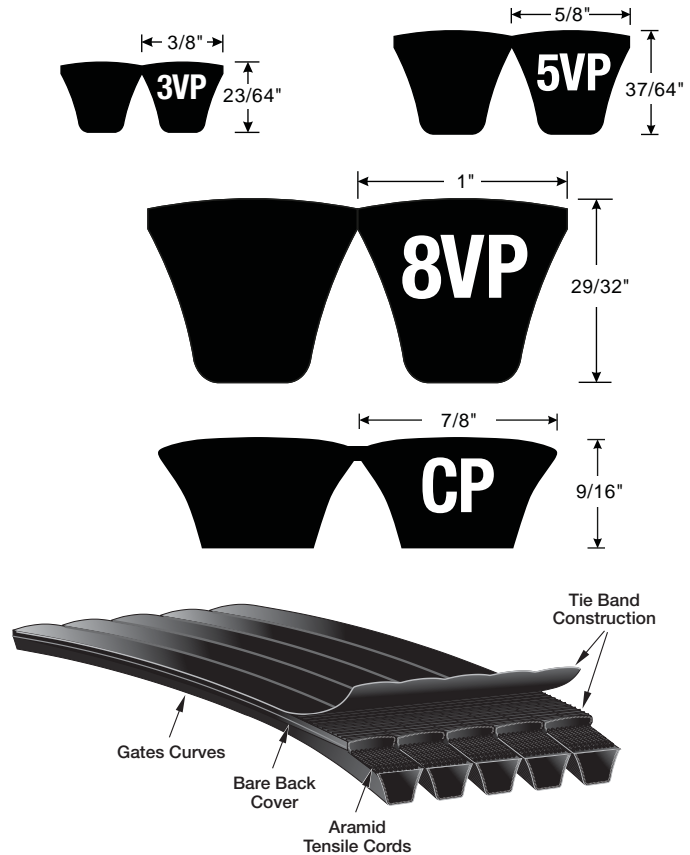
Specifically designed for aggressive applications, this extra heavy-duty belt construction provides extraordinary high impact strength, capacity, and wear resistance.

Markets/Applications

Predator belts are well suited as replacement belts for applications exposed to pulsating loads or heavy shock loads, such as mining, agriculture, wood processing, oil field equipment, heavy construction and sand/gravel operations.

Features/Advantages

- Aramid Tensile Cords combine limited stretch with extraordinary strength and durability that is pound-for-pound stronger than steel.
- Multiple layer Tie Band provides excellent lateral rigidity to prevent belts from turning over or from coming off of the drive
- Bareback Cover resists debris and allows the belt to slip un-der extreme shock load conditions, reducing heat buildup and prolonging belt life.
- Gates Curves provide proper cord support and full contact with the sheave-groove for equal loading, uniform wear, and increased belt life.



SECTION B **Drive Selection Procedures**

- Stock Drive Selection
- NEMA Minimum Recommended
- Sheave Diameters
- Narrow Section V-Belt
 - Stock Belt Lengths
 - Super HC
 - Super HC Molded Notch
 - Super HC Predator
 - Drive Selection Tables
 - Super HC
 - Super HC Molded Notch
 - Super HC Predator
 - Horsepower Rating Tables
 - Super HC
 - Super HC Molded Notch
 - Super HC Predator
- Classical Section V-Belt
 - Stock Belt Lengths
 - Hi-Power II
 - Tri- Power Molded Notch
 - Hi-Power II Predator
 - Drive Selection Tables
 - Hi-Power II
 - Tri- Power Molded Notch
 - Hi-Power II Predator
 - Horsepower Rating Tables
 - Hi-Power II
 - Tri- Power Molded Notch
 - Hi-Power II Predator

Stock Drive Selection

How to Select the Correct V-Belt and PowerBand Belt Drive Using Stock Sheaves and Belts

The selection tables for two-sheave speed down drives, using standard electric motors, start on Page B10. Information includes sheave diameters, speed ratios, belt length, center distance and belt horsepower ratings.

Before Selecting a V-Belt Drive, You Need to Know Only These Four Things:

1. The type of application, machine, or work being done.
2. The horsepower rating and speed (RPM) of the driveR.
3. The speed (RPM) of the driveN machine or the required speed ratio.
4. The approximate center distance required.

CLUTCHING DRIVES

Refer all clutching drive applications to Gates Power Transmission Product Application at ptpsupport@gates.com V-belt drives which use the belt as a clutch require special consideration because the heat generated by belt slip (during engagement and disengagement) on some clutching applications can cause some V-Belt tensile materials to shrink in length. The shrinkage may cause a belt, which is already engaged and driving, to not declutch, or a declutched belt may engage itself and start driving the machine unexpectedly. Depending on the machine and circumstances, either situation could prove dangerous to the machine operator or bystanders.

Belts specially designed to minimize or eliminate heat shrinkage may be required.

To Design a Drive, Follow These Three Steps:

Step 1 Find the Design Horsepower

Design Horsepower = (Service Factor) x (Horsepower Requirement)

- A. Select the proper **Service Factor** from Table No. B1.
- B. The **horsepower requirement** of the drive is usually taken as the nameplate rating of the driveR. The actual load requirement of the driveN machine may be used as the horsepower requirement if it is known. This load must be used in those applications where a small auxiliary machine is being driven from a large motor or engine.
- C. Find **design horsepower** by multiplying the horsepower requirement of the drive by the service Factor.

Table No. B1 — Service Factors

DriveN Machine	DriveR					
	AC Motors: Normal Torque, Squirrel Cage, Synchronous, Split Phase. DC Motors: Shunt Wound. Engines: Multiple Cylinder Internal Combustion.*			AC Motors: High Torque, High Slip, Repulsion-Induction, Single Phase, Series Wound, Slip Ring. DC Motors: Series Wound, Compound Wound. Engines: Single Cylinder Internal Combustion.*		
	Intermittent Service	Normal Service	Continuous Service	Intermittent Service	Normal Service	Continuous Service
	3-5 Hours Daily or Seasonal	8-10 Hours Daily	16-24 Hours Daily	3-5 Hours Daily or Seasonal	8-10 Hours Daily	16-24 Hours Daily
Dispensing, Display Equipment Instrumentation Measuring Equipment Medical Equipment Office, Projection Equipment	1.0	1.1	1.2	1.1	1.2	1.3
Agitators: Liquid Appliances, Sewing Machines, Sweepers Conveyors: Belt, Light Package Fans: Up to 10 HP Hand Tools (Power) Machine Tools: (Light) Drill Presses, Lathes, Saws Screens: Drum, Oven Woodworking Equipment: Band Saws, Drills, Lathes	1.1	1.2	1.3	1.2	1.3	1.4
Agitators: Semi-liquid Compressors: Centrifugal Centrifuges Conveyors: Belt; Coal, Ore, Sand Dough Mixers Fans: Over 10 HP Generators Laundry Equipment Line Shafts Machine Tools: (Heavy) Boring, Grinders, Milling, Shapers Paper Machinery (except Pulpers) Presses, Punches, Shears Printing Machinery Pumps: Centrifugal, Gear Screens: Revolving, Vibratory	1.1	1.2	1.4	1.2	1.3	1.5
Blowers: Positive Displacement, Mine Fans Brick Machinery Compressors: Piston Conveyors: Drag, Elevator, Pan, Screw Elevators: Bucket Exciters Extractors Mills: Hammer Paper Pulpers Pulverizers Pumps: Piston Rubber Calendars, Extruders, Mills Textile Machinery	1.2	1.3	1.5	1.4	1.5	1.6
Crushers (Gyratory-Jaw-Roll) Hoists Mills: Ball-Rod-Tube Sawmill Machinery	1.3	1.4	1.6	1.5	1.6	1.8

*Apply indicated Service Factor to continuous engine rating. Deduct 0.2 (with a minimum Service Factor of 1.0) when applying to maximum intermittent rating. The use of a Service Factor of 2.0 is recommended for equipment subject to choking. For Grain Milling and Elevator Equipment, see Mill Mutual Bulletin No. VB-601-62. For Oil Field Machinery, see API specification for Oil Field V-Belting, API Standard 1B.

Stock Drive Selection

How to Select the Correct V-Belt and PowerBand® Belt Drive Using Stock Sheaves and Belts — continued

Step 2 Select the Proper V-Belt Section

Speed and Design Horsepower Determine the Proper Cross Section

- A. At the bottom of the appropriate Cross Section Selection Charts following read across to the **design horsepower** of the drive, interpolating if necessary.
- B. Read straight up to the **rpm of the faster shaft**. Interpolate if necessary.

C. The cross section in the area surrounding the point of intersection which you located is the proper **belt cross section** to use.

NOTE:

If your point is near one of the lines, a good drive can be designed with the cross section on either side of the line. Design drives using both cross sections and select the most economical drive consistent with your other requirements.

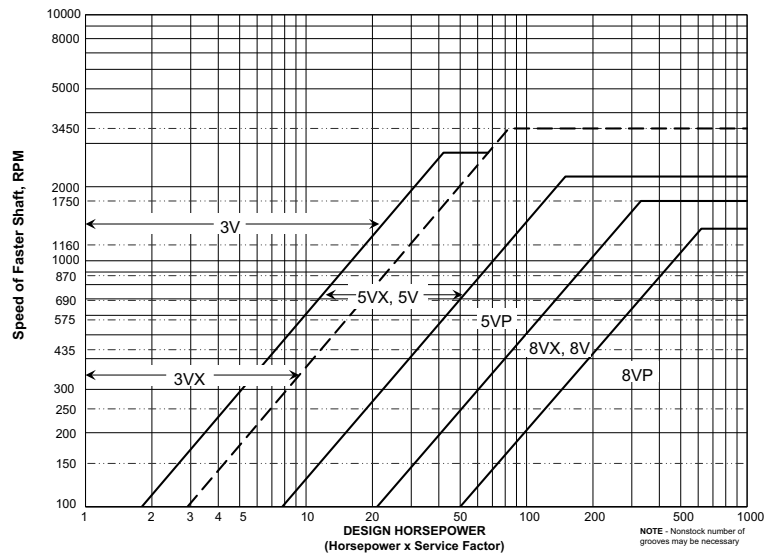


Figure No. B1

Cross Section Selection Chart

(For Super HC® V-Belts, Super HC® Molded Notch V-Belts, Super HC PowerBand Belts, and Predator Belts)

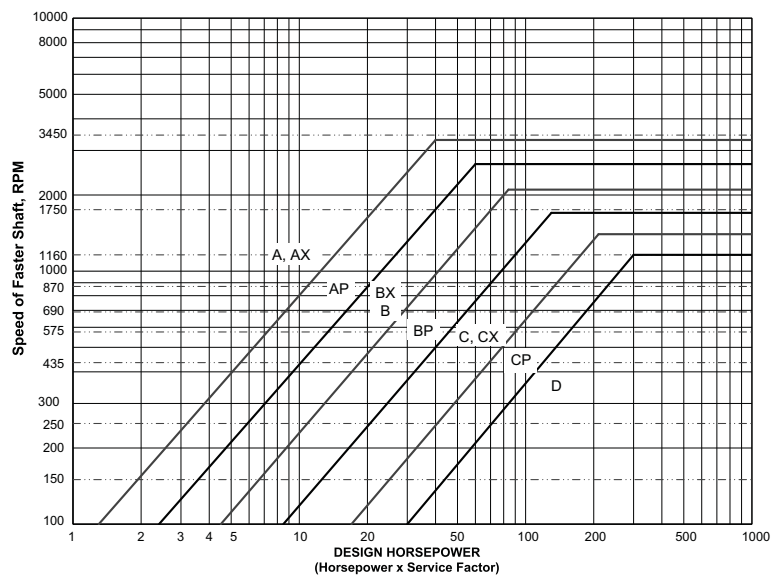


Figure No. B2

Cross Section Selection Chart

(For Hi-Power® II V-Belts, Hi-Power II PowerBand Belts, Tri-Power® Molded Notch V-Belts, and Predator Belts)

Heavy Duty V-Belt Drive Design Manual

Stock Drive Selection

NEMA Minimum Sheave Diameters

Table No. B2

Minimum Recommended Sheave Outside Diameters
for General Purpose Electric Motors
*Super HC[®] V-Belts, Super HC Molded Notch,
Super HC PowerBand[®] Belts,
Super HC Molded Notch PowerBand Belts*

** For U.S. Only

Motor Horsepower	Motor RPM (60 cycle and 50 cycle Electric Motors)						Motor Horsepower
	575 485*	690 575*	870 725*	1160 950*	1750 1425*	3450 2850*	
1/2	—	—	2.2	—	—	—	1/2
3/4	—	—	2.4	2.2	—	—	3/4
1	3.0	2.5	2.4	2.4	2.2	—	1
1 1/2	3.0	3.0	2.4	2.4	2.4	2.2	1 1/2
2	3.8	3.0	3.0	2.4	2.4	2.4	2
3	4.5	3.8	3.0	3.0	2.4	2.4	3
5	4.5	4.5	3.8	3.0	3.0	2.4	5
7 1/2	5.2	4.5	4.4	3.8	3.0	3.0	7 1/2
10	6.0	5.2	4.4	4.4	3.8	3.0	10
15	6.8	6.0	5.2	4.4	4.4	3.8	15
20	8.2	6.8	6.0	5.2	4.4	4.4	20
25	9.0	8.2	6.8	6.0	4.4	4.4	25
30	10.0	9.0	6.8	6.8	5.2	—	30
40	10.0	10.0	8.2	6.8	6.0	—	40
50	11.0	10.0	8.4	8.2	6.8	—	50
60	12.0	11.0	10.0	8.0	7.4	—	60
75	14.0	13.0	9.5	10.0	8.6	—	75
100	18.0	15.0	12.0	10.0	8.6	—	100
125	20.0	18.0	15.0	12.0	10.5#	—	125
150	22.0	20.0	18.0	13.0	10.5	—	150
200	22.0	22.0	22.0	—	13.2	—	200
250	22.0	22.0	—	—	—	—	250
300	27.0	27.0	—	—	—	—	300

*These RPM are for 50 cycle electric motors.
#9.5 for Frame Number 444T.

Data in the white area of Table No. B2 are from NEMA Standard MG-1-14.42, November, 1978. Data in the gray area are from MG-1-14.43, January, 1968. Data in the blue area are a composite of electric motor manufacturers data. They are generally conservative, and specific motors and bearings may permit the use of a smaller motor sheave. Consult the motor manufacturer.

Table No. B3

Minimum Recommended Sheave Datum Diameters
for General Purpose Electric Motors
*Hi-Power[®] II V-Belts, Hi-Power II PowerBand Belts
or Tri-Power[®] Molded Notch V-Belts*

** For U.S. Only

Motor Horsepower	Motor RPM (60 cycle and 50 cycle Electric Motors)						Motor Horsepower
	575 485*	690 575*	870 725*	1160 950*	1750 1425*	3450 2850*	
1/2	2.5	2.5	2.2	—	—	—	1/2
3/4	3.0	2.5	2.4	2.2	—	—	3/4
1	3.0	3.0	2.4	2.4	2.2	—	1
1 1/2	3.0	3.0	2.4	2.4	2.4	2.2	1 1/2
2	3.8	3.0	3.0	2.4	2.4	2.4	2
3	4.5	3.8	3.0	3.0	2.4	2.4	3
5	4.5	4.5	3.8	3.0	3.0	2.6	5
7 1/2	5.2	4.5	4.4	3.8	3.0	3.0	7 1/2
10	6.0	5.2	4.6	4.4	3.8	3.0	10
15	6.8	6.0	5.4	4.6	4.4	3.8	15
20	8.2	6.8	6.0	5.4	4.6	4.4	20
25	9.0	8.2	6.8	6.0	5.0	4.4	25
30	10.0	9.0	6.8	6.8	5.4	—	30
40	10.0	10.0	8.2	6.8	6.0	—	40
50	11.0	10.0	9.0	8.2	6.8	—	50
60	12.0	11.0	10.0	9.0	7.4	—	60
75	14.0	13.0	10.5	10.0	9.0	—	75
100	18.0	15.0	12.5	11.0	10.0	—	100
125	20.0	18.0	15.0	12.5	11.5†	—	125
150	22.0	20.0	18.0	13.0	—	—	150
200	22.0	22.0	22.0	—	—	—	200
250	22.0	22.0	—	—	—	—	250
300	27.0	27.0	—	—	—	—	300

*These RPM are for 50 cycle electric motors.
†11.0 for Frame Number 444T.

Data in the white area of Table No. B3 are from NEMA Standard MG-1-14.42, November, 1978. Data in the gray area are from MG-1-14.45, September, 1965. Data in the blue area are a composite of electric motor manufacturers data. They are generally conservative, and specific motors and bearings may permit the use of a smaller motor sheave. Consult the motor manufacturer.

NOTE: For a given motor horsepower and speed, the total belt pull is related to the motor sheave size. As this size **decreases**, the total belt pull **increases**. Therefore, to limit the resultant load on motor shaft and bearings, NEMA lists minimum sheave sizes for the various motors. The sheave on the motor (DriveR Sheave) should be at least this large.

Stock Drive Selection

How to Select the Correct V-Belt and PowerBand® Belt Drive Using Stock Sheaves and Belts — continued

Step 3 Select the Drive

Locate the Proper Drive Selection Table for the Cross Section You Selected.

Before following the steps below, refer to paragraph B of Step 3. It provides guidance in the selection process and serves as a final judgment of your selection.

A. For Standard Drives:

1. Calculate your speed ratio, and read down the speed ratio column to a value close to your desired speed ratio.
2. To the right, in the sheave diameter columns, you will find the **small and large sheave** diameters to order for the drive. These are the two sheaves that will provide the required speed ratio. Be sure that the motor sheave is equal to or larger than the minimum recommended diameter shown in Table Nos. B2 or B3 on Page B4.
3. Read to the right the center distance value closest to the one specified. The drive components can usually be adjusted to provide for this catalog value. Read up to the top of the column for the correct V-belt for the drive.
4. Immediately below the table, you will find a color key for identifying the **horsepower correction factor**. Jot down the proper factor for the center distance you have selected.
5. Move to the separate horsepower rating charts, selecting the appropriate faster speed, and find the Basic Horsepower for the smaller sheave.
6. On the same line across, find the add-on horsepower. Add this value to the Basic Horsepower to determine the Total H.P.
7. Multiply the rated horsepower per belt by the horsepower correction factor found from the color key to find the **horsepower per belt**.
8. Divide the design horsepower for the drive by the horsepower per belt to find the **number of belts**. The answer will usually contain a fraction. Use the next larger whole number of belts.

If your drive requires more than the stock number of grooves, there are two possibilities:

- a. Use the diameters as selected and order the nonstock number of grooves.
 - b. Turn to the drive design section and design a drive using one or two nonstock sheaves. You may be able to design a more economical drive by using larger sheaves (which results in fewer belts) in conjunction with at least one stock sheave.
9. Find the recommended **installation and take-up allowances** from Table Nos. D33 to D36 on Pages D29 and D30.
 10. Calculate the minimum and maximum deflection forces and deflection distance used to statically tension the drive. These values can be found in the Tensioning Section on Pages D22 through D28.

Your design is now complete. Specify Gates Super HC® V-Belts, Super HC Molded Notch V-Belts, Hi-Power® II V-Belts, Tri-Power® Molded Notch V-Belts, Predator Belts, Super HC PowerBand® Belts, Super HC Molded Notch PowerBand Belts, Super HC Molded Notch PowerBand Belts, Hi-Power II PowerBand Belts or Predator PowerBand Belts when ordering.

Gates PowerBand Belts are available in combinations of 2, 3, 4, 5 or 6 strand belts as needed to equal the total number of belts.

Step 3 Select the Drive — continued

B. Final Judgment

While selecting or evaluating your drive, consider these facts:

1. If you need to keep sheave face width at a minimum, select the largest diameter drive from the group.
2. Larger diameter sheaves will also keep drive tension, and therefore belt pull, at a minimum.
3. In addition, larger diameter sheaves will generally give a more economical drive, but you should hesitate to select diameters so large as to require only one belt — you sacrifice multiple-belt dependability.
4. If you have limited space for your drive, consider using the smallest diameter drive from the group. However, sheaves on electric motors must be at least as large as the NEMA minimum from Table Nos. B2 or B3 on Page B4.
5. When your point on the cross section selection chart is near a line, indicating that either of two cross sections can be used, the larger section will generally give a more economical drive. However, in the largest cross sections, this may require the use of standard but nonstock sheaves. In this case the drive using the small cross sections with stock sheaves will usually be more economical.

C. Other Drives

1. For special drives not explained here (quarter turn, V-flat, idler), see Pages D7 through D15.

Stock Drive Selection

Drive Selection Example Using a Standard Speed Electric Motor for the DriveR and Super HC[®] V-Belts

Given:

1. A 10 hp Squirrel Cage motor is to drive a centrifugal pump in normal service.
2. 1750 rpm motor speed.
3. 1635 rpm desired pump speed.
4. Desired center distance about 38".

Comments	Results
<p>Step 1 Find the Design Horsepower</p> <p>A. From Table No. B1 on Page B2, Service Factor is 1.2. B. Horsepower requirement of the drive is 10. C. Design Horsepower = 10 hp x 1.2 = 12 hp.</p>	<p>Service Factor = 1.2</p> <p>Design Horsepower = 12</p>
<p>Step 2 Select the Proper V-Belt Section</p> <p>A. From Figure B1 on Page B3, a drive with Design Horsepower of 12 and 1750 rpm of the faster shaft can use a 3VX section Super HC V-Belt.</p>	<p>Belt Section = 3VX</p>
<p>Step 3 Select the Drive</p> <p>A. Turn to the drive selection table for 3VX belts, Table No. B6 on Page B10.</p> <ol style="list-style-type: none"> 1. Calculate the speed ratio: $1750 \div 1635 = 1.07$ 2. Under the speed ratio column, find the 1.07 ratio. There are four sheave diameter combinations that give this ratio. The small sheave diameter of 2.2" is smaller than the NEMA recommended minimum diameter of 3.8", and should not be used. 3. Use the remaining combination of DriveR = 5.6" O.D.; DriveN = 6.0" O.D. The 5.6" DriveR diameter is larger than the NEMA minimum of 3.8". 4. On the same line to the right, the Center Distance nearest to the desired 38" is 38.4". At the top of this column 3VX950 V-belts are specified. This means that using the two sheaves 5.6" O.D. and 6.0" O.D. with V-belt 3VX950, the drive center distance will be 38.4" (See Step 4 below.) 5. The 38.4" center distance lies in the gray area of the table for which the color key at the bottom of Page B11 shows a 1.1 horsepower correction factor. 6. Go to the 3VX Horsepower Rating Table B10 on page B57. Find the 1750 rpm value in the RPM of Faster Shaft column, then read to the right to find the Basic Horsepower using a 5.6 inch diameter sheave. 7. Continue to the right and determine the Add-On Horsepower for a 1.07 speed ratio, which is 0.08. Add this value to the Basic Horsepower to find a Total HP of 7.09. 8. The horsepower correction factor, 1.1 times the Total horsepower per belt, 7.09, is $1.1 \times 7.09 = 7.8$. This is the Rated horsepower per belt. 9. The design horsepower divided by the horsepower per belt/rib is $12 \div 7.8 = 1.5$; or 2 belts required for the drive. 	<p>Speed Ratio = 1.07 rpm</p> <p>Motor Sheave = 5.6" O.D. Pump Sheave = 6.0" O.D.</p> <p>Center Distance = 38.4"</p> <p>V-Belt Number = 3VX950</p> <p>Horsepower Correction Factor = 1.1</p> <p>Basic Horsepower per Belt = 7.01</p> <p>Add-On Horsepower per Belt = 0.08 Total Horsepower per Belt = 7.09</p> <p>Rated Horsepower per Belt = 7.8</p> <p>Number of Belts = 2</p> <p>Shortest center distance = 38.4" - 0.8" = 37.6" Longest center distance = 38.4" + 1.4" = 39.8"</p>
<p>Step 4 Determine Installation and Takeup Allowance</p> <p>A. Center distance allowances for installation and takeup from Table No. D33 on Page D29 are 0.8" for installation and 1.4" for takeup.</p>	

Heavy Duty V-Belt Drive Design Manual

Table No. B4

Super HC® and Super HC Molded Notch V-Belts and PowerBand® Belts Sizes

(PowerBand Belts are available in 2, 3, 4 or 5 bands in sizes shown, or wider, on a standard non-stock basis.)



Lengths listed as molded notch are available in banded or molded notch construction unless otherwise noted.

3V Part No.	Outside Circum. Effective Length (in)	3V Part No.	Outside Circum. Effective Length (in)	5V Part No.	Outside Circum. Effective Length (in)	5V Part No.	Outside Circum. Effective Length (in)	5V Part No.	Outside Circum. Effective Length (in)	8V Part No.	Outside Circum. Effective Length (in)
3VX250*	25	3VX690**	69	5VX350*	35	5VX720*	72	5VX1160*	116	8V1000*	100
3VX265*	26.5	3VX710	71	5VX362*	36.2	5VX730*	73	5VX1162*	116.2	8V1060*	106
3VX280*	28	3V730*	73	5VX372*	37.2	5VX740*	74	5VX1180**	118	8V1120*	112
3VX290**	29	3VX750	75	5VX382*	38.2	5VX750	75	5V1200**	120	8V1180*	118
3VX300	30	3VX771**	77.1	5VX392*	39.2	5VX760*	76	5V1210**	121	8V1250*	125
3VX315	31.5	3VX800	80	5VX402*	40.2	5VX769*	76.9	5VX1220*	122	8V1320*	132
3VX326**	32.6	3V810*	81	5VX412*	41.2	5VX780*	78	5VX1230*	123	8V1400*	140
3VX335	33.5	3VX826**	82.6	5VX422*	42.2	5VX790*	79	5VX1250	125	8V1500*	150
3VX350**	35	3V830*	83	5VX433*	43.3	5VX800	80	5VX1277*	127.7	8V1600*	160
3VX355	35.5	3VX850	85	5VX450*	45	5VX810*	81	5VX1320	132	8V1700*	170
3VX366**	36.6	3VX900	90	5VX459*	45.9	5VX830*	83	5VX1374*	137.4	8V1800*	180
3VX375	37.5	3VX926**	92.6	5VX470*	47	5VX840*	84	5VX1400	140	8V1900*	190
3VX385**	38.5	3VX950	95	5VX479*	47.9	5VX850	85	5VX1469*	146.9	8V2000*	200
3VX390**	39	3VX974**	97.4	5VX490*	49	5VX860*	86	5VX1500	150	8V2120	212
3VX400	40	3VX1000	100	5VX500	50	5VX867*	86.7	5VX1600	160	8V2240	224
3VX415**	41.5	3VX1027**	102.7	5VX510*	51	5VX880*	88	5VX1700	170	8V2300**	230
3VX425	42.5	3VX1060	106	5VX519*	51.9	5VX890*	89	5VX1701*	170.1	8V2360	236
3VX450	45	3VX1088**	108.8	5VX530	53	5VX900	90	5VX1800	180	8V2500	250
3VX464**	46.4	3VX1120	112	5VX540*	54	5VX918*	91.8	5VX1900	190	8V2650	265
3VX475	47.5	3VX1146**	114.6	5VX550*	55	5VX930*	93	5VX2000	200	8V2800	280
3VX487**	48.7	3VX1180	118	5VX560	56	5VX940*	94	5V1630***	163	8V3000	300
3VX500	50	3VX1224**	122.4	5VX570*	57	5VX950	95	5V2120	212	8V3150	315
3VX520**	52	3VX1250	125	5VX580*	58	5VX960*	96	5V2240	224	8V3350	335
3VX530	53	3VX1296**	129.6	5VX590*	59	5VX978*	97.8	5V2360	236	8V3550	355
3VX540**	54	3VX1320	132	5VX600	60	5VX990*	99	5V2500	250	8V3750	375
3VX550**	55	3VX1400	140	5VX610*	61	5VX1000	100	5V2650	265	8V4000	400
3VX560	56			5VX619*	61.9	5VX1017*	101.7	5V2800	280	8V4250	425
3VX570**	57			5VX630	63	5VX1030*	103	5V3000	300	8V4500	450
3VX580**	58			5VX650*	65	5VX1050*	105	5V3150	315	8V4750	475
3VX590**	59			5VX660*	66	5VX1060	106	5V3350	335	8V5000	500
3VX600	60			5VX670	67	5VX1080*	108	5V3550	355	8V5600	560
3VX616**	61.6			5VX680*	68	5VX1108*	110.8			8V6000	600
3VX630	63			5VX690*	69	5VX1120	112				
3VX650*/***	65			5VX700*	70	5VX1139*	113.9				
3VX670	67			5VX710	71	5VX1150*	115				

* Not Available in 3V PowerBand

** Only Available in 3VX Single Belts

*** Not Available in 3VX PowerBand

* Only Available in 5VX Single Belt

** Only Available in 5V PowerBand

*** Only Available in 5V Single Belt

* Available in 8VX Single Belt

** Only Available in 8V

Single Belt

NOTES

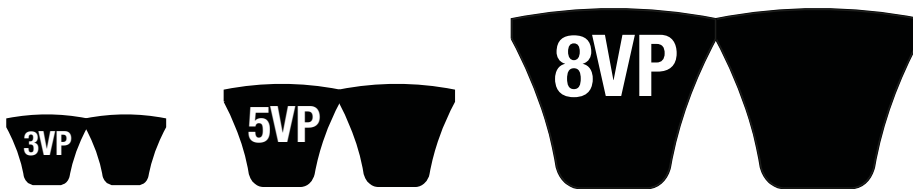
The part number for PowerBand® belts is constructed by placing the number of strands required followed by a slash (/) in front of the V-belt No. For example 6/5VX1000 represents a 5VX1000 with 6 strands.

See Page A5 for additional information on Gates Super HC PowerBand Belts.

Heavy Duty V-Belt Drive Design Manual

Table No. B5

Narrow Predator® and Predator® PowerBand® Belts Sizes



3VP Section		5VP Section		8VP Section	
Predator V-Belt No.	Outside Circumference Effective Length (in)	Predator V-Belt No.	Outside Circumference Effective Length (in)	Predator V-Belt No.	Outside Circumference Effective Length (in)
3VP450*	45	5VP600*	60	8VP1000*	100
3VP475*	47.5	5VP630*	63	8VP1060*	106
3VP500*	50	5VP670*	67	8VP1120*	112
3VP530*	53	5VP710*	71	8VP1180*	118
3VP560*	56	5VP750*	75	8VP1250*	125
3VP600*	60	5VP800	80	8VP1320*	132
3VP630*	63	5VP850	85	8VP1400*	140
3VP670*	67	5VP870*	87	8VP1500*	150
3VP710*	71	5VP900	90	8VP1600	160
3VP750*	75	5VP950	95	8VP1700	170
3VP800*	80	5VP1000	100	8VP1800	180
3VP850*	85	5VP1060	106	8VP1900	190
3VP900*	90	5VP1120	112	8VP2000	200
3VP950*	95	5VP1180	118	8VP2120	212
3VP1000*	100	5VP1250	125	8VP2240	224
3VP1060*	106	5VP1320	132	8VP2360	236
3VP1120*	112	5VP1400	140	8VP2500	250
3VP1180*	118	5VP1500	150	8VP2650	265
3VP1250*	125	5VP1600	160	8VP2800	280
3VP1320*	132	5VP1700	170	8VP3000	300
3VP1400*	140	5VP1800	180	8VP3150	315
		5VP1900	190	8VP3350	335
		5VP2000	200	8VP3550	355
		5VP2030*	203	8VP3750*	375
		5VP2120	212	8VP4000*	400
		5VP2240	224	8VP4250*	425
		5VP2360	236	8VP4500*	450
		5VP2500	250	8VP4750*	475
		5VP2650	265	8VP5000*	500
		5VP2800	280	8VP5600*	560
		5VP3000	300	8VP6000*	600
		5VP3150	315		
		5VP3350	335		
		5VP3550	355		

3VP Predator® belts are available up to 10 strands
* Only Available in 3VP PowerBand Belts

5VP Predator® belts are available up to 16 strands
* Only Available in 5VP PowerBand Belts

8VP Predator® belts are available up to 12 strands
* Only Available in 8VP PowerBand Belts

NOTES:

The part number is constructed by placing the number of strands required followed by a slash (/) in front of the belt size. For example 6/3VP1000 represents a 3VP1000 with 6 strands.

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Heavy Duty V-Belt Drive Design Manual

Table No. B6

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Speed Ratio	V-Belt No. and Center Distance																											
Small Sheave	Large Sheave		3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V
			3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX
2.20	2.20	1.00	250	265	280	290	300	315	326	335	350	355	366	375	385	390	400	415	425	450	464	475	487	500	520	530	540			
* 2.20	* 2.20	1.00	8.0	8.8	9.6	10.5	11.0	11.5	12.3	12.8	13.3	14.0	14.3	14.8	15.3	15.8	16.0	16.5	17.3	17.8	19.0	19.7	20.3	20.9	21.5	22.5	23.0	23.5		
* 2.35	* 2.35	1.00	8.8	9.6	10.3	10.8	11.3	12.1	12.6	13.1	13.8	14.1	14.6	15.1	15.6	15.8	16.3	17.1	17.6	18.8	19.5	20.1	20.7	21.3	22.3	22.8	23.3			
* 2.50	* 2.50	1.00	8.6	9.3	10.1	10.6	11.1	11.8	12.4	12.8	13.6	13.8	14.4	14.8	15.3	15.6	16.1	16.8	17.3	18.6	19.3	19.8	20.4	21.1	22.1	22.6	23.1			
2.65	2.65	1.00	8.3	9.1	9.8	10.3	10.8	11.6	12.1	12.6	13.3	13.6	14.1	14.6	15.1	15.3	15.8	16.6	17.1	18.3	19.0	19.6	20.2	20.8	21.8	22.3	22.8			
2.80	2.80	1.00	8.1	8.9	9.6	10.1	10.6	11.4	11.9	12.4	13.1	13.4	13.9	14.4	14.9	15.1	15.6	16.4	16.9	18.1	18.8	19.4	20.0	20.6	21.6	22.1	22.6			
3.00	3.00	1.00	7.8	8.5	9.3	9.6	10.3	11.0	11.6	12.0	12.8	13.0	13.6	14.0	14.5	14.8	15.3	16.0	16.5	17.8	18.5	19.0	19.6	20.3	21.3	21.8	22.3			
3.15	3.15	1.00	7.6	8.3	9.1	9.6	10.1	10.8	11.4	11.8	12.6	12.8	13.4	13.8	14.3	14.6	15.1	15.8	16.3	17.6	18.3	18.8	19.4	20.1	21.1	21.6	22.1			
3.35	3.35	1.00	7.2	8.0	8.7	9.2	9.7	10.5	11.0	11.5	12.2	12.5	13.0	13.5	14.0	14.2	14.7	15.5	16.0	17.2	17.9	18.5	19.1	19.7	20.7	21.2	21.7			
3.65	3.65	1.00	6.8	7.5	8.3	8.8	9.3	10.0	10.6	11.0	11.8	12.0	12.6	13.0	13.5	13.8	14.3	15.0	15.5	16.8	17.5	18.0	18.6	19.3	20.3	20.8	21.3			
4.12	4.12	1.00	6.0	6.8	7.5	8.0	8.5	9.3	9.8	10.3	11.0	11.3	12.0	12.3	12.8	13.0	13.5	14.3	14.8	16.0	16.7	17.3	17.9	18.5	19.5	20.0	20.5			
4.50	4.50	1.00	5.4	6.2	6.9	7.4	7.9	8.7	9.2	9.7	10.4	10.7	11.2	11.7	12.2	12.4	12.9	13.7	14.2	15.4	16.1	16.7	17.3	17.9	18.9	19.4	19.9			
4.75	4.75	1.00	5.8	6.5	7.0	7.5	8.3	8.8	9.3	10.0	10.7	11.0	11.7	12.2	12.4	12.9	13.7	14.2	15.4	16.1	16.7	17.3	17.9	18.5	19.4	19.9	20.5			
5.00	5.00	1.00	6.1	6.6	7.1	7.9	8.4	8.9	9.6	9.9	10.4	10.9	11.4	11.6	12.1	12.9	13.4	14.6	15.3	15.9	16.5	17.1	17.7	18.1	18.6	19.1	19.5			
5.30	5.30	1.00	6.2	6.7	7.4	8.0	8.4	9.2	9.4	10.0	10.4	10.9	11.2	11.7	12.4	12.9	14.2	14.9	15.4	16.0	16.7	17.3	17.7	18.2	18.7	19.2	19.7			
5.60	5.60	1.00	6.6	7.2	7.7	8.5	8.8	9.7	9.0	9.5	10.0	10.5	10.7	11.2	12.0	12.5	13.7	14.4	15.0	15.6	16.2	16.7	17.2	17.7	18.2	18.7	19.2			
6.00	6.00	1.00	6.9	7.3	8.1	8.3	8.9	9.3	9.8	10.1	10.6	11.3	11.8	13.1	13.8	14.3	14.9	15.6	16.6	17.1	17.7	18.1	18.6	19.1	19.6	20.1	20.6			
6.50	6.50	1.00	7.3	7.5	8.1	8.5	9.0	9.3	9.8	10.5	11.0	12.3	13.0	13.5	14.1	14.8	15.8	16.3	17.0	17.7	18.1	18.6	19.1	19.6	20.1	20.6				
6.90	6.90	1.00	7.5	7.9	8.4	8.7	9.2	9.9	10.4	11.7	12.4	13.1	13.8	14.3	14.9	15.6	16.6	17.1	17.7	18.1	18.6	19.1	19.6	20.1	20.6					
8.00	8.00	1.00	8.7	9.9	10.6	11.2	12.9	13.6	14.3	15.0	16.0	16.7	17.3	17.9	18.5	19.2	19.8	20.4	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4			
10.60	10.60	1.00	12.9	13.6	14.3	15.0	16.0	16.7	17.3	17.9	18.5	19.2	19.8	20.4	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4			
3.00	3.15	1.05	7.7	8.4	9.2	9.7	10.2	10.9	11.5	11.9	12.7	12.9	13.5	13.9	14.4	14.7	15.2	15.9	16.4	17.7	18.4	18.9	19.5	20.2	21.2	21.7	22.2			
4.75	5.00	1.05	5.6	6.3	6.8	7.3	8.1	8.6	9.1	9.8	10.1	10.6	11.1	11.6	11.8	12.3	13.1	13.6	14.8	15.5	16.1	16.7	17.3	18.3	18.8	19.3				
* 2.50	2.65	1.06	8.5	9.2	10.0	10.5	11.0	11.7	12.3	12.7	13.5	13.7	14.3	14.7	15.2	15.5	16.0	16.7	17.2	18.5	19.2	19.7	20.3	21.0	22.0	22.5	23.0			
2.65	2.80	1.06	8.2	9.0	9.7	10.2	10.7	11.5	12.0	12.5	13.2	13.5	14.0	14.5	15.0	15.2	15.7	16.5	17.0	18.2	18.9	19.5	20.1	20.7	21.7	22.2	22.7			
3.15	3.35	1.06	7.4	8.1	8.9	9.4	9.9	10.6	11.2	11.6	12.4	12.6	13.2	13.6	14.1	14.4	14.9	15.6	16.1	17.4	18.1	18.6	19.2	19.9	20.9	21.4	21.9			
4.50	4.75	1.06	5.2	6.0	6.7	7.2	7.7	8.5	9.0	9.5	10.2	10.5	11.0	11.5	12.0	12.2	12.7	13.5	14.0	15.2	15.9	16.5	17.1	17.7	18.7	19.2	19.7			
5.00	5.30	1.06	5.9	6.4	6.9	7.7	8.2	8.7	9.4	9.7	10.2	10.7	11.2	11.4	11.9	12.7	13.2	14.4	15.1	15.7	16.3	16.9	17.9	18.4	18.9	19.4	19.9			
5.30	5.60	1.06	5.9	6.4	7.2	7.7	8.2	8.7	9.4	9.7	10.2	10.7	11.2	11.4	11.9	12.7	13.2	14.4	15.1	15.7	16.3	16.9	17.9	18.4	18.9	19.4	19.9			
6.50	6.90	1.06	6.6	7.1	7.9	8.4	8.9	9.6	10.1	10.4	10.9	11.4	11.6	12.1	12.9	13.4	14.6	15.3	15.9	16.5	17.1	17.7	18.1	18.6	19.1	19.6	20.1			
* 2.20	* 2.35	1.07	8.9	9.7	10.4	10.9	11.4	12.2	12.7	13.2	13.9	14.2	14.7	15.2	15.7	15.9	16.4	17.2	17.7	18.9	19.6	20.2	20.8	21.4	22.4	22.9	23.4			
* 2.35	* 2.50	1.07	8.7	9.4	10.2	10.7	11.2	11.9	12.5	12.9	13.7	13.9	14.5	14.9	15.4	15.7	16.2	16.9	17.4	18.7	19.4	19.9	20.5	21.2	22.2	22.7	23.2			
2.80	3.00	1.07	7.9	8.7	9.4	9.9	10.4	11.2	11.7	12.2	12.9	13.2	13.7	14.2	14.7	14.9	15.4	16.2	16.7	17.9	18.6	19.2	19.8	20.4	21.4	21.9	22.4			
5.60	6.00	1.07	6.2	6.7	7.4	7.9	8.4	8.6	9.2	9.6	10.1	10.4	10.9	11.2	11.7	12.4	12.9	14.2	14.9	15.6	16.2	16.7	17.3	18.3	18.8	19.3	19.8			
6.00	6.50	1.08	6.6	7.1	7.9	8.4	8.9	9.6	10.1	10.4	10.9	11.4	11.6	12.1	12.9	13.4	14.6	15.3	15.9	16.5	17.1	17.7	18.1	18.6	19.1	19.6	20.1			
3.35	3.65	1.08	7.0	7.8	8.5	9.0	9.5	10.3	10.8	11.3	12.0	12.3	12.8	13.3	13.8	14.0	14.5	15.3	15.8	17.0	17.7	18.3	18.9	19.5	20.5	21.0	21.5			
4.12	4.50	1.09	5.7	6.5	7.2	7.7	8.2	9.0	9.5	10.0	10.7	11.0	11.5	12.0	12.5	12.7	13.2	14.0	14.5	15.7	16.4	17.0	17.6	18.2	19.2	19.7	20.2			
4.50	5.00	1.11	5.8	6.5	7.0	7.5	8.3	8.8	9.3	10.0	10.3	10.8	11.3	11.8	12.3	12.5	13.3	13.8	15.0	15.7	16.3	16.9	17.5	18.5	19.0	19.5				
* 2.50	2.80	1.12	8.3	9.1	9.8	10.3	10.8	11.6	12.1	12.6	13.3	13.6	14.1	14.6	15.1	15.3	15.8	16.6	17.1	18.3	19.0	19.6	20.2	20.8	21.8	22.3	22.8			
3.00	3.35	1.12	7.5	8.3	9.0	9.5	10.0	10.8	11.3	11.8	12.5	12.8	13.3	13.8	14.3	14.5	15.0	15.8	16.3	17.5	18.2	18.8	19.4	20.0	21.0	21.5	22.0			
4.75	5.30	1.12	6.1	6.6	7.1	7.9	8.4	8.9	9.6	9.9	10.4	10.9	11.4	11.6	12.1	12.9	13.4	14.6	15.3	15.9	16.5	17.1	18.1	18.6	19.1	19.6	20.1			
5.00	5.60	1.12	6.2	6.7	7.4	8.0	8.4	9.2	9.4	10.0	10.4	10.9	11.2	11.7	12.4	12.9	14.2	14.9	15.4	16.6	17.3	17.9	18.5	19.5	20.0	20.5	21.0			
* 2.35	2.65	1.13	8.6	9.3	10.1	10.6	11.1	11.8	12.4	12.8	13.6	13.8	14.4	14.8	15.3	15.6	16.1	16.8	17.3	18.6	19.3	19.8	20.4	21.1	22.1	22.6	23.1			
* 2.65	3.00	1.13	8.1	8.8	9.6	10.1	10.6	11.3	11.9	12.3	13.1	13.3	13.9	14.3	14.8															

Heavy Duty V-Belt Drive Design Manual

Table No. B6

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Outside Diameters						
3VX	3V	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX		Small Sheave	Large Sheave					
550	560	570	580	590	600	616	630	650	670	690	710	730	750	771	800	810	826	830	850	900	926	950	974	1000	1.00	* 2.20	* 2.20
24.0	24.5	25.0	25.5	26.0	26.3	27.3	28.0	29.0	30.0	31.0	32.0	34.0	35.1	36.5	37.8	38.8	41.3	42.6	43.8	45.0	46.3	48.0	50.0	52.0	1.00	* 2.35	* 2.35
23.8	24.3	24.8	25.3	25.8	26.3	27.1	27.8	28.8	29.8	30.8	31.8	33.8	34.9	36.3	37.6	38.6	41.1	42.4	43.6	44.8	46.1	48.0	50.0	52.0	1.00	* 2.50	* 2.50
23.6	24.1	24.6	25.1	25.6	26.1	26.9	27.6	28.6	29.6	30.6	31.6	33.6	34.6	36.1	37.4	38.4	40.9	42.2	43.4	44.6	45.9	47.8	49.8	51.8	1.00	* 2.65	* 2.65
23.3	23.8	24.3	24.8	25.3	25.8	26.6	27.3	28.3	29.3	30.3	31.3	32.3	33.3	34.4	35.8	36.9	39.4	40.7	41.9	43.1	44.4	46.3	48.3	50.3	1.00	2.80	2.80
23.1	23.6	24.1	24.6	25.1	25.6	26.4	27.1	28.1	29.1	30.1	31.1	32.1	33.1	34.2	35.6	36.7	39.2	40.5	41.7	42.9	44.2	46.1	48.1	50.1	1.00	3.00	3.00
22.8	23.3	23.8	24.3	24.8	25.3	26.1	26.8	27.8	28.8	29.8	30.8	31.8	32.8	33.8	35.3	35.8	36.6	36.8	37.8	40.3	41.6	42.8	44.0	45.3	1.00	3.15	3.15
22.6	23.1	23.6	24.1	24.6	25.1	25.9	26.6	27.6	28.6	29.6	30.6	31.6	32.6	33.6	35.1	35.6	36.4	36.6	37.6	40.1	41.4	42.6	43.8	45.1	1.00	3.30	3.30
22.2	22.7	23.2	23.7	24.2	24.7	25.5	26.2	27.2	28.2	29.2	30.2	31.2	32.2	33.2	34.7	35.2	36.0	36.2	37.2	39.7	41.0	42.2	43.4	44.7	1.00	3.45	3.45
21.8	22.3	22.8	23.3	23.8	24.3	25.1	25.8	26.8	27.8	28.8	29.8	30.8	31.8	32.8	34.3	34.8	35.6	35.8	36.8	39.3	40.6	41.8	43.0	44.3	1.00	3.60	3.60
21.0	21.5	22.0	22.5	23.0	23.5	24.3	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.1	33.5	34.0	34.8	35.0	36.0	38.5	39.8	41.0	42.2	43.5	1.00	4.12	4.12
20.4	20.9	21.4	21.9	22.4	22.9	23.7	24.4	25.4	26.4	27.4	28.4	29.4	30.4	31.5	32.9	33.4	34.2	34.4	35.4	37.9	39.2	40.4	41.6	42.9	1.00	4.50	4.50
20.0	20.5	21.0	21.5	22.0	22.5	23.3	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.1	32.5	33.0	33.8	34.0	35.0	37.5	38.8	40.0	41.2	42.5	1.00	4.75	4.75
19.6	20.1	20.6	21.1	21.6	22.1	22.9	23.6	24.6	25.6	26.6	27.6	28.6	29.6	30.7	32.1	32.6	33.4	33.6	34.6	37.1	38.4	39.6	40.8	42.1	1.00	5.00	5.00
19.2	19.7	20.2	20.7	21.2	21.7	22.5	23.2	24.2	25.2	26.2	27.2	28.2	29.2	30.2	31.7	32.2	33.0	33.2	34.2	36.7	38.0	39.2	40.4	41.7	1.00	5.30	5.30
18.7	19.2	19.7	20.2	20.7	21.2	22.0	22.7	23.7	24.7	25.7	26.7	27.7	28.7	29.8	31.2	31.7	32.5	32.7	33.7	36.2	37.5	38.7	39.9	41.2	1.00	5.60	5.60
18.1	18.6	19.1	19.6	20.1	20.6	21.4	22.1	23.1	24.1	25.1	26.1	27.1	28.1	29.1	30.6	31.1	31.9	32.1	33.1	35.6	36.9	38.1	39.3	40.6	1.00	6.00	6.00
17.3	17.8	18.3	18.8	19.3	19.8	20.6	21.3	22.3	23.3	24.3	25.3	26.3	27.3	28.3	29.8	30.3	31.1	31.3	32.3	34.8	36.1	37.3	38.5	39.8	1.00	6.50	6.50
16.7	17.2	17.7	18.2	18.7	19.2	20.0	20.7	21.7	22.7	23.7	24.7	25.7	26.7	27.7	29.2	29.7	30.5	30.7	31.7	34.2	35.5	36.7	37.9	39.2	1.00	6.90	6.90
14.9	15.4	15.9	16.4	16.9	17.4	18.2	18.9	19.9	20.9	21.9	22.9	23.9	24.9	25.9	27.4	27.9	28.7	28.9	29.9	32.4	33.7	34.9	36.1	37.4	1.00	8.00	8.00
22.7	23.2	23.7	24.2	24.7	25.2	26.0	26.7	27.7	28.7	29.7	30.7	31.7	32.7	33.7	35.2	35.7	36.5	36.7	37.7	40.2	41.5	42.7	43.9	45.2	1.05	3.00	3.15
22.8	23.3	23.8	24.3	24.8	25.3	26.1	26.8	27.8	28.8	29.8	30.8	31.8	32.8	33.8	35.3	35.8	36.6	36.8	37.8	40.3	41.6	42.8	44.0	45.3	1.06	4.75	5.00
23.5	24.0	24.5	25.0	25.5	26.0	26.8	27.5	28.5	29.5	30.5	31.5	32.5	33.5	34.5	36.0	36.5	37.3	37.5	38.5	41.0	42.3	43.5	44.7	46.0	1.06	* 2.50	2.65
23.2	23.7	24.2	24.7	25.2	25.7	26.5	27.2	28.2	29.2	30.2	31.2	32.2	33.2	34.3	35.7	36.2	37.0	37.2	38.2	40.7	42.0	43.2	44.4	45.7	1.06	2.65	2.80
22.4	22.9	23.4	23.9	24.4	24.9	25.7	26.4	27.4	28.4	29.4	30.4	31.4	32.4	33.4	34.9	35.4	36.2	36.4	37.4	39.9	41.2	42.4	43.6	44.9	1.06	3.15	3.35
20.2	20.7	21.2	21.7	22.2	22.7	23.5	24.2	25.2	26.2	27.2	28.2	29.2	30.2	31.3	32.7	33.2	34.0	34.2	35.2	37.7	39.0	40.2	41.4	42.7	1.06	4.50	4.75
19.4	19.9	20.4	20.9	21.4	21.9	22.7	23.4	24.4	25.4	26.4	27.4	28.4	29.4	30.5	31.9	32.4	33.2	33.4	34.4	36.9	38.2	39.4	40.6	41.9	1.06	5.00	5.30
18.9	19.4	19.9	20.4	20.9	21.4	22.2	22.9	23.9	24.9	25.9	26.9	27.9	28.9	30.0	31.4	31.9	32.7	32.9	33.9	36.4	37.7	38.9	40.1	41.4	1.06	5.30	5.60
17.0	17.5	18.0	18.5	19.0	19.5	20.3	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.5	30.0	30.8	31.0	32.0	34.5	35.8	37.0	38.2	39.5	1.06	6.50	6.90
23.9	24.4	24.9	25.4	25.9	26.4	27.2	27.9	28.9	29.9	30.9	31.9	32.9	33.9	35.0	36.4	37.5	38.9	41.4	42.7	43.9	45.1	46.4	47.7	49.0	1.07	* 2.20	* 2.35
23.7	24.2	24.7	25.2	25.7	26.2	27.0	27.7	28.7	29.7	30.7	31.7	32.7	33.7	34.7	36.2	37.3	38.7	41.2	42.5	43.7	44.9	46.2	47.5	48.8	1.07	* 2.35	* 2.50
22.9	23.4	23.9	24.4	24.9	25.4	26.2	26.9	27.9	28.9	29.9	30.9	31.9	32.9	34.0	35.4	35.9	36.7	36.9	37.9	40.4	41.7	42.9	44.1	45.4	1.07	2.80	3.00
18.4	18.9	19.4	19.9	20.4	20.9	21.7	22.4	23.4	24.4	25.4	26.4	27.4	28.4	29.4	30.9	31.4	32.2	32.4	33.4	35.9	37.2	38.4	39.6	40.9	1.07	5.60	6.00
17.7	18.2	18.7	19.2	19.7	20.2	21.0	21.7	22.7	23.7	24.7	25.7	26.7	27.7	28.7	29.7	30.7	31.7	32.7	33.7	36.2	37.5	38.7	39.9	41.2	1.08	6.00	6.50
22.0	22.5	23.0	23.5	24.0	24.5	25.3	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.1	34.5	35.0	35.8	36.0	37.0	39.5	40.8	42.0	43.2	44.5	1.09	3.35	3.65
20.7	21.2	21.7	22.2	22.7	23.2	24.0	24.7	25.7	26.7	27.7	28.7	29.7	30.7	31.8	33.2	33.7	34.5	34.7	35.7	38.2	39.5	40.7	41.9	43.2	1.09	4.12	4.50
20.0	20.5	21.0	21.5	22.0	22.5	23.3	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.1	32.5	33.0	33.8	34.0	35.0	37.5	38.8	40.0	41.2	42.5	1.11	4.50	5.00
23.3	23.8	24.3	24.8	25.3	25.8	26.6	27.3	28.3	29.3	30.3	31.3	32.3	33.3	34.4	35.8	37.1	38.3	40.8	42.1	43.3	44.5	45.8	47.1	48.4	1.12	* 2.50	2.80
22.5	23.0	23.5	24.0	24.5	25.0	25.8	26.5	27.5	28.5	29.5	30.5	31.5	32.5	33.6	35.0	35.5	36.3	36.5	37.5	40.0	41.3	42.5	43.7	45.0	1.12	3.00	3.35
19.6	20.1	20.6	21.1	21.6	22.1	22.9	23.6	24.6	25.6	26.6	27.6	28.6	29.6	30.7	32.1	32.6	33.4	33.6	34.6	37.1	38.4	39.6	40.8	42.1	1.12	4.75	5.30
19.2	19.7	20.2	20.7	21.2	21.7	22.5	23.2	24.2	25.2	26.2	27.2	28.2	29.2	30.2	31.7	32.2	33.0	33.2	34.2	36.7	38.0	39.2	40.4	41.7	1.12	5.00	5.60
23.6	24.1	24.6	25.1	25.6	26.1	26.9	27.6	28.6	29.6	30.6	31.6	32.6	33.6	34.6	36.1	37.4	38.6	41.1	42.4	43.6	44.8	46.1	47.4	1.13	* 2.35	2.65	
23.1	23.6	24.1	24.6	25.1	25.6	26.4	27.1	28.1	29.1	30.1	31.1	32.1	33.1	34.1	35.6	36.1	36.9	37.1	38.1	40.6	41.9	43.1	44.3	45.6	1.13	2.65	3.00
22.8	23.3	23.8	24.3	24.8	25.3	26.1	26.8	27.8	28.8	29.8	30.8	31.8	32.8	33.8	35.3	35.8	36.6	36.8	37.8	40.3	41.6	42.8	44.0	45.3	1.13	2.80	3.15
21.4	21.9	22.4	22.9	23.4	23.9	24.7	25.4	26.4	27.4	28.4	29.4	30.4	31.4	32.4	33.9	34.4	35.2	35.4	36.4	38.9	40.2	41.4	42.6	43.9	1.13	3.65	4.12
18.6	19.1	19.6																									

Heavy Duty V-Belt Drive Design Manual

Table No. B6

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Speed Ratio	V-Belt No. and Center Distance											
Small Sheave	Large Sheave		3V			3VX			3VP			3V		
			3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	
		1.00	1027	1060	1088	1120	1146	1180	1224	1250	1296	1320	1400	
* 2.20	* 2.20	1.00	47.9	49.5	50.9	52.5	53.8	55.5	57.7	59.0	61.3	62.5	66.5	
* 2.35	* 2.35	1.00	47.7	49.3	50.7	52.3	53.6	55.3	57.5	58.8	61.1	62.3	66.3	
* 2.50	* 2.50	1.00	47.4	49.1	50.5	52.1	53.4	55.1	57.3	58.6	60.9	62.1	66.1	
2.65	2.65	1.00	47.2	48.8	50.2	51.8	53.1	54.8	57.0	58.3	60.6	61.8	65.8	
2.80	2.80	1.00	47.0	48.6	50.0	51.6	52.9	54.6	56.8	58.1	60.4	61.6	65.6	
3.00	3.00	1.00	46.6	48.3	49.7	51.3	52.6	54.3	56.5	57.8	60.1	61.3	65.3	
3.15	3.15	1.00	46.4	48.1	49.5	51.1	52.4	54.1	56.3	57.6	59.9	61.1	65.1	
3.35	3.35	1.00	46.1	47.7	49.1	50.7	52.0	53.7	55.9	57.2	59.5	60.7	64.7	
3.65	3.65	1.00	45.6	47.3	48.7	50.3	51.6	53.3	55.5	56.8	59.1	60.3	64.3	
4.12	4.12	1.00	44.9	46.5	47.9	49.5	50.8	52.5	54.7	56.0	58.3	59.5	63.5	
4.50	4.50	1.00	44.3	45.9	47.3	48.9	50.2	51.9	54.1	55.4	57.7	58.9	62.9	
4.75	4.75	1.00	43.9	45.5	46.9	48.5	49.8	51.5	53.7	55.0	57.3	58.5	62.5	
5.00	5.00	1.00	43.5	45.1	46.5	48.1	49.4	51.1	53.3	54.6	56.9	58.1	62.1	
5.30	5.30	1.00	43.0	44.7	46.1	47.7	49.0	50.7	52.9	54.2	56.5	57.7	61.7	
5.60	5.60	1.00	42.6	44.2	45.6	47.2	48.5	50.2	52.4	53.7	56.0	57.2	61.2	
6.00	6.00	1.00	41.9	43.6	45.0	46.6	47.9	49.6	51.8	53.1	55.4	56.6	60.6	
6.50	6.50	1.00	41.1	42.8	44.2	45.8	47.1	48.8	51.0	52.3	54.6	55.8	59.8	
6.90	6.90	1.00	40.5	42.2	43.6	45.2	46.5	48.2	50.4	51.7	54.0	55.2	59.2	
8.00	8.00	1.00	38.8	40.4	41.8	43.4	44.7	46.4	48.6	49.9	52.2	53.4	57.4	
10.60	10.60	1.00	34.7	36.3	37.7	39.3	40.6	42.3	44.5	45.8	48.1	49.3	53.3	
3.00	3.15	1.05	46.5	48.2	49.6	51.2	52.5	54.2	56.4	57.7	60.0	61.2	65.2	
4.75	5.00	1.05	43.7	45.3	46.7	48.3	49.6	51.3	53.5	54.8	57.1	58.3	62.3	
* 2.50	2.65	1.06	47.3	49.0	50.4	52.0	53.3	55.0	57.2	58.5	60.8	62.0	66.0	
2.65	2.80	1.06	47.1	48.7	50.1	51.7	53.0	54.7	56.9	58.2	60.5	61.7	65.7	
3.15	3.35	1.06	46.2	47.9	49.3	50.9	52.2	53.9	56.1	57.4	59.7	60.9	64.9	
4.50	4.75	1.06	44.1	45.7	47.1	48.7	50.0	51.7	53.9	55.2	57.5	58.7	62.7	
5.00	5.30	1.06	43.3	44.9	46.3	47.9	49.2	50.9	53.1	54.4	56.7	57.9	61.9	
5.30	5.60	1.06	42.8	44.4	45.8	47.4	48.7	50.4	52.6	53.9	56.2	57.4	61.4	
6.50	6.90	1.06	40.8	42.5	43.9	45.5	46.8	48.5	50.7	52.0	54.3	55.5	59.5	
* 2.20	* 2.35	1.07	47.8	49.4	50.8	52.4	53.7	55.4	57.6	58.9	61.2	62.4	66.4	
* 2.35	* 2.50	1.07	47.5	49.2	50.6	52.2	53.5	55.2	57.4	58.7	61.0	62.2	66.2	
2.80	3.00	1.07	46.8	48.4	49.8	51.4	52.7	54.4	56.6	57.9	60.2	61.4	65.4	
5.60	6.00	1.07	42.2	43.9	45.3	46.9	48.2	49.9	52.1	53.4	55.7	56.9	60.9	
6.00	6.50	1.08	41.5	43.2	44.6	46.2	47.5	49.2	51.4	52.7	55.0	56.2	60.2	
3.35	3.65	1.09	45.9	47.5	48.9	50.5	51.8	53.5	55.7	57.0	59.3	60.5	64.5	
4.12	4.50	1.09	44.6	46.2	47.6	49.2	50.5	52.2	54.4	55.7	58.0	59.2	63.2	
4.50	5.00	1.11	43.9	45.5	46.9	48.5	49.8	51.5	53.7	55.0	57.3	58.5	62.5	
* 2.50	2.65	1.12	47.2	48.8	50.2	51.8	53.1	54.8	57.0	58.3	60.6	61.8	65.8	
* 3.00	3.35	1.12	46.4	48.0	49.4	51.0	52.3	54.0	56.2	57.5	59.8	61.0	65.0	
4.75	5.30	1.12	43.5	45.1	46.5	48.1	49.4	51.1	53.3	54.6	56.9	58.1	62.1	
5.00	5.60	1.12	43.0	44.7	46.1	47.7	49.0	50.7	52.9	54.2	56.5	57.7	61.7	
* 2.35	2.65	1.13	47.4	49.1	50.5	52.1	53.4	55.1	57.3	58.6	60.9	62.1	66.1	
2.65	3.00	1.13	46.9	48.6	50.0	51.6	52.9	54.6	56.8	58.1	60.4	61.6	65.6	
2.80	3.15	1.13	46.7	48.3	49.7	51.3	52.6	54.3	56.5	57.8	60.1	61.3	65.3	
3.65	4.12	1.13	45.2	46.9	48.3	49.9	51.2	52.9	55.1	56.4	58.7	59.9	63.9	
5.30	6.00	1.13	42.5	44.1	45.5	47.1	48.4	50.1	52.3	53.6	55.9	57.1	61.1	
* 2.20	* 2.50	1.14	47.7	49.3	50.7	52.3	53.6	55.3	57.5	58.8	61.1	62.3	66.3	
4.12	4.75	1.15	44.4	46.0	47.4	49.0	50.3	52.0	54.2	55.5	57.8	59.0	63.0	
6.00	6.90	1.15	41.2	42.9	44.3	45.9	47.2	48.9	51.1	52.4	54.7	55.9	59.9	
3.15	3.65	1.16	46.0	47.7	49.1	50.7	52.0	53.7	55.9	57.2	59.5	60.7	64.7	
5.60	6.50	1.16	41.8	43.5	44.9	46.5	47.8	49.5	51.7	53.0	55.3	56.5	60.5	
6.90	8.00	1.16	39.6	41.3	42.7	44.3	45.6	47.3	49.5	50.8	53.1	54.3	58.3	
4.50	5.30	1.18	43.7	45.3	46.7	48.3	49.6	51.3	53.5	54.8	57.1	58.3	62.3	
4.75	5.60	1.18	43.2	44.9	46.3	47.9	49.2	50.9	53.1	54.4	56.7	57.9	61.9	
2.65	3.15	1.19	46.8	48.4	49.8	51.4	52.7	54.4	56.6	57.9	60.2	61.4	65.4	
* 2.35	2.80	1.20	47.3	49.0	50.4	52.0	53.3	55.0	57.2	58.5	60.8	62.0	66.0	
* 2.50	3.00	1.20	47.0	48.7	50.1	51.7	53.0	54.7	56.9	58.2	60.5	61.7	65.7	
2.80	3.35	1.20	46.5	48.2	49.6	51.2	52.5	54.2	56.4	57.7	60.0	61.2	65.2	
5.00	6.00	1.20	42.7	44.4	45.8	47.4	48.7	50.4	52.6	53.9	56.2	57.4	61.4	
* 2.20	2.65	1.21	47.5	49.2	50.6	52.2	53.5	55.2	57.4	58.7	61.0	62.2	66.2	
3.00	3.65	1.22	46.1	47.8	49.2	50.8	52.1	53.8	56.0	57.3	59.6	60.8	64.8	
4.12	5.00	1.22	44.2	45.8	47.2	48.8	50.1	51.8	54.0	55.3	57.6	58.8	62.8	
3.35	4.12	1.23	45.5	47.1	48.5	50.1	51.4	53.1	55.3	56.6	58.9	60.1	64.1	
5.30	6.50	1.23	42.1	43.7	45.1	46.7	48.0	49.7	51.9	53.2	55.5	56.7	60.7	
5.60	6.90	1.23	41.5	43.2	44.6	46.2	47.5	49.2	51.4	52.7	55.0	56.2	60.2	
6.50	8.00	1.23	40.0	41.6	43.0	44.6	45.9	47.6	49.8	51.1	53.4	54.6	58.6	
3.65	4.50	1.24	44.9	46.6	48.0	49.6	50.9	52.6	54.8	56.1	58.4	59.6	63.6	
4.50	5.60	1.25	43.4	45.1	46.5	48.1	49.4	51.1	53.3	54.6	56.9	58.1	62.1	
* 2.50	3.15	1.27	46.9	48.6	50.0	51.6	52.9	54.6	56.8	58.1	60.4	61.6	65.6	
2.65	3.35	1.27	46.6	48.3	49.7	51.3	52.6	54.3	56.5	57.8	60.1	61.3	65.3	
4.75	6.00	1.27	42.9	44.6	46.0	47.6	48.9	50.6	52.8	54.1	56.4	57.6	61.6	
* 2.20	2.80	1.28	47.4	49.1	50.5	52.1	53.4	55.1	57.3	58.6	60.9	62.1	66.1	
* 2.35	3.00	1.28	47.1	48.8	50.2	51.8	53.1	54.8	57.0	58.3	60.6	61.8	65.8	
4.12	5.30	1.29	43.9	45.6	47.0	48.6	49.9	51.6	53.8	55.1	57.4	58.6	62.6	

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2
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* Diameters below recommended RMA minimum for narrow (3V, 5V, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B6

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand and Predator PowerBand Belt Drives



Sheave Outside Diameters		Speed Ratio	V-Belt No. and Center Distance																															
Small Sheave	Large Sheave		3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V	3V				
5.00	6.50	1.30																																
5.30	6.90	1.30																																
2.80	3.65	1.31	7.4	8.2	8.9	9.4	9.9	10.7	11.2	11.7	12.4	12.7	13.2	13.7	14.2	14.4	14.9	15.7	16.2	17.4	18.1	18.7	19.3	19.9	20.9	21.4	21.9							
3.15	4.12	1.31	6.8	7.5	8.3	8.8	9.3	10.0	10.6	11.0	11.8	12.0	12.6	13.0	13.5	13.8	14.3	15.0	15.5	16.8	17.5	18.0	18.6	19.3	20.3	20.8	21.3							
3.65	4.75	1.31	5.9	6.6	7.4	7.9	8.4	9.1	9.7	10.1	10.9	11.1	11.7	12.1	12.6	12.9	13.4	14.1	14.6	15.9	16.6	17.1	17.7		18.4	19.4	19.9	20.4						
10.60	14.00	1.32																																
8.00	10.60	1.33																																
4.50	6.00	1.34				6.2	6.7	7.5	8.0	8.5	9.2	9.5	10.0	10.5	11.0	11.2	11.7	12.5	13.0	14.2	14.9	15.5	16.1		10.3	11.3	11.8	12.3						
6.00	8.00	1.34																																
2.35	3.15	1.35	8.2	8.9	9.7	10.2	10.7	11.4	12.0	12.4	13.2	13.4	14.0	14.4	14.9	15.2	15.7	16.4	16.9	18.2	18.9	19.4	20.0	20.7	21.7	22.2	22.7							
* 2.50	3.35	1.35	7.9	8.6	9.4	9.9	10.4	11.1	11.7	12.1	12.9	13.1	13.7	14.1	14.6	14.9	15.4	16.1	16.6	17.9	18.6	19.2	19.8	20.4	21.4	21.9	22.4							
3.35	4.50	1.35	6.3	7.1	7.8	8.3	8.8	9.6	10.1	10.6	11.3	11.6	12.1	12.6	13.1	13.3	13.8	14.6	15.1	16.3	17.0	17.6	18.2	18.8	19.8	20.3	20.8							
4.12	5.60	1.36	5.6	6.3	6.8	7.3	8.1	8.6	9.1	9.8	10.1	10.6	11.1	11.6	11.8	12.3	13.1	13.6	14.8	15.5	16.1	16.7	17.4	18.4	18.9	19.4								
* 2.20	3.00	1.37	8.4	9.2	9.9	10.4	10.9	11.7	12.2	12.7	13.4	13.7	14.2	14.7	15.2	15.4	15.9	16.7	17.2	18.4	19.1	19.7	20.3	20.9	21.9	22.4	22.9							
4.75	6.50	1.37				6.1	6.9	7.4	7.9	8.6	8.9	9.4	9.9	10.4	10.6	11.1	11.9	12.4	13.6	14.3	14.9	15.5	16.1	17.1	17.6	18.1								
2.65	3.65	1.38	7.5	8.3	9.0	9.5	10.0	10.8	11.3	11.8	12.5	12.8	13.3	13.8	14.3	14.5	15.0	15.8	16.3	17.5	18.2	18.8	19.4	20.0	21.0	21.5	22.0							
3.00	4.12	1.38	6.9	7.6	8.4	8.9	9.4	10.1	10.7	11.1	11.9	12.1	12.7	13.1	13.6	13.9	14.4	15.1	15.6	16.9	17.6	18.1	18.7	19.4	20.4	20.9	21.4							
3.65	5.00	1.38	5.7	6.4	7.2	7.7	8.2	8.9	9.5	9.9	10.7	10.9	11.5	11.9	12.4	12.7	13.2	13.9	14.4	15.7	16.4	16.9	17.5	18.2	19.2	19.7	20.2							
5.00	6.90	1.38																																
3.35	4.75	1.42	6.1	6.9	7.6	8.1	8.6	9.4	9.9	10.4	11.1	11.4	11.9	12.4	12.9	13.1	13.6	14.4	14.9	16.1	16.8	17.4	18.0	18.6	19.6	20.1	20.6							
* 2.35	3.35	1.43	8.0	8.8	9.5	10.0	10.5	11.3	11.8	12.3	13.0	13.3	13.8	14.3	14.8	15.0	15.5	16.3	16.8	18.0	18.7	19.3	19.9	20.5	21.5	22.0	22.5							
5.60	8.00	1.43																																
* 2.20	3.15	1.44	8.3	9.0	9.8	10.3	10.8	11.5	12.1	12.5	13.3	13.5	14.1	14.5	15.0	15.3	15.8	16.5	17.0	18.3	19.0	19.5	20.1	20.8	21.8	22.3	22.8							
3.15	4.50	1.44	6.5	7.2	8.0	8.5	9.0	9.7	10.3	10.7	11.5	11.7	12.3	12.7	13.2	13.5	14.0	14.7	15.2	16.5	17.2	17.7	18.3	19.0	20.0	20.5	21.0							
4.50	6.00	1.45				6.3	7.0	7.6	8.0	8.6	9.1	9.6	10.1	10.6	10.8	11.3	12.1	12.6	13.8	14.5	15.1	15.7	16.3	17.3	17.8	18.3								
3.65	5.30	1.46	5.4	6.2	6.9	7.4	7.9	8.7	9.2	9.7	10.4	10.7	11.2	11.7	12.2	12.4	12.9	13.7	14.2	15.4	16.1	16.7	17.3	18.0	19.0	19.5	20.0							
4.12	6.00	1.46				6.0	6.5	7.0	7.7	8.3	8.8	9.5	9.8	10.3	10.8	11.3	11.5	12.0	12.8	13.3	14.5	15.2	15.8	16.4	17.0	18.0	18.5	19.0						
4.75	6.90	1.46																																
* 2.50	3.65	1.47	7.6	8.4	9.2	9.7	10.2	10.9	11.5	11.9	12.7	12.9	13.5	13.9	14.5	15.0	15.6	16.3	16.8	18.1	18.8	19.4	20.0	20.6	21.6	22.1	22.6							
2.80	4.12	1.48	7.0	7.8	8.5	9.0	9.5	10.3	10.8	11.3	12.0	12.3	12.8	13.3	13.8	14.0	14.6	15.3	15.8	17.1	17.8	18.3	18.9	19.5	20.2	21.2	21.7	22.2						
3.35	5.00	1.50	5.9	6.6	7.4	7.9	8.4	9.2	9.7	10.2	10.9	11.2	11.7	12.2	12.7	12.9	13.4	14.2	14.7	15.9	16.6	17.2	17.8	18.4	19.4	19.9	20.4							
3.00	4.50	1.51	6.6	7.3	8.1	8.6	9.1	9.8	10.4	10.8	11.6	11.8	12.4	12.8	13.3	13.6	14.1	14.8	15.3	16.6	17.3	17.8	18.4	19.1	20.1	20.6	21.1							
5.15	8.00	1.51																																
3.35	4.75	1.52	6.2	7.0	7.8	8.3	8.8	9.5	10.1	10.5	11.3	11.5	12.1	12.5	13.0	13.3	13.8	14.5	15.0	16.3	17.0	17.5	18.1	18.8	19.8	20.3	20.8							
* 2.20	3.35	1.53	8.1	8.9	9.6	10.1	10.6	11.4	11.9	12.4	13.1	13.4	13.9	14.4	14.9	15.1	15.6	16.4	16.9	18.1	18.8	19.4	20.0	20.6	21.6	22.1	22.6							
3.65	5.60	1.54	5.1	5.9	6.7	7.2	7.7	8.4	9.0	9.4	10.2	10.4	11.0	11.4	11.9	12.2	12.7	13.4	14.0	15.2	15.9	16.5	17.1	17.7	18.7	19.2	19.7							
4.50	6.90	1.54																																
6.90	10.60	1.54																																
* 2.35	3.65	1.57	7.8	8.5	9.3	9.8	10.3	11.0	11.6	12.0	12.8	13.0	13.6	14.0	14.5	14.8	15.3	16.0	16.5	17.8	18.5	19.0	19.6	20.3	21.3	21.8	22.3							
2.65	4.12	1.57	7.1	7.9	8.7	9.2	9.7	10.4	11.0	11.4	12.2	12.4	13.0	13.4	13.9	14.2	14.7	15.4	15.9	17.2	17.9	18.4	19.0	19.7	20.7	21.2	21.7							
4.12	6.50	1.58				6.0	6.6	7.3	7.9	8.3	9.1	9.3	9.9	10.3	10.8	11.1	11.6	12.4	12.9	14.1	14.8	15.4	16.0	16.6	17.6	18.1	18.6							
3.00	4.75	1.59	6.4	7.1	7.9	8.4	8.9	9.6	10.2	10.6	11.4	11.6	12.2	12.6	13.1	13.4	13.9	14.6	15.1	16.4	17.1	17.6	18.2	18.9	19.9	20.4	20.9							
3.35	5.30	1.59	5.6	6.4	7.1	7.6	8.1	8.9	9.5	9.9	10.7	10.9	11.5	11.9	12.4	12.7	13.2	13.9	14.4	15.7	16.4	16.9	17.5	18.2	19.2	19.7	20.2							
3.15	5.00	1.60	6.0	6.8	7.5	8.0	8.5	9.3	9.9	10.3	11.1	11.3	11.9	12.3	12.8	13.1	13.6	14.3	14.8	16.1	16.8	17.3	17.9	18.6	19.6	20.1	20.6							
5.00	8.00	1.61																																
2.80	4.50	1.62	6.7	7.5	8.2	8.7	9.2	10.0	10.5	11.0	11.7	12.0	12.5	13.0	13.5	13.7	14.2	15.0	15.5	16.7	17.4	18.0	18.6	19.2	20.2	20.7	21.2							
6.50	10.60	1.64																																
3.65	6.00	1.65				5.5	6.3	6.8	7.3	8.1	8.6	9.1	9.9	10.1	10.7	11.1	11.6	11.9	12.4	13.1	13.6	14.0	14.5	15.1	15.6	16.6	17.1	17.6						
* 2.50	4.12	1.66	7.3	8.0	8.8	9.3	9.8	10.5	11.1	11.5	12.3	12.5	13.1	13.5	14.0	14.3																		

Heavy Duty V-Belt Drive Design Manual

Table No. B6

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Speed Ratio	V-Belt No. and Center Distance																												
Small Sheave	Larger Sheave		3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	
5.00	6.50	1.30	18.5	19.0	19.5	20.0	20.5	21.0	21.8	22.5	23.5	24.5	25.5	26.5	27.5	28.5	29.5	31.0	31.5	32.3	32.5	33.5	36.0	37.3	38.5	39.7	41.0	42.4	43.8	45.2	46.6
5.30	6.90	1.30	17.9	18.4	18.9	19.4	19.9	20.4	21.1	21.9	22.9	23.9	24.9	25.9	26.9	27.9	29.0	30.4	30.9	31.7	31.9	32.9	35.4	36.7	37.9	39.1	40.4	41.7	43.0	44.3	45.6
2.80	3.65	1.31	22.4	22.9	23.4	23.9	24.4	24.9	25.7	26.4	27.4	28.4	29.4	30.4	31.4	32.4	33.5	34.9	35.4	36.2	36.4	37.4	39.9	41.2	42.4	43.6	44.9	46.2	47.5	48.8	50.1
3.15	4.12	1.31	21.8	22.3	22.8	23.3	23.8	24.3	25.1	25.8	26.8	27.8	28.8	29.8	30.8	31.8	32.8	34.3	34.8	35.6	35.8	36.8	39.3	40.6	41.8	43.0	44.3	45.6	46.9	48.2	49.5
3.65	4.75	1.31	20.9	21.4	21.9	22.4	22.9	23.4	24.2	24.9	25.9	26.9	27.9	28.9	29.9	30.9	31.9	33.4	33.9	34.7	34.9	35.9	38.4	39.7	40.9	42.1	43.4	44.7	46.0	47.3	48.6
10.60	14.00	1.32	12.8	13.3	13.8	14.3	14.8	15.3	16.1	16.8	17.8	18.8	19.8	20.9	21.9	22.9	23.9	25.4	25.9	26.7	26.9	27.9	30.4	31.7	32.9	34.1	35.4	36.7	38.0	39.2	40.4
8.00	10.60	1.33	19.2	19.7	20.2	20.7	21.2	21.7	22.5	23.2	24.2	25.2	26.2	27.2	28.2	29.2	30.3	31.7	32.2	33.0	33.2	34.2	36.7	38.0	39.2	40.4	41.7	43.0	44.3	45.6	46.9
4.50	6.00	1.34	16.5	17.0	17.5	18.0	18.5	19.0	19.8	20.5	21.5	22.5	23.5	24.5	25.5	26.5	27.5	29.0	29.5	30.3	30.5	31.5	34.0	35.3	36.5	37.7	39.0	40.3	41.6	42.9	44.2
6.00	8.00	1.34	23.2	23.7	24.2	24.7	25.2	25.7	26.5	27.2	28.2	29.2	30.2	31.2	32.2	33.2	34.2	35.7	36.2	37.0	37.2	38.2	40.7	42.0	43.2	44.4	45.7	47.0	48.3	49.5	50.8
2.35	3.15	1.35	22.9	23.4	23.9	24.4	24.9	25.4	26.2	26.9	27.9	28.9	29.9	30.9	31.9	32.9	34.0	35.4	35.9	36.7	36.9	37.9	40.4	41.7	42.9	44.1	45.4	46.7	47.9	49.2	50.5
3.15	4.50	1.35	21.3	21.8	22.3	22.8	23.3	23.8	24.6	25.3	26.3	27.3	28.3	29.3	30.3	31.3	32.4	33.8	34.3	35.1	35.3	36.3	38.8	40.1	41.3	42.5	43.8	45.1	46.4	47.7	49.0
4.12	5.60	1.36	19.9	20.4	20.9	21.4	21.9	22.4	23.2	23.9	24.9	25.9	26.9	27.9	28.9	29.9	30.9	32.4	32.9	33.7	33.9	34.9	37.4	38.7	39.9	41.1	42.4	43.7	45.0	46.3	47.6
2.20	3.00	1.37	23.4	23.9	24.4	24.9	25.4	25.9	26.7	27.4	28.4	29.4	30.4	31.4	32.4	33.4	34.5	35.9	36.4	37.2	37.4	38.4	40.9	42.2	43.4	44.6	45.9	47.2	48.5	49.8	51.1
4.75	6.50	1.37	18.6	19.1	19.6	20.1	20.6	21.1	21.9	22.6	23.6	24.6	25.6	26.6	27.6	28.7	29.7	31.2	31.7	32.5	32.7	33.7	36.2	37.5	38.7	39.9	41.2	42.5	43.8	45.1	46.4
3.65	5.00	1.38	22.5	23.0	23.5	24.0	24.5	25.0	25.8	26.5	27.5	28.5	29.5	30.5	31.5	32.5	33.6	35.0	35.5	36.3	36.5	37.5	40.0	41.3	42.5	43.7	45.0	46.3	47.6	48.9	50.2
3.00	4.12	1.38	21.9	22.4	22.9	23.4	23.9	24.4	25.2	25.9	26.9	27.9	28.9	29.9	30.9	31.9	33.0	34.4	34.9	35.7	35.9	36.9	39.4	40.7	41.9	43.1	44.4	45.7	47.0	48.3	49.6
3.65	5.00	1.38	20.7	21.2	21.7	22.2	22.7	23.2	24.0	24.7	25.7	26.7	27.7	28.7	29.7	30.7	31.7	33.2	33.7	34.5	34.7	35.7	38.2	39.5	40.7	41.9	43.2	44.5	45.8	47.1	48.4
5.00	6.90	1.38	18.1	18.6	19.1	19.6	20.1	20.6	21.4	22.1	23.1	24.1	25.1	26.1	27.1	28.1	29.2	30.6	31.1	31.9	32.1	33.1	35.6	36.9	38.1	39.3	40.6	41.9	43.2	44.5	45.8
3.35	4.75	1.42	21.1	21.6	22.1	22.6	23.1	23.6	24.4	25.1	26.1	27.1	28.1	29.1	30.1	31.1	32.2	33.6	34.1	34.9	35.1	36.1	38.6	39.9	41.1	42.3	43.6	44.9	46.2	47.5	48.8
2.35	3.35	1.43	23.0	23.5	24.0	24.5	25.0	25.5	26.3	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.1	35.5	36.0	36.8	37.0	38.0	40.5	41.8	43.0	44.2	45.5	46.8	48.1	49.4	50.7
5.60	8.00	1.43	16.8	17.3	17.8	18.3	18.8	19.3	20.1	20.8	21.8	22.8	23.8	24.8	25.8	26.8	27.8	29.3	29.8	30.6	30.8	31.8	34.3	35.6	36.8	38.0	39.3	40.6	41.9	43.2	44.5
2.20	3.15	1.44	23.3	23.8	24.3	24.8	25.3	25.8	26.6	27.3	28.3	29.3	30.3	31.3	32.3	33.3	34.3	35.8	36.3	37.1	37.3	38.3	40.8	42.1	43.3	44.5	45.8	47.1	48.4	49.7	51.0
3.15	4.50	1.44	21.5	22.0	22.5	23.0	23.5	24.0	24.8	25.5	26.5	27.5	28.5	29.5	30.5	31.5	32.5	34.0	34.5	35.3	35.5	36.5	39.0	40.3	41.5	42.7	44.0	45.3	46.6	47.9	49.2
4.50	6.50	1.45	18.8	19.3	19.8	20.3	20.8	21.3	22.1	22.8	23.8	24.8	25.8	26.8	27.8	28.8	29.8	31.3	31.8	32.6	32.8	33.8	36.3	37.6	38.8	40.0	41.3	42.6	43.9	45.2	46.5
3.65	5.30	1.46	20.5	21.0	21.5	22.0	22.5	23.0	23.8	24.5	25.5	26.5	27.5	28.5	29.5	30.5	31.5	33.0	33.5	34.3	34.5	35.5	38.0	39.3	40.5	41.7	43.0	44.3	45.6	46.9	48.2
4.12	6.00	1.46	19.5	20.0	20.5	21.0	21.5	22.0	22.8	23.5	24.5	25.5	26.5	27.5	28.5	29.5	30.6	32.0	32.5	33.3	33.5	34.5	37.0	38.3	39.5	40.7	42.0	43.3	44.6	45.9	47.2
4.75	6.90	1.46	18.3	18.8	19.3	19.8	20.3	20.8	21.6	22.3	23.3	24.3	25.3	26.3	27.3	28.3	29.4	30.8	31.3	32.1	32.3	33.3	35.8	37.1	38.3	39.5	40.8	42.1	43.4	44.7	46.0
2.50	3.65	1.47	22.7	23.2	23.7	24.2	24.7	25.2	26.0	26.7	27.7	28.7	29.7	30.7	31.7	32.7	33.7	35.2	35.7	36.5	36.7	37.7	40.2	41.5	42.7	43.9	45.2	46.5	47.8	49.1	50.4
2.80	4.12	1.48	22.1	22.6	23.1	23.6	24.1	24.6	25.4	26.1	27.1	28.1	29.1	30.1	31.1	32.1	33.1	34.6	35.1	35.9	36.1	37.1	39.6	40.9	42.1	43.3	44.6	45.9	47.2	48.5	49.8
3.35	5.00	1.50	20.9	21.4	21.9	22.4	22.9	23.4	24.2	24.9	25.9	26.9	27.9	28.9	29.9	30.9	32.0	33.4	33.9	34.7	34.9	35.9	38.4	39.7	40.9	42.1	43.4	44.7	46.0	47.3	48.6
3.00	4.50	1.51	21.6	22.1	22.6	23.1	23.6	24.1	24.9	25.6	26.6	27.6	28.6	29.6	30.6	31.6	32.7	34.1	34.6	35.4	35.6	36.6	39.1	40.4	41.6	42.8	44.1	45.4	46.7	48.0	49.3
5.30	8.00	1.51	17.0	17.5	18.0	18.5	19.0	19.5	20.3	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.1	29.5	30.0	30.8	31.0	32.0	34.5	35.8	37.0	38.2	39.5	40.8	42.1	43.4	44.7
3.15	4.75	1.52	21.3	21.8	22.3	22.8	23.3	23.8	24.6	25.3	26.3	27.3	28.3	29.3	30.3	31.3	32.3	33.8	34.3	35.1	35.3	36.3	38.8	40.1	41.3	42.5	43.8	45.1	46.4	47.7	49.0
2.20	3.35	1.53	23.1	23.6	24.1	24.6	25.1	25.6	26.4	27.1	28.1	29.1	30.1	31.1	32.1	33.1	34.2	35.6	36.1	36.9	37.1	38.1	40.6	41.9	43.1	44.3	45.6	46.9	48.2	49.5	50.8
3.65	5.00	1.54	20.2	20.7	21.2	21.7	22.2	22.7	23.5	24.2	25.2	26.2	27.2	28.2	29.2	30.2	31.2	32.7	33.2	34.0	34.2	35.2	37.7	39.0	40.2	41.4	42.7	44.0	45.3	46.6	47.9
4.50	6.90	1.54	18.5	19.0	19.5	20.0	20.5	21.0	21.8	22.5	23.5	24.5	25.5	26.5	27.5	28.5	29.6	31.0	31.5	32.3	32.5	33.5	36.0	37.3	38.5	39.7	41.0	42.3	43.6	44.9	46.2

Heavy Duty V-Belt Drive Design Manual

Table No. B6

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance											Speed Ratio	Sheave Outside Diameters	
3V	3VX	3VP	3V	3VX	3VP	3V	3VX	3VP	3V	3VX		Small Sheave	Large Sheave
1027	1060	1088	1120	1146	1180	1224	1250	1296	1320	1400	1.30	5.00	6.50
42.3	44.0	45.4	47.0	48.3	50.0	52.2	53.5	55.8	57.0	61.0	1.30	5.30	6.90
41.8	43.4	44.8	46.4	47.7	49.4	51.6	52.9	55.2	56.4	60.4	1.31	2.80	3.65
46.3	47.9	49.3	50.9	52.2	53.9	56.1	57.4	59.7	60.9	64.9	1.31	3.15	4.12
45.6	47.3	48.7	50.3	51.6	53.3	55.5	56.8	59.1	60.3	64.3	1.31	3.65	4.75
44.7	46.4	47.8	49.4	50.7	52.4	54.6	55.9	58.2	59.4	63.4	1.31	3.65	4.75
32.0	33.6	35.0	36.6	37.9	39.6	41.8	43.1	45.4	46.6	50.7	1.32	10.60	14.00
36.7	38.4	39.8	41.4	42.7	44.4	46.6	47.9	50.2	51.4	55.4	1.33	8.00	10.60
43.1	44.7	46.1	47.7	49.0	50.7	52.9	54.2	56.5	57.7	61.7	1.34	4.50	6.00
40.3	42.0	43.4	45.0	46.3	48.0	50.2	51.5	53.8	55.0	59.0	1.34	6.00	8.00
47.0	48.7	50.1	51.7	53.0	54.7	56.9	58.2	60.5	61.7	65.7	1.35	2.35	3.15
46.8	48.4	49.8	51.4	52.7	54.4	56.6	57.9	60.2	61.4	65.4	1.35	2.50	3.35
45.2	46.8	48.2	49.8	51.1	52.8	55.0	56.3	58.6	59.8	63.8	1.35	3.35	4.50
43.7	45.4	46.8	48.4	49.7	51.4	53.6	54.9	57.2	58.4	62.4	1.36	4.12	5.60
47.3	48.9	50.3	51.9	53.2	54.9	57.1	58.4	60.7	61.9	65.9	1.37	2.20	3.00
42.5	44.2	45.6	47.2	48.5	50.2	52.4	53.7	56.0	57.2	61.2	1.37	4.75	6.50
46.4	48.0	49.4	51.0	52.3	54.0	56.2	57.5	59.8	61.0	65.1	1.38	2.65	3.65
45.8	47.4	48.8	50.4	51.7	53.4	55.6	56.9	59.2	60.4	64.4	1.38	3.00	4.12
44.6	46.2	47.6	49.2	50.5	52.2	54.4	55.7	58.0	59.2	63.2	1.38	3.65	5.00
42.0	43.6	45.0	46.6	47.9	49.6	51.8	53.1	55.4	56.6	60.6	1.38	5.00	6.90
45.0	46.6	48.0	49.6	50.9	52.6	54.8	56.1	58.4	59.6	63.6	1.42	3.35	4.75
46.9	48.5	49.9	51.5	52.8	54.5	56.7	58.0	60.3	61.5	65.5	1.43	2.35	3.35
40.7	42.3	43.7	45.3	46.6	48.3	50.5	51.8	54.1	55.3	59.3	1.43	5.60	8.00
47.1	48.8	50.2	51.8	53.1	54.8	57.0	58.3	60.6	61.8	65.8	1.44	2.20	3.15
45.3	47.0	48.4	50.0	51.3	53.0	55.2	56.5	58.8	60.0	64.0	1.44	3.15	4.50
42.7	44.3	45.7	47.4	48.7	50.4	52.6	53.9	56.2	57.4	61.4	1.45	4.50	6.50
44.3	46.0	47.4	49.0	50.3	52.0	54.2	55.5	57.8	59.0	63.0	1.46	3.65	5.30
43.4	45.0	46.4	48.0	49.3	51.0	53.2	54.5	56.8	58.0	62.0	1.46	4.12	6.00
42.2	43.8	45.2	46.8	48.1	49.8	52.0	53.3	55.6	56.8	60.8	1.46	4.75	6.90
46.5	48.2	49.6	51.2	52.5	54.2	56.4	57.7	60.0	61.2	65.2	1.47	2.50	3.65
43.3	45.0	46.4	48.0	49.3	51.0	53.2	54.5	56.8	58.0	62.0	1.48	2.80	4.12
44.8	46.4	47.8	49.4	50.7	52.4	54.6	55.9	58.2	59.4	63.4	1.50	3.35	5.00
45.5	47.1	48.5	50.1	51.4	53.1	55.3	56.6	58.9	60.1	64.1	1.51	3.00	4.50
40.9	42.5	43.9	45.5	46.8	48.5	50.7	52.0	54.3	55.5	59.5	1.51	5.30	8.00
45.1	46.8	48.2	49.8	51.1	52.8	55.0	56.3	58.6	59.8	63.8	1.52	3.15	4.75
47.0	48.6	50.0	51.6	52.9	54.6	56.8	58.1	60.4	61.6	65.6	1.53	2.20	3.35
44.1	45.7	47.1	48.7	50.0	51.7	53.9	55.2	57.5	58.7	62.7	1.54	2.65	3.65
42.4	44.0	45.4	47.0	48.3	50.0	52.2	53.5	55.8	57.0	61.0	1.54	4.50	6.90
37.6	39.2	40.6	42.2	43.5	45.2	47.4	48.7	51.0	52.2	56.2	1.54	6.90	10.60
46.6	48.3	49.7	51.3	52.6	54.3	56.5	57.8	60.1	61.3	65.3	1.57	2.35	3.65
46.0	47.7	49.1	50.7	52.0	53.7	55.9	57.2	59.5	60.7	64.7	1.57	2.65	4.12
43.0	44.6	46.0	47.6	48.9	50.6	52.8	54.1	56.4	57.6	61.6	1.58	4.12	6.50
45.3	46.9	48.3	49.9	51.2	52.9	55.1	56.4	58.7	59.9	63.9	1.59	3.00	4.75
44.5	46.2	47.6	49.2	50.5	52.2	54.4	55.7	58.0	59.2	63.2	1.59	3.35	5.00
44.9	46.6	48.0	49.6	50.9	52.6	54.8	56.1	58.4	59.6	63.6	1.60	3.15	5.30
41.1	42.8	44.2	45.8	47.1	48.8	51.0	52.3	54.6	55.8	59.8	1.61	5.00	8.00
45.6	47.3	48.7	50.3	51.6	53.3	55.5	56.8	59.1	60.3	64.3	1.62	2.80	4.50
37.9	39.5	40.9	42.5	43.8	45.5	47.7	49.0	51.3	52.5	56.5	1.64	6.50	10.60
43.8	45.4	46.8	48.4	49.7	51.4	53.6	54.9	57.2	58.4	62.4	1.65	3.65	6.00
46.1	47.8	49.2	50.8	52.1	53.8	56.0	57.3	59.6	60.8	64.8	1.66	2.50	4.12
46.7	48.4	49.8	51.4	52.7	54.4	56.6	57.9	60.2	61.4	65.4	1.67	2.20	3.65
45.1	46.7	48.1	49.7	51.0	52.7	54.9	56.2	58.5	59.7	63.7	1.68	3.00	5.00
44.3	46.0	47.4	49.0	50.3	52.0	54.2	55.5	57.8	59.0	63.0	1.68	3.35	5.60
42.7	44.3	45.7	47.3	48.6	50.3	52.5	53.8	56.1	57.3	61.3	1.68	4.12	6.90
44.7	46.4	47.8	49.4	50.7	52.4	54.6	55.9	58.2	59.4	63.4	1.69	3.15	5.30
41.3	43.0	44.4	46.0	47.3	49.0	51.2	52.5	54.8	56.0	60.0	1.69	4.75	8.00
45.7	47.4	48.8	50.4	51.7	53.4	55.6	56.9	59.2	60.4	64.4	1.71	2.65	4.50
45.4	47.1	48.5	50.1	51.4	53.1	55.3	56.6	58.9	60.1	64.1	1.71	2.80	4.75
33.9	35.6	37.0	38.6	39.9	41.6	43.8	45.1	47.4	48.6	52.6	1.75	8.00	14.00
46.3	47.9	49.3	50.9	52.2	53.9	56.1	57.4	59.7	60.9	64.9	1.77	2.35	4.12
38.2	39.9	41.3	42.9	44.2	45.9	48.1	49.4	51.7	52.9	56.9	1.77	6.00	10.60
44.8	46.5	47.9	49.5	50.8	52.5	54.7	56.0	58.3	59.5	63.5	1.78	3.00	5.30
44.5	46.1	47.5	49.1	50.4	52.1	54.3	55.6	57.9	59.1	63.1	1.79	3.15	5.60
43.4	45.0	46.4	48.0	49.3	51.0	53.2	54.5	56.8	58.0	62.0	1.79	3.65	6.50
41.5	43.1	44.5	46.1	47.5	49.2	51.4	52.7	55.0	56.2	60.2	1.79	4.50	8.00
45.2	46.9	48.3	49.9	51.2	52.9	55.1	56.4	58.7	59.9	63.9	1.80	2.80	5.00
44.0	45.6	47.0	48.6	49.9	51.6	53.8	55.1	57.4	58.6	62.6	1.80	3.35	6.00
27.8	29.5	30.9	32.5	33.8	35.5	37.7	39.0	41.3	42.5	46.6	1.80	10.60	19.00
45.5	47.2	48.6	50.2	51.5	53.2	55.4	56.7	59.0	60.2	64.2	1.81	2.65	4.75
45.8	47.5	48.9	50.5	51.8	53.5	55.7	57.0	59.3	60.5	64.5	1.82	2.50	4.50
44.6	46.2	47.6	49.2	50.5	52.2	54.4	55.7	58.0	59.2	63.2	1.88	3.00	5.60
46.4	48.0	49.4	51.0	52.3	54.0	56.2	57.5	59.8	61.0	65.0	1.89	2.20	4.12
45.3	47.0	48.4	50.0	51.3	53.0	55.2	56.5	58.8	60.0	64.0	1.90	2.65	5.00
43.0	44.7	46.1	47.7	49.0	50.7	52.9	54.2	56.5	57.7	61.7	1.90	3.65	6.90
38.5	40.2	41.6	43.2	44.5	46.2	48.4	49.7	52.0	53.2	57.2	1.92	5.60	10.60
45.0	46.6	48.0	49.6	50.9	52.6	54.8	56.1	58.4	59.6	63.6	1.91	2.80	5.30

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2

* Diameters below recommended RMA minimum for narrow (3V, 5V, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.



Heavy Duty V-Belt Drive Design Manual

Table No. B6

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Outside Diameters						
3VX	3V	3VP	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX	3VX		Small Sheave	Large Sheave					
550	560	570	580	590	600	616	630	650	670	690	710	730	750	771	800	810	826	830	850	900	926	950	974	1000	1.92	* 2.50	4.75
20.8	22.3	22.8	23.3	23.8	24.3	25.1	25.8	26.8	27.8	28.8	29.8	31.8	32.8	34.3	35.6	36.8	39.3	40.6	41.8	43.0	44.3	45.8	47.4	49.0	1.92	* 3.15	6.00
22.1	22.6	23.1	23.6	24.1	24.6	25.4	26.1	27.1	28.1	29.1	30.1	32.1	33.1	34.6	35.9	37.1	39.6	40.9	42.1	43.3	44.6	46.1	47.7	49.3	1.93	* 2.35	4.50
19.7	20.2	20.7	21.2	21.7	22.2	23.0	23.7	24.7	25.7	26.7	27.7	28.7	29.7	30.8	32.2	32.7	33.5	33.7	34.7	37.2	38.5	39.7	40.9	42.2	1.95	* 3.35	6.00
17.9	18.4	18.9	19.4	19.9	20.4	21.2	21.9	22.9	23.9	24.9	25.9	26.9	27.9	29.0	30.4	30.9	31.7	31.9	32.9	35.4	36.7	37.9	39.1	40.4	1.95	* 4.12	8.00
14.8	15.3	15.8	16.3	16.8	17.3	18.1	18.8	19.8	20.8	21.9	22.9	23.9	24.9	25.9	27.4	27.9	28.7	28.9	29.9	32.4	33.7	34.9	36.1	37.4	2.01	* 5.30	10.60
21.6	22.1	22.6	23.1	23.6	24.1	24.9	25.6	26.6	27.6	28.6	29.6	31.6	32.6	34.1	35.4	36.6	39.1	40.4	41.6	42.8	44.1	45.4	47.0	48.6	2.02	* 2.50	5.00
21.2	21.7	22.2	22.7	23.2	23.7	24.5	25.2	26.2	27.2	28.2	29.2	30.2	31.2	32.3	33.7	34.2	35.0	35.2	36.2	38.7	40.0	41.2	42.4	43.7	2.02	* 2.65	5.30
20.9	21.4	21.9	22.4	22.9	23.4	24.2	24.9	25.9	26.9	27.9	28.9	29.9	30.9	31.9	33.4	33.9	34.7	34.9	35.9	38.4	39.7	40.9	42.1	43.4	2.02	* 2.80	5.60
20.4	20.9	21.4	21.9	22.4	22.9	23.7	24.4	25.4	26.4	27.4	28.4	29.4	30.4	31.4	32.9	33.4	34.2	34.4	35.4	37.9	39.2	40.4	41.6	42.9	2.04	* 3.00	6.00
21.9	22.4	22.9	23.4	23.9	24.4	25.2	25.9	26.9	27.9	28.9	29.9	31.9	33.0	34.4	35.7	36.9	39.4	40.7	41.9	43.1	44.4	45.8	47.2	48.6	2.04	* 2.35	4.75
11.5	12.1	12.6	13.1	13.9	14.7	15.7	16.7	17.7	18.7	19.8	20.8	21.8	23.3	23.8	24.6	24.8	25.8	28.4	29.7	30.9	32.1	33.4	34.7	36.0	2.04	* 6.90	14.00
22.2	22.7	23.2	23.7	24.2	24.7	25.5	26.2	27.2	28.2	29.2	30.2	32.2	33.3	34.7	36.0	37.2	39.7	41.0	42.2	43.4	44.7	46.0	47.4	48.8	2.07	* 2.20	4.50
19.9	20.4	20.9	21.4	21.9	22.4	23.2	23.9	24.9	25.9	26.9	27.9	28.9	29.9	30.9	32.4	32.9	33.7	33.9	34.9	37.4	38.7	39.9	41.1	42.4	2.08	* 3.15	6.50
19.4	19.9	20.4	20.9	21.4	21.9	22.7	23.4	24.4	25.4	26.4	27.4	28.4	29.4	30.4	31.9	32.4	33.2	33.4	34.4	36.9	38.2	39.4	40.6	41.9	2.08	* 3.35	6.90
21.0	21.5	22.0	22.5	23.0	23.5	24.3	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.5	34.0	34.8	35.0	36.0	38.5	39.8	41.0	42.2	43.5	2.13	* 2.65	5.60
15.0	15.5	16.0	16.5	17.0	17.5	18.3	19.0	20.1	21.1	22.1	23.1	24.1	25.1	26.1	27.6	28.1	28.9	29.1	30.1	32.6	33.9	35.1	36.3	37.6	2.13	* 5.00	10.60
21.3	21.8	22.3	22.8	23.3	23.8	24.6	25.3	26.3	27.3	28.3	29.3	31.3	32.4	33.8	35.1	36.3	38.8	40.1	41.4	42.6	43.9	45.2	46.5	47.8	2.14	* 2.50	5.30
21.7	22.2	22.7	23.2	23.7	24.2	25.0	25.7	26.7	27.7	28.7	29.7	31.7	32.8	34.2	35.5	36.7	39.2	40.5	41.7	42.9	44.2	45.5	46.8	48.1	2.15	* 2.35	5.00
20.5	21.0	21.5	22.0	22.5	23.0	23.8	24.5	25.5	26.5	27.5	28.5	29.5	30.5	31.6	33.0	33.6	34.4	34.6	35.6	38.1	39.4	40.6	41.8	43.1	2.16	* 2.80	6.00
11.3	11.8	12.3	12.8	13.4	14.2	14.9	16.0	17.0	18.0	19.0	20.0	21.1	22.1	23.6	24.1	24.9	25.1	26.1	28.7	30.0	31.2	32.4	33.7	35.0	2.16	* 6.50	14.00
22.0	22.5	23.0	23.5	24.0	24.5	25.3	26.0	27.0	28.0	29.0	30.0	32.0	33.1	34.5	35.8	37.0	39.5	40.8	42.0	43.2	44.5	45.8	47.1	48.4	2.19	* 2.20	4.75
20.0	20.5	21.0	21.5	22.0	22.5	23.3	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.5	33.0	33.8	34.0	35.0	37.5	38.8	40.0	41.2	42.5	2.19	* 3.00	6.50
19.5	20.0	20.5	21.0	21.5	22.0	22.8	23.5	24.5	25.5	26.5	27.5	28.5	29.5	30.6	32.1	32.6	33.4	33.6	34.6	37.1	38.4	39.6	40.8	42.1	2.21	* 3.15	6.90
18.2	18.7	19.2	19.7	20.2	20.7	21.5	22.2	23.2	24.3	25.3	26.3	27.3	28.3	29.3	30.8	31.3	32.1	32.3	33.3	35.8	37.1	38.3	39.5	40.8	2.21	* 3.65	8.00
15.2	15.7	16.2	16.7	17.2	17.7	18.5	19.2	20.2	21.2	22.3	23.3	24.3	25.3	26.3	27.8	28.3	29.1	29.3	30.3	32.8	34.1	35.3	36.5	37.8	2.24	* 4.75	10.60
21.1	21.6	22.1	22.6	23.1	23.6	24.4	25.1	26.1	27.1	28.1	29.1	31.1	32.2	33.6	34.9	36.1	38.6	39.9	41.1	42.3	43.6	44.9	46.2	47.5	2.27	* 2.50	5.60
21.4	21.9	22.4	22.9	23.4	23.9	24.7	25.4	26.5	27.5	28.5	29.5	31.5	32.5	34.0	35.3	36.5	39.0	40.3	41.5	42.7	44.0	45.3	46.6	47.9	2.28	* 2.35	5.30
20.8	21.1	21.6	22.1	22.6	23.1	23.9	24.6	25.7	26.7	27.7	28.7	29.7	30.7	31.7	33.2	33.7	34.5	34.7	35.7	38.2	39.5	40.7	41.9	43.2	2.29	* 2.65	6.00
21.8	22.3	22.8	23.3	23.8	24.3	25.1	25.8	26.8	27.8	28.8	29.8	31.8	32.9	34.3	35.6	36.8	39.3	40.6	41.8	43.0	44.3	45.6	46.9	48.2	2.30	* 2.20	5.00
19.6	20.1	20.6	21.1	21.6	22.1	22.9	23.6	24.6	25.7	26.7	27.7	28.7	29.7	30.7	32.2	32.7	33.5	33.7	34.7	37.2	38.5	39.7	40.9	42.2	2.32	* 3.00	6.00
11.1	11.6	12.1	12.7	13.2	13.7	14.5	15.3	16.3	17.3	18.4	19.4	20.4	21.4	22.5	24.0	24.5	25.3	25.5	26.5	29.0	30.3	31.5	32.7	34.1	2.34	* 6.00	14.00
20.1	20.6	21.1	21.6	22.1	22.6	23.4	24.1	25.1	26.1	27.1	28.1	29.1	30.1	31.2	32.6	33.1	33.9	34.1	35.1	37.7	39.0	40.2	41.4	42.7	2.35	* 2.80	6.50
15.3	15.8	16.4	16.9	17.4	17.9	18.7	19.4	20.4	21.4	22.4	23.4	24.5	25.5	26.5	28.0	28.5	29.3	29.5	30.5	33.0	34.3	35.5	36.7	38.0	2.37	* 10.60	25.00
21.2	21.7	22.2	22.7	23.2	23.7	24.5	25.2	26.2	27.2	28.2	29.2	31.2	32.3	33.7	35.0	36.2	38.7	40.0	41.2	42.4	43.7	45.0	46.3	47.6	2.38	* 2.35	5.60
18.4	18.9	19.4	20.0	20.5	21.0	21.8	22.5	23.5	24.5	25.5	26.5	27.5	28.5	29.5	31.0	31.5	32.3	32.5	33.5	36.0	37.3	38.5	39.7	41.0	2.41	* 3.35	8.00
20.8	21.3	21.8	22.3	22.8	23.3	24.1	24.8	25.8	26.8	27.8	28.8	30.8	31.8	33.3	34.6	35.8	38.3	39.6	40.8	42.0	43.3	44.5	45.8	47.1	2.43	* 2.50	6.00
21.6	22.1	22.6	23.1	23.6	24.1	24.9	25.6	26.6	27.6	28.6	29.6	31.6	32.6	34.1	35.4	36.6	39.1	40.4	41.6	42.8	44.1	45.4	46.7	48.0	2.44	* 2.20	5.30
20.2	20.7	21.2	21.7	22.2	22.7	23.5	24.2	25.2	26.2	27.2	28.2	29.3	30.3	31.3	32.8	33.3	34.1	34.3	35.3	37.8	39.1	40.3	41.5	42.8	2.48	* 2.65	6.50
19.8	20.3	20.8	21.3	21.8	22.3	23.1	23.8	24.8	25.8	26.8	27.8	28.8	29.8	30.9	32.3	32.8	33.6	33.8	34.8	37.3	38.6	39.8	41.0	42.3	2.49	* 2.80	6.90
11.3	11.9	12.4	12.9	13.4	14.0	14.8	15.5	16.6	17.6	18.6	19.6	20.7	21.7	22.8	24.2	24.7	25.6	25.8	26.8	29.3	30.6	31.8	33.0	34.3	2.51	* 5.60	14.00
18.6	19.1	19.6	20.1	20.6	21.1	21.9	22.6	23.6	24.6	25.6	26.6	27.6	28.6	29.7	31.1	31.6	32.5	32.7	33.7	36.2	37.5	38.7	39.9	41.2	2.56	* 3.15	8.00
21.3	21.8	22.3	22.8	23.3	23.8	24.6	25.3	26.3	27.3	28.3	29.3	31.3	32.4	33.8	35.1	36.3	38.8	40.1	41.3	42.5	43.8	45.1	46.4	47.7	2.58	* 2.20	5.60
19.6	20.1	20.6	21.1	21.6	22.1	22.9	23.6	24.6	25.7	26.7	27.7	28.7	29.7	30.7	32.2	32.7	33.5	33.7	34.7	37.2	38.5	39.7	40.9	42.2	2.58	* 2.35	6.00
15.6	16.1	16.6	17.1	17.6	18.1	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.8	29.6	30.8	31.3	34.6	35.8	37.0	38.3	39.5	40.8	2.59	* 4.12	10.60

Heavy Duty V-Belt Drive Design Manual

Table No. B6

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters			V-Belt No. and Center Distance											
Small Sheave	Large Sheave	Speed Ratio	3V		3VX		3VP		3V		3VX		3VP	
			3VX	3VP	3VX	3VP	3VX	3VP	3VX	3VP	3VX	3VP		
1.50	4.75	1.92	45.6	47.3	48.7	50.3	51.6	53.3	55.5	56.8	59.1	60.3	64.3	
3.15	6.00	1.92	44.1	45.8	47.2	48.8	50.1	51.8	54.0	55.3	57.6	58.8	62.8	
2.35	4.50	1.93	46.0	47.6	49.0	50.6	51.9	53.6	55.8	57.1	59.4	60.6	64.6	
3.35	6.50	1.95	43.6	45.2	46.6	48.2	49.5	51.2	53.4	54.7	57.0	58.2	62.2	
4.12	8.00	1.95	41.8	43.4	44.8	46.4	47.7	49.4	51.6	52.9	55.2	56.4	60.4	
5.30	10.60	2.01	38.8	40.4	41.8	43.4	44.7	46.4	48.6	49.9	52.2	53.4	57.5	
2.50	5.00	2.02	45.4	47.1	48.5	50.1	51.4	53.1	55.3	56.6	58.9	60.1	64.1	
2.65	5.30	2.02	45.1	46.7	48.1	49.7	51.0	52.7	54.9	56.2	58.5	59.7	63.7	
2.80	5.60	2.02	44.7	46.4	47.8	49.4	50.7	52.4	54.6	55.9	58.2	59.4	63.4	
3.00	6.00	2.02	44.3	45.9	47.3	48.9	50.2	51.9	54.1	55.4	57.7	58.9	62.9	
2.35	4.75	2.04	45.8	47.4	48.8	50.4	51.7	53.4	55.6	56.9	59.2	60.4	64.4	
6.90	14.00	2.04	34.8	36.4	37.8	39.4	40.7	42.4	44.6	45.9	48.3	49.5	53.5	
2.20	4.50	2.07	46.1	47.7	49.1	50.7	52.0	53.7	55.9	57.2	59.5	60.7	64.7	
2.50	5.30	2.14	45.2	46.9	48.3	49.9	51.2	52.9	55.1	56.4	58.7	59.9	63.9	
3.35	6.90	2.08	43.3	44.9	46.3	47.9	49.2	50.9	53.1	54.4	56.7	57.9	61.9	
2.65	5.60	2.13	44.8	46.5	47.9	49.5	50.8	52.5	54.7	56.0	58.3	59.5	63.5	
5.00	10.60	2.13	39.0	40.7	42.1	43.7	45.0	46.7	48.9	50.2	52.5	53.7	57.7	
2.50	5.30	2.14	45.2	46.9	48.3	49.9	51.2	52.9	55.1	56.4	58.7	59.9	63.9	
2.35	5.00	2.15	45.6	47.2	48.6	50.2	51.5	53.2	55.4	56.7	59.0	60.2	64.2	
2.80	6.00	2.16	44.4	46.1	47.5	49.1	50.4	52.1	54.3	55.6	57.9	59.1	63.1	
6.50	14.00	2.16	35.0	36.7	38.1	39.7	41.0	42.7	44.9	46.2	48.6	49.8	53.8	
2.20	4.75	2.19	45.9	47.5	48.9	50.5	51.8	53.5	55.7	57.0	59.3	60.5	64.5	
3.00	6.50	2.19	43.9	45.5	46.9	48.5	49.8	51.5	53.7	55.0	57.3	58.5	62.5	
3.15	6.90	2.21	43.4	45.1	46.5	48.1	49.4	51.1	53.3	54.6	56.9	58.1	62.1	
3.65	8.00	2.21	42.1	43.8	45.2	46.8	48.1	49.8	52.0	53.3	55.6	56.8	60.8	
4.75	10.60	2.24	39.2	40.8	42.2	43.8	45.1	46.9	49.1	50.4	52.7	53.9	57.9	
2.50	5.60	2.27	45.0	46.6	48.0	49.6	50.9	52.6	54.8	56.1	58.4	59.6	63.6	
2.35	5.30	2.28	45.3	47.0	48.4	50.0	51.3	53.0	55.2	56.5	58.8	60.0	64.0	
2.65	6.00	2.29	44.5	46.2	47.6	49.2	50.5	52.2	54.4	55.7	58.0	59.2	63.2	
2.20	5.00	2.30	45.7	47.3	48.7	50.3	51.6	53.3	55.5	56.8	59.1	60.3	64.3	
3.00	6.90	2.32	43.5	45.2	46.6	48.2	49.5	51.2	53.4	54.7	57.0	58.2	62.2	
6.00	14.00	2.34	35.4	37.1	38.5	40.1	41.4	43.1	45.3	46.6	48.9	50.1	54.1	
2.80	6.50	2.35	44.0	45.7	47.1	48.7	50.0	51.7	53.9	55.2	57.5	58.7	62.7	
10.60	25.00	2.36	22.2	23.9	25.4	27.1	28.4	30.2	32.4	33.8	36.1	37.3	41.4	
4.50	10.60	2.37	39.4	41.0	42.4	44.0	45.3	47.0	49.2	50.5	52.9	54.1	58.1	
8.00	19.00	2.38	29.6	31.3	32.7	34.4	35.7	37.4	39.6	40.9	43.2	44.5	48.5	
2.35	5.60	2.41	45.1	46.7	48.1	49.7	51.0	52.7	54.9	56.2	58.5	59.7	63.7	
3.35	8.00	2.41	42.4	44.0	45.4	47.0	48.3	50.0	52.2	53.5	55.8	57.0	61.0	
2.50	6.00	2.43	44.6	46.3	47.7	49.3	50.6	52.3	54.5	55.8	58.1	59.3	63.3	
2.20	5.30	2.44	45.4	47.1	48.5	50.1	51.4	53.1	55.3	56.6	58.9	60.1	64.1	
2.65	6.50	2.48	44.1	45.8	47.2	48.8	50.1	51.8	54.0	55.3	57.6	58.8	62.8	
2.80	6.90	2.49	43.7	45.3	46.7	48.3	49.6	51.3	53.5	54.8	57.1	58.3	62.3	
5.60	14.00	2.51	35.7	37.4	38.8	40.4	41.7	43.4	45.6	46.9	49.2	50.4	54.4	
3.15	8.00	2.56	42.5	44.2	45.6	47.2	48.5	50.2	52.4	53.7	56.0	57.2	61.2	
2.20	5.60	2.58	45.2	46.8	48.2	49.8	51.1	52.8	55.0	56.3	58.6	59.8	63.9	
2.35	6.00	2.59	44.8	46.4	47.8	49.4	50.7	52.4	54.6	55.9	58.2	59.4	63.4	
4.12	10.60	2.59	39.7	41.3	42.7	44.3	45.6	47.3	49.5	50.8	53.1	54.3	58.3	
2.50	6.50	2.63	44.2	45.9	47.3	48.9	50.2	51.9	54.1	55.4	57.7	58.9	62.9	
2.65	6.90	2.63	43.8	45.4	46.8	48.5	49.8	51.5	53.7	55.0	57.3	58.5	62.5	
3.00	8.00	2.66	42.6	44.3	45.7	47.3	48.6	50.3	52.5	53.8	56.1	57.3	61.3	
2.20	6.00	2.77	44.9	46.5	48.0	49.5	50.8	52.5	54.7	56.0	58.3	59.5	63.5	
6.90	19.00	2.77	30.4	32.1	33.5	35.1	36.5	38.2	40.4	41.7	44.0	45.3	49.3	
2.35	6.50	2.80	44.4	46.0	47.4	49.0	50.3	52.0	54.2	55.5	57.8	59.0	63.0	
2.50	6.90	2.80	43.9	45.6	47.0	48.6	49.9	51.6	53.8	55.1	57.4	58.6	62.6	
5.00	14.00	2.82	36.1	37.8	39.2	40.8	42.1	43.8	46.1	47.4	49.7	50.9	54.9	
2.80	8.00	2.89	42.8	44.4	45.8	47.4	48.7	50.5	52.7	54.0	56.3	57.5	61.5	
3.65	10.60	2.93	40.0	41.7	43.1	44.7	46.0	47.7	49.9	51.2	53.5	54.7	58.7	
6.50	19.00	2.94	30.7	32.4	33.8	35.4	36.7	38.5	40.7	42.0	44.3	45.5	49.6	
4.75	14.00	2.97	36.3	38.0	39.4	41.0	42.3	44.0	46.2	47.5	49.9	51.1	55.1	
2.35	6.90	2.98	44.0	45.7	47.1	48.7	50.0	51.7	53.9	55.2	57.5	58.7	62.7	
2.20	6.50	3.00	44.5	46.1	47.5	49.1	50.4	52.1	54.3	55.6	57.9	59.1	63.1	
2.65	8.00	3.06	42.9	44.6	46.0	47.6	48.9	50.6	52.8	54.1	56.4	57.6	61.6	
4.50	14.00	3.13	36.5	38.2	39.6	41.2	42.5	44.2	46.4	47.7	50.0	51.2	55.3	
8.00	25.00	3.14	23.9	25.7	27.1	28.8	30.2	31.9	34.2	35.6	37.9	39.2	43.2	
10.60	33.50	3.17							23.7	25.2	27.8	29.1	33.4	
6.00	19.00	3.18	31.0	32.7	34.1	35.8	37.1	38.8	41.0	42.4	44.7	45.9	49.9	
2.20	6.90	3.19	44.1	45.8	47.2	48.8	50.1	51.8	54.0	55.3	57.6	58.8	62.8	
3.35	10.60	3.20	40.2	41.9	43.3	44.9	46.2	47.9	50.1	51.4	53.7	54.9	58.9	
2.50	8.00	3.24	43.0	44.7	46.1	47.7	49.0	50.7	52.9	54.2	56.5	57.7	61.7	
3.15	10.60	3.40	40.4	42.0	43.4	45.0	46.4	48.1	50.3	51.6	53.9	55.1	59.1	
5.60	19.00	3.41	31.3	33.0	34.4	36.1	37.4	39.1	41.3	42.7	45.0	46.2	50.2	
4.12	14.00	3.43	36.8	38.5	39.9	41.5	42.8	44.5	46.7	48.0	50.3	51.5	55.5	
2.35	8.00	3.46	49.1	44.8	46.2	47.8	49.1	50.8	53.0	54.3	56.6	57.8	61.8	

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2
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* Diameters below recommended RMA minimum for narrow (3V, 5V, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B6

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance											Sheave Outside Diameters		
3VX	3V	3VX	3V	3VX	3V	3VX	3V	3VX	3V	3V	Speed Ratio	Small Sheave	Large Sheave
1027	1060	1088	1120	1146	1180	1224	1250	1296	1320	1400			
40.5	42.1	43.6	45.2	46.5	48.2	50.4	51.7	54.0	55.2	59.2	3.58	3.00	10.60
31.5	33.2	34.6	36.3	37.6	39.3	41.5	42.9	45.2	46.4	50.4	3.61	5.30	19.00
24.6	26.4	27.9	29.5	30.9	32.7	35.0	36.3	38.7	39.9	44.0	3.64	6.90	25.00
43.2	44.9	46.3	47.9	49.2	50.9	53.1	54.4	56.7	57.9	61.9	3.70	* 2.20	8.00
31.7	33.4	34.8	36.5	37.8	39.5	41.8	43.1	45.4	46.6	50.7	3.83	5.00	19.00
40.6	42.3	43.7	45.3	46.6	48.3	50.5	51.8	54.1	55.3	59.3	3.84	2.80	10.60
24.9	26.6	28.1	29.8	31.2	33.0	35.2	36.6	39.0	40.2	44.3	3.87	6.50	25.00
37.1	38.8	40.2	41.8	43.1	44.8	47.1	48.4	50.7	51.9	55.9	3.88	3.65	14.00
31.9	33.6	35.0	36.7	38.0	39.7	41.9	43.3	45.6	46.8	50.8	4.03	4.75	19.00
40.7	42.4	43.8	45.4	46.7	48.4	50.6	51.9	54.2	55.5	59.5	4.06	2.65	10.60
25.2	27.0	28.5	30.1	31.5	33.3	35.6	36.9	39.3	40.5	44.6	4.19	6.00	25.00
37.3	39.0	40.4	42.0	43.3	45.1	47.3	48.6	50.9	52.1	56.1	4.23	3.35	14.00
32.1	33.8	35.2	36.8	38.2	39.9	42.1	43.4	45.8	47.0	51.0	4.26	4.50	19.00
40.9	42.5	43.9	45.5	46.8	48.5	50.7	52.1	54.4	55.6	59.6	4.31	* 2.50	10.60
37.5	39.2	40.6	42.2	43.5	45.2	47.4	48.7	51.0	52.2	56.3	4.50	3.15	14.00
25.4	27.2	28.7	30.4	31.8	33.6	35.8	37.2	39.6	40.8	44.9	4.50	5.60	25.00
41.0	42.6	44.0	45.6	46.9	48.7	50.9	52.2	54.5	55.7	59.7	4.59	* 2.35	10.60
32.3	34.0	35.5	37.1	38.4	40.2	42.4	43.7	46.0	47.3	51.3	4.66	4.12	19.00
37.6	39.3	40.7	42.3	43.6	45.3	47.5	48.8	51.2	52.4	56.4	4.73	3.00	14.00
25.6	27.4	28.9	30.6	32.0	33.8	36.0	37.4	39.8	41.0	45.1	4.75	5.30	25.00
41.1	42.7	44.1	45.8	47.1	48.8	51.0	52.3	54.6	55.8	59.8	4.91	* 2.20	10.60
25.8	27.6	29.1	30.8	32.2	34.0	36.2	37.6	40.0	41.2	45.3	5.04	5.00	25.00
37.7	39.4	40.8	42.4	43.7	45.5	47.7	49.0	51.3	52.5	56.5	5.07	2.80	14.00
32.7	34.3	35.8	37.4	38.7	40.5	42.7	44.0	46.4	47.6	51.6	5.19	6.50	33.50
26.0	27.8	29.3	31.0	32.3	34.1	36.4	37.8	40.2	41.4	45.5	5.31	4.75	25.00
37.8	39.5	40.9	42.5	43.9	45.6	47.8	49.1	51.4	52.6	56.6	5.37	2.65	14.00
26.1	27.9	29.4	31.1	32.5	34.3	36.6	37.9	40.3	41.6	45.7	5.61	4.50	25.00
38.0	39.6	41.0	42.7	44.0	45.7	47.9	49.2	51.5	52.7	56.7	5.69	* 2.50	14.00
32.9	34.6	36.0	37.6	39.0	40.7	42.9	44.3	46.6	47.8	51.9	5.74	3.35	19.00
26.2	28.0	29.5	31.2	32.5	34.3	36.6	38.0	40.4	41.6	45.7	6.03	5.60	33.50
38.1	39.7	41.1	42.8	44.1	45.8	48.0	49.3	51.6	52.8	56.9	6.07	* 2.35	14.00
33.0	34.7	36.1	37.8	39.1	40.8	43.1	44.4	46.7	47.9	52.0	6.11	3.15	19.00
26.4	28.2	29.7	31.4	32.8	34.5	36.8	38.2	40.6	41.8	45.9	6.13	4.12	25.00
33.1	34.8	36.2	37.9	39.2	40.9	43.2	44.5	46.8	48.1	52.1	6.37	5.30	33.50
38.2	39.8	41.3	42.9	44.2	45.9	48.1	49.4	51.7	52.9	57.0	6.49	* 2.20	14.00
33.2	34.9	36.4	38.0	39.3	41.1	43.3	44.6	47.0	48.2	52.2	6.89	2.80	19.00
26.7	28.5	30.0	31.7	33.1	34.9	37.2	38.5	40.9	42.1	46.3	6.93	3.65	25.00
33.3	35.0	36.5	38.1	39.4	41.2	43.4	44.7	47.1	48.3	52.4	7.29	2.65	19.00
26.9	28.7	30.2	31.9	33.3	35.0	37.4	38.7	41.1	42.3	46.5	7.56	3.35	25.00
33.4	35.1	36.6	38.2	39.6	41.3	43.5	44.9	47.2	48.4	52.5	7.73	* 2.50	19.00
27.0	28.8	30.3	32.0	33.4	35.2	37.5	38.8	41.2	42.5	46.6	8.05	3.15	25.00
33.5	35.2	36.7	38.3	39.7	41.4	43.6	45.0	47.3	48.5	52.6	8.24	* 2.35	19.00
27.1	28.9	30.4	32.1	33.5	35.3	37.6	38.9	41.3	42.6	46.7	8.46	3.00	25.00
33.6	35.3	36.8	38.4	39.8	41.5	43.7	45.1	47.4	48.6	52.7	8.81	* 2.20	19.00
27.2	29.0	30.5	32.2	33.6	35.4	37.7	39.1	41.5	42.7	46.8	9.07	2.80	25.00
27.3	29.1	30.6	32.3	33.7	35.5	37.8	39.2	41.6	42.8	46.9	9.60	2.65	25.00
27.4	29.2	30.7	32.4	33.8	35.6	37.9	39.3	41.7	42.9	47.1	10.14	3.35	33.50
27.5	29.3	30.8	32.5	33.9	35.7	38.0	39.4	41.8	43.0	47.2	10.85	* 2.65	25.00
27.6	29.4	30.9	32.6	34.0	35.8	38.1	39.5	41.9	43.1	47.3	11.60	* 2.20	25.00
19.4	21.8	23.6	25.8	28.4	30.0	32.6	34.0	38.4	40.0	44.0	12.16	2.80	33.50
19.5	21.9	23.7	25.9	28.5	30.1	32.7	34.1	38.5	40.1	44.1	12.87	2.65	33.50
19.6	22.0	23.8	25.9	28.6	30.1	32.8	34.1	38.6	40.2	44.2	13.65	* 2.50	33.50
19.7	22.1	23.8	26.0	28.7	30.2	32.9	34.2	38.7	40.3	44.3	14.54	* 2.35	33.50
19.7	22.2	23.9	26.1	28.8	30.3	33.0	34.3	38.8	40.4	44.4	15.56	* 2.20	33.50

Key to Horsepower Correction Factor: 0.7, **0.8**, 0.9, 1.0, 1.1, 1.2

* Diameters below recommended RMA minimum for narrow (3V, 5V, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																								Speed Ratio	Sheave Outside Diameters				
5VX	5V	5VX	5VX	5V	5VX	5VX	5VX	5V	5VX	5VX	5VX	5V	5VX	5VX	5VX	5V	5VX	5VX	5V	5VX	5VX	5V	5VX		Small Sheave	Large Sheave			
619	630	650	660	670	680	690	700	710	720	730	740	750	760	769	780	790	800	810	830	840	850	860	867	870	880	1.00	4.40	4.40	
24.0	24.6	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.5	32.1	32.6	33.1	33.6	34.6	35.1	35.6	36.1	36.4	37.1	37.1	1.00	4.40	4.40	
23.3	23.8	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.8	34.3	34.8	35.3	35.7	36.3	36.3	1.00	4.90	4.90	
22.8	23.3	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	33.3	33.8	34.3	34.8	35.2	35.8	35.8	1.00	5.20	5.20	
22.3	22.9	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.8	30.4	30.9	31.4	31.9	32.9	33.4	33.9	34.4	34.7	35.4	35.4	1.00	5.50	5.50	
21.7	22.2	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	32.2	32.7	33.2	33.7	34.1	34.7	34.7	1.00	5.90	5.90	
21.1	21.6	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.6	32.1	32.6	33.1	33.5	34.1	34.1	1.00	6.30	6.30	
20.4	21.0	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	27.9	28.5	29.0	29.5	30.0	31.0	31.5	32.0	32.5	32.8	33.5	33.5	1.00	6.70	6.70	
19.8	20.3	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	30.3	30.8	31.3	31.8	32.2	32.8	32.8	1.00	7.10	7.10	
19.2	19.7	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.7	30.2	30.7	31.2	31.6	31.7	32.2	1.00	7.50	7.50	
18.4	18.9	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.9	29.4	29.9	30.4	30.8	30.9	31.4	1.00	8.00	8.00	
17.6	18.1	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	28.1	28.6	29.1	29.6	30.0	30.1	30.6	1.00	8.50	8.50	
16.8	17.4	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.3	24.9	25.4	25.9	26.4	27.4	27.9	28.4	28.9	29.2	29.4	29.9	1.00	9.00	9.00	
16.4	17.0	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	23.9	24.5	25.0	25.5	26.0	27.0	27.5	28.0	28.5	28.8	29.0	29.5	1.00	9.25	9.25	
15.6	16.2	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.1	23.7	24.2	24.7	25.2	26.2	26.7	27.2	27.7	28.0	28.2	28.7	1.00	9.75	9.75	
14.8	15.3	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	25.3	25.8	26.3	26.8	27.2	27.3	27.8	1.00	10.30	10.30	
13.8	14.4	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.3	21.9	22.4	22.9	23.4	24.4	24.9	25.4	25.9	26.2	26.4	26.9	1.00	10.90	10.90	
13.2	13.8	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.7	21.3	21.8	22.3	22.8	23.8	24.3	24.8	25.3	25.6	25.8	26.3	1.00	11.30	11.30	
13.0	13.0	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	19.9	20.5	21.0	21.5	22.0	23.0	23.5	24.0	24.5	24.8	25.0	25.5	1.00	11.80	11.80	
				13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.2	23.4	23.9	1.00	12.50	12.50	
								14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.7	18.3	18.8	19.3	19.8	20.8	21.3	21.8	22.2	22.3	22.8	1.00	13.20	13.20	
																											1.00	14.00	14.00
																											1.00	15.00	15.00
																											1.00	16.00	16.00
16.6	17.2	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.1	24.7	25.2	25.7	26.2	27.2	27.7	28.2	28.7	29.0	29.2	29.7	1.03	9.00	9.25	
13.5	14.1	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.0	21.6	22.1	22.6	23.1	24.1	24.6	25.1	25.6	25.9	26.1	26.6	1.04	10.90	11.30	
12.8	13.4	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.3	20.9	21.4	21.9	22.4	23.4	23.9	24.4	24.9	25.2	25.4	25.9	1.04	11.30	11.80	
22.4	24.0	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	30.9	31.5	32.0	32.5	33.0	34.0	34.5	35.0	35.5	35.9	36.5	36.5	1.05	4.90	4.90	
16.0	16.6	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.5	24.1	24.6	25.1	25.6	26.6	27.1	27.6	28.1	28.4	28.6	29.1	1.05	9.25	9.75	
23.8	24.4	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.3	31.9	32.4	32.9	33.4	34.4	34.9	35.4	35.9	36.2	36.9	36.9	1.06	4.40	4.65	
23.0	23.6	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.5	31.1	31.6	32.1	32.6	33.6	34.1	34.6	35.1	35.4	36.1	36.1	1.06	4.90	5.20	
22.5	23.1	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.0	30.6	31.1	31.6	32.1	33.1	33.6	34.1	34.6	34.9	35.6	35.6	1.06	5.20	5.50	
20.7	21.3	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.2	28.8	29.3	29.8	30.3	31.3	31.8	32.3	32.8	33.1	33.8	33.8	1.06	6.30	6.70	
20.1	20.7	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.6	28.2	28.7	29.2	29.7	30.7	31.2	31.7	32.2	32.5	33.2	33.2	1.06	6.70	7.10	
19.5	20.0	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	30.0	30.5	31.0	31.5	31.9	32.0	32.5	1.06	7.10	7.50	
18.0	18.5	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.5	29.0	29.5	30.0	30.4	30.5	31.0	1.06	8.00	8.50	
17.2	17.8	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.7	25.3	25.8	26.3	26.8	27.8	28.3	28.8	29.3	29.6	29.8	30.3	1.06	8.50	9.00	
15.2	15.8	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.7	23.3	23.8	24.3	24.8	25.8	26.3	26.8	27.3	27.6	27.8	28.3	1.06	9.75	10.30	
14.3	14.8	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.8	25.3	25.8	26.3	26.7	26.8	27.3	1.06	10.30	10.90	
		13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	22.4	22.9	23.4	23.9	24.3	24.4	24.9	1.06	11.80	12.50	
								14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	20.3	21.3	21.8	22.3	22.8	23.3	23.8	1.06	12.50	13.20	
																											1.06	13.20	14.00
																											1.06	14.00	15.00
																											1.07	15.00	16.00
																											1.07	9.00	9.75
13.1	13.7	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.6	21.2	21.7	22.2	22.7	23.7	24.2	24.7	25.2	25.5	25.7	26.2	1.08	10.90	11.80	
17.0	17.6	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.5	25.1	25.6	26.1	26.6	27.6	28.1	28.6	29.1	29.4	29.6	30.1	1.09	8.50	9.25	
14.0	14.5	15.5	16.0	16.5	17.0																								

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Outside Diameters								
5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V		Small Sheave	Large Sheave							
1230	1250	1277	1320	1374	1400	1469	1500	1600	1630	1700	1701	1800	1800	1900	2000	2030	2120	2240	2360	2500	2650	2800	3000	3150	3350	3550	1.00	* 4.40	* 4.40
54.6	55.6	56.9	59.1	61.8	63.1	66.5	68.1	73.1	73.1	78.1	78.1	83.1	83.1	88.1	90.3	94.8	100.8	106.8	113.8	121.3	128.8	138.8	146.3	156.3	166.3	1.00	* 4.65	* 4.65	
53.8	54.8	56.2	58.3	61.0	62.3	65.8	67.3	72.3	72.3	77.3	77.3	82.3	82.3	87.3	90.4	94.9	100.9	106.9	113.9	121.4	128.9	138.9	146.4	156.4	166.4	1.00	* 4.90	* 4.90	
52.9	53.9	55.2	57.4	60.1	61.4	64.8	66.3	71.3	71.3	76.3	76.3	81.3	81.3	86.3	89.4	93.9	99.9	105.9	112.9	120.4	127.9	137.9	145.4	155.4	165.4	1.00	* 5.20	* 5.20	
52.2	53.2	54.6	56.7	59.4	60.7	64.2	65.7	70.7	70.7	75.7	75.7	80.7	80.7	85.7	88.8	93.3	99.3	105.3	112.3	119.8	127.3	137.3	144.8	154.8	164.8	1.00	* 5.50	* 5.50	
51.6	52.6	54.0	56.1	58.8	60.1	63.6	65.1	70.1	70.1	75.1	75.1	80.1	80.1	85.1	88.2	92.7	98.7	104.7	111.7	119.2	126.7	136.7	144.2	154.2	164.2	1.00	* 5.90	* 5.90	
51.0	52.0	53.3	55.5	58.2	59.5	62.9	64.5	69.5	69.5	74.5	74.5	79.5	79.5	84.5	87.6	92.1	98.1	104.1	111.1	118.6	126.1	136.1	143.6	153.6	163.6	1.00	* 6.30	* 6.30	
50.3	51.3	52.7	54.8	57.5	58.8	62.3	63.8	68.8	68.8	73.8	73.8	78.8	78.8	83.8	86.9	91.4	97.4	103.4	110.4	117.9	125.4	135.4	142.9	152.9	162.9	1.00	* 6.70	* 6.70	
49.7	50.7	52.1	54.2	56.9	58.2	61.7	63.2	68.2	68.2	73.2	73.2	78.2	78.2	83.2	86.3	90.8	96.8	102.8	109.8	117.3	124.8	134.8	142.3	152.3	162.3	1.00	7.10	7.10	
48.9	49.9	51.3	53.4	56.1	57.4	60.9	62.4	67.4	67.4	72.4	72.4	77.4	77.4	82.4	85.5	90.0	96.0	102.0	109.0	116.5	124.0	134.0	141.5	151.5	161.5	1.00	8.00	8.00	
48.1	49.1	50.5	52.6	55.3	56.6	60.1	61.6	66.6	66.6	71.6	71.6	76.6	76.6	81.6	84.7	89.2	95.2	101.2	108.2	115.7	123.2	133.2	140.7	150.7	160.7	1.00	8.50	8.50	
47.4	48.4	49.7	51.9	54.6	55.9	59.3	60.9	65.9	65.9	70.9	70.9	75.9	75.9	80.9	84.0	88.5	94.5	100.5	107.5	115.0	122.5	132.5	139.9	149.9	159.9	1.00	9.00	9.00	
47.0	48.0	49.3	51.5	54.2	55.5	58.9	60.5	65.5	65.5	70.5	70.5	75.5	75.5	80.5	83.6	88.1	94.1	100.1	107.1	114.6	122.1	132.1	139.5	149.5	159.5	1.00	9.25	9.25	
46.2	47.2	48.5	50.7	53.4	54.7	58.1	59.7	64.7	64.7	69.7	69.7	74.7	74.7	79.7	82.8	87.3	93.3	99.3	106.3	113.8	121.3	131.3	138.7	148.7	158.7	1.00	9.75	9.75	
45.3	46.3	47.7	49.8	52.5	53.8	57.3	58.8	63.8	63.8	68.8	68.8	73.8	73.8	78.8	81.9	86.4	92.4	98.4	105.4	112.9	120.4	130.4	137.8	147.8	157.8	1.00	10.30	10.30	
44.4	45.4	46.7	48.9	51.6	52.9	56.3	57.9	62.9	62.9	67.9	67.9	72.9	72.9	77.9	81.0	85.5	91.5	97.5	104.5	112.0	119.5	129.5	136.9	146.9	156.9	1.00	10.90	10.90	
43.8	44.8	46.1	48.3	51.0	52.3	55.7	57.3	62.3	62.3	67.3	67.3	72.3	72.3	77.3	80.4	84.9	90.9	96.9	103.9	111.4	118.9	128.9	136.3	146.3	156.3	1.00	11.30	11.30	
43.0	44.0	45.3	47.5	50.2	51.5	54.9	56.5	61.5	61.5	66.5	66.5	71.5	71.5	76.5	79.6	84.1	90.1	96.1	103.1	110.6	118.1	128.1	135.5	145.5	155.5	1.00	11.80	11.80	
41.9	42.8	44.2	46.4	49.1	50.4	53.8	55.4	60.4	60.4	65.4	65.4	70.4	70.4	75.4	78.5	83.0	89.0	95.0	102.0	109.5	117.0	127.0	134.4	144.4	154.4	1.00	12.50	12.50	
40.8	41.8	43.1	45.3	48.0	49.3	52.7	54.3	59.3	59.3	64.3	64.3	69.3	69.3	74.3	77.4	81.9	87.9	93.9	100.9	108.4	115.9	125.9	133.3	143.3	153.3	1.00	13.20	13.20	
39.5	40.5	41.9	44.0	46.7	48.0	51.5	53.0	58.0	58.0	63.0	63.0	68.0	68.0	73.0	76.1	80.6	86.6	92.6	99.6	107.1	114.6	124.6	132.0	142.0	152.0	1.00	14.00	14.00	
37.9	38.9	40.3	42.4	45.1	46.4	49.9	51.4	56.4	56.4	61.4	61.4	66.4	66.4	71.4	74.5	79.0	85.0	91.0	98.0	105.5	113.0	123.0	130.4	140.4	150.4	1.00	15.00	15.00	
36.4	37.4	38.7	40.9	43.6	44.9	48.3	49.9	54.9	54.9	59.9	59.9	64.9	64.9	69.9	73.0	77.5	83.5	89.5	96.5	104.0	111.5	121.5	128.9	138.9	148.9	1.00	16.00	16.00	
47.2	48.2	49.5	51.7	54.4	55.7	59.1	60.7	65.7	65.7	70.7	70.7	75.7	75.7	80.7	83.8	88.3	94.3	100.3	107.3	114.8	122.3	132.3	139.7	149.7	159.7	1.03	9.00	9.25	
44.1	45.1	46.4	48.6	51.3	52.6	56.0	57.6	62.6	62.6	67.6	67.6	72.6	72.6	77.6	80.7	85.2	91.2	97.2	104.2	111.7	119.2	129.2	136.6	146.6	156.6	1.04	10.90	11.30	
43.4	44.4	45.7	47.9	50.6	51.9	55.3	56.9	61.9	61.9	66.9	66.9	71.9	71.9	76.9	80.0	84.5	90.5	96.5	103.5	111.0	118.5	128.5	135.9	145.9	155.9	1.04	11.30	11.80	
54.0	55.0	56.3	58.5	61.2	62.5	65.9	67.5	72.5	72.5	77.5	77.5	82.5	82.5	87.5	90.6	95.1	101.1	107.1	114.1	121.6	129.1	139.1	146.5	156.5	166.5	1.05	* 4.65	* 4.90	
46.6	47.6	48.9	51.1	53.8	55.1	58.5	60.1	65.1	65.1	70.1	70.1	75.1	75.1	80.1	83.2	87.7	93.7	99.7	106.7	114.2	121.7	131.7	139.1	149.1	159.1	1.06	9.25	9.75	
54.4	55.4	56.7	58.9	61.6	62.9	66.3	67.9	72.9	72.9	77.9	77.9	82.9	82.9	87.9	91.0	95.5	101.5	107.5	114.5	122.0	129.5	139.5	146.9	156.9	166.9	1.06	* 4.40	* 4.65	
53.6	54.6	55.9	58.1	60.8	62.1	65.5	67.1	72.1	72.1	77.1	77.1	82.1	82.1	87.1	90.2	94.7	100.7	106.7	113.7	121.2	128.7	138.7	146.1	156.1	166.1	1.06	* 4.90	* 5.20	
53.1	54.1	55.4	57.6	60.3	61.6	65.0	66.6	71.6	71.6	76.6	76.6	81.6	81.6	86.6	89.7	94.2	100.2	106.2	113.2	120.7	128.2	138.2	145.6	155.6	165.6	1.06	* 5.20	* 5.50	
51.3	52.3	53.6	55.8	58.5	59.8	63.2	64.8	69.8	69.8	74.8	74.8	79.8	79.8	84.8	87.9	92.4	98.4	104.4	111.4	118.9	126.4	136.4	143.8	153.8	163.8	1.06	* 6.30	* 6.70	
50.7	51.7	53.0	55.2	57.9	59.2	62.6	64.2	69.2	69.2	74.2	74.2	79.2	79.2	84.2	87.3	91.8	97.8	103.8	110.8	118.3	125.8	135.8	143.2	153.2	163.2	1.06	* 6.70	* 7.10	
50.0	51.0	52.4	54.5	57.2	58.5	62.0	63.5	68.5	68.5	73.5	73.5	78.5	78.5	83.5	86.6	91.1	97.1	103.1	110.1	117.6	125.1	135.1	142.5	152.5	162.5	1.06	7.10	7.50	
49.5	49.5	50.9	53.0	55.7	57.0	60.5	62.0	67.0	67.0	72.0	72.0	77.0	77.0	82.0	85.1	89.6	95.6	101.6	108.6	116.1	123.6	133.6	141.0	151.0	161.0	1.06	8.00	8.50	
47.8	48.8	50.1	52.3	55.0	56.3	59.7	61.3	66.3	66.3	71.3	71.3	76.3	76.3	81.3	84.4	88.9	94.9	100.9	107.9	115.4	122.9	132.9	140.3	150.3	160.3	1.06	8.50	9.00	
45.8	46.8	48.1	50.3	53.0	54.3	57.7	59.3	64.3	64.3	69.3	69.3	74.3	74.3	79.3	82.4	86.9	92.9	98.9	105.9	113.4	120.9	130.9	138.3	148.3	158.3	1.06	9.75	10.30	
44.8	45.8	47.2	49.3	52.0	53.3	56.8	58.3	63.3	63.3	68.3	68.3	73.3	73.3	78.3	81.4	85.9	91.9	97.9	104.9	112.4	119.9	129.9	137.3	147.3	157.3	1.06	10.30	10.90	
42.4	43.4	44.8	46.9	49.6	50.9	54.4	55.9	60.9	60.9	65.9	65.9	70.9	70.9	75.9	79.0	83.5	89.5	95.5	102.5	110.0	117.5	127.5	134.9	144.9	154.9	1.06	11.80	12.50	
41.3	42.3	43.7	45.8	48.5	49.8	53.3	54.8	59.8	59.8	64.8	64.8	69.8	69.8	74.8	77.9	82.4	88.4	94.4	101.4	108.9	116.4	126.4	133.8	143.8	153.8	1.06	12.50	13.20	
40.1	41.1	42.5	44.6	47.3	48.6	52.1	53.6	58.6	61.1	63.6	63.6	68.6	68.6	73.6	76.7	81.2	87.2	93.2	100.2	107.7	115.2	125.2	132.6	142.6	152.6	1.06	13.20	14.00	
52.5	53.5	54.9	57.0	59.7	61.0	64.5	66.0	71.0	71.0	76.0	76.0	81.0	81.0	86.0	89.1	93.6	99.6	105.6	112.6	120.1	127.6	137.6	145.0	155.0	165.0	1.07	* 5.50	* 5.90	
51.9	52.9	54.3	56.4	59.1	6																								

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Speed Ratio	V-Belt No. and Center Distance																											
Small Sheave	Large Sheave		5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	5VX	
8.50	9.75	1.15																												
9.00	10.30	1.15																												
10.30	11.80	1.15																												
10.90	12.50	1.15																												
8.00	9.25	1.16																												
9.75	11.30	1.16																												
11.30	13.20	1.17																												
16.00	18.70	1.17																												
9.25	10.90	1.18																												
4.40	5.20	1.19																												
4.65	5.50	1.19																												
6.30	7.50	1.19																												
11.80	14.00	1.19																												
6.70	8.00	1.20																												
7.10	8.50	1.20																												
7.50	9.00	1.20																												
12.50	15.00	1.20																												
4.90	5.90	1.21																												
5.90	7.10	1.21																												
8.50	10.30	1.21																												
9.00	10.90	1.21																												
9.75	11.80	1.21																												
10.90	13.20	1.21																												
13.20	16.00	1.21																												
5.20	6.30	1.22																												
5.50	6.70	1.22																												
8.00	9.75	1.22																												
9.25	11.30	1.22																												
10.30	12.50	1.22																												
7.50	9.25	1.24																												
11.30	14.00	1.24																												
15.00	18.70	1.25																												
4.40	5.50	1.26																												
9.00	11.30	1.26																												
4.65	5.90	1.27																												
6.30	8.00	1.27																												
6.70	8.50	1.27																												
7.10	9.00	1.27																												
11.80	15.00	1.27																												
5.90	7.50	1.28																												
9.25	11.80	1.28																												
9.75	12.50	1.28																												
10.30	13.20	1.28																												
12.50	16.00	1.28																												
4.90	6.30	1.29																												
5.20	6.70	1.29																												
8.00	10.30	1.29																												
8.50	10.90	1.29																												
10.90	14.00	1.29																												
5.50	7.10	1.30																												
7.50	9.75	1.30																												
7.10	9.25	1.31																												
9.00	11.80	1.31																												
8.50	11.30	1.33																												
11.30	15.00	1.33																												
16.00	21.20	1.33																												
14.00	18.70	1.34																												
4.40	5.90	1.35																												
6.30	8.50	1.35																												
6.70	9.00	1.35																												
4.65	6.30	1.36																												
5.90	8.00	1.36																												
9.25	12.50	1.36																												
9.75	13.20	1.36																												
10.30	14.00	1.36																												
11.80	16.00	1.36																												

Key to Horsepower Correction Factor: 0.7 0.8 0.9 1.0 1.1 1.2

* Diameters below recommended RMA minimum for narrow (3V, 5V, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																												Speed Ratio	Sheave Outside Diameters	
5VX	5V	5VX	5VX	5V	5VX	5VX	5VX	5V	5VX	5VX	5VX	5V	5VX	5VX	5VX	5V	5VX	5VX	5V	5VX	5VX	5V	5VX	5VX	5V	5VX	5VX		Small Sheave	Large Sheave
619	630	650	660	670	680	690	700	710	720	730	740	750	760	769	780	790	800	810	830	840	850	860	867	870	880	1.15	8.50	9.75		
15.8	17.2	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.1	24.7	25.2	25.7	26.2	27.2	27.7	28.2	28.7	29.0	29.2	29.7	1.15	9.00	10.30		
13.6	14.1	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	24.1	24.6	25.1	25.6	26.0	26.1	26.6	1.15	10.30	11.80		
17.4	17.9	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.9	28.4	28.9	29.4	29.8	29.9	30.4	1.16	10.30	12.50		
14.4	14.9	15.9	16.4	16.9	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	21.9	22.5	23.0	23.5	24.0	25.0	25.5	26.0	26.5	26.8	27.0	27.5	1.16	9.75	11.30		
			13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	22.2	22.7	23.2	23.7	24.1	24.2	24.7	1.17	11.30	13.20		
																										1.17	16.00	18.70		
15.1	15.7	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.6	23.2	23.7	24.2	24.7	25.7	26.2	26.7	27.2	27.5	27.7	28.2	1.18	9.25	10.90		
23.4	24.0	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	30.9	31.5	32.0	32.5	33.0	34.0	34.5	35.0	35.5	35.8	36.5	36.1	1.19	4.40	5.20		
23.0	23.5	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.5	34.0	34.5	35.0	35.4	36.0	36.1	1.19	4.65	5.50		
20.1	20.7	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.6	28.2	28.7	29.2	29.7	30.7	31.2	31.7	32.2	32.5	33.2	33.2	1.19	6.30	7.50		
																											1.19	11.80	14.00	
19.4	19.9	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.9	30.4	30.9	31.4	31.8	32.4	32.4	1.20	6.70	8.00		
18.7	19.2	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	29.2	29.7	30.2	30.7	31.1	31.2	31.7	1.20	7.10	8.50		
18.0	18.5	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.5	29.0	29.5	30.0	30.4	30.5	31.0	1.20	7.50	9.00		
																											1.20	12.50	15.00	
22.5	23.0	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	33.0	33.5	34.0	34.5	34.9	35.5	35.5	1.21	4.90	5.90		
20.7	21.3	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.2	28.8	29.3	29.8	30.3	31.3	31.8	32.3	32.8	33.1	33.8	33.8	1.21	5.90	7.10		
16.2	16.7	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.7	27.2	27.7	28.2	28.6	28.7	29.2	1.21	8.50	10.30		
15.3	15.8	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.4	22.8	23.4	23.9	24.4	24.9	25.9	26.4	26.9	27.4	27.7	27.9	28.4	1.21	9.00	10.90		
14.0	14.5	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.1	22.6	23.1	23.6	24.6	25.1	25.6	26.1	26.4	26.6	27.1	1.21	9.75	11.80		
																											1.21	10.90	13.20	
																											1.21	13.20	16.00	
21.9	22.5	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.4	30.0	30.5	31.0	31.5	32.5	33.0	33.5	34.0	34.3	35.0	35.0	1.22	5.20	6.30		
21.4	21.9	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.9	32.4	32.9	33.4	33.8	34.4	34.4	1.22	5.50	6.70		
17.0	17.5	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.5	28.0	28.5	29.0	29.4	29.5	30.0	1.22	8.00	9.75		
14.8	15.3	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	25.3	25.8	26.3	26.8	27.2	27.3	27.8	1.22	8.50	10.30		
13.0	13.5	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.5	21.1	21.6	22.1	22.6	23.6	24.1	24.6	25.1	25.4	25.6	26.1	1.22	10.30	12.50		
17.8	18.3	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	28.3	28.8	29.3	29.8	30.2	30.3	30.8	1.24	7.50	9.25		
																											1.24	11.30	14.00	
																											1.25	15.00	18.70	
23.2	23.7	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.7	34.2	34.7	35.2	35.6	36.2	36.2	1.26	4.40	5.50		
15.0	15.5	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.5	26.0	26.5	27.0	27.4	27.5	28.0	1.26	9.00	11.30		
22.7	23.2	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	33.2	33.7	34.2	34.7	35.1	35.7	35.7	1.27	4.65	5.90		
19.7	20.3	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.2	27.8	28.3	28.8	29.3	30.3	30.8	31.3	31.8	32.1	32.8	32.8	1.27	6.30	8.00		
19.0	19.5	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.5	30.0	30.5	31.0	31.4	32.0	32.0	1.27	6.70	8.50		
18.3	18.8	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.8	29.3	29.8	30.3	30.7	30.8	31.3	1.27	7.10	9.00		
																											1.27	11.80	15.00	
20.4	21.0	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	27.9	28.5	29.0	29.5	30.0	31.0	31.5	32.0	32.5	32.8	33.5	33.5	1.28	5.90	7.50		
14.4	14.9	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.9	25.4	25.9	26.4	26.8	26.9	27.4	1.28	9.25	11.80		
13.4	14.0	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	20.9	21.5	22.0	22.5	23.0	24.0	24.5	25.0	25.5	25.8	26.0	26.5	1.28	9.75	12.50		
																											1.28	10.30	13.20	
																											1.28	12.50	16.00	
22.1	22.7	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.6	30.2	30.7	31.2	31.7	32.7	33.2	33.7	34.2	34.5	35.2	35.2	1.29	4.90	6.30		
21.6	22.1	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	32.1	32.6	33.1	33.6	34.0	34.6	34.6	1.29	5.20	6.70		
16.5	17.1	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.0	24.6	25.1	25.6	26.1	27.1	27.6	28.1	28.6	29.0	29.1	29.6	1.29	8.00	10.30		
15.7	16.2	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	26.2	26.7	27.2	27.7	28.1	28.2	28.7	1.29	8.50	10.90		
21.0	21.6	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.5	29.1	29.6	30.1	30.6	31.6	32.1	32.6	33.1	33.4	34.1	34.1	1.30	5.50	7.10		
17.4	17.9	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9																

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Speed Ratio	V-Belt No. and Center Distance																									
Small Sheave	Large Sheave		5VX 890	5V 900	5VX 918	5VX 930	5VX 940	5V 950	5VX 960	5VX 978	5V 990	5VX 1000	5VX 1017	5VX 1030	5V 1050	5VX 1060	5VX 1080	5V 1108	5VX 1120	5VX 1139	5V 1150	5VX 1160	5VX 1162	5V 1180	5V 1200	5V 1210	5VX 1220	
8.50	9.75	1.15	30.2	30.7	31.6	32.2	32.7	33.2	33.7	34.6	35.2	35.7	36.5	37.2	38.2	38.7	39.7	41.1	41.7	42.6	43.2	43.7	43.8	44.7	45.7	46.2	46.7	
9.00	10.30	1.15	29.3	29.8	30.7	31.3	31.8	32.3	32.8	33.7	34.3	34.8	35.7	36.3	37.3	37.8	38.8	40.2	40.8	41.8	42.3	42.8	42.9	43.8	44.8	45.3	45.8	
10.30	12.50	1.15	27.1	27.6	28.5	29.1	29.6	30.1	30.6	31.5	32.1	32.6	33.5	34.1	35.1	35.6	36.6	38.0	38.6	39.6	40.1	40.6	40.7	41.6	42.6	43.1	43.6	
8.00	9.25	1.16	28.1	28.6	29.5	30.1	30.6	31.1	31.6	32.5	33.1	33.6	34.5	35.1	36.1	36.6	37.6	39.0	39.6	40.6	41.1	41.6	41.7	42.6	43.6	44.1	44.6	
9.75	11.30	1.16	26.9	27.4	28.3	28.9	29.4	29.9	30.4	31.3	31.9	32.4	33.3	33.9	34.9	35.4	36.4	37.8	38.4	39.4	40.4	40.9	41.4	42.4	43.4	43.9	44.4	
11.30	13.20	1.17	25.2	25.7	26.6	27.2	27.7	28.2	28.7	29.6	30.2	30.7	31.6	32.2	33.2	33.7	34.7	36.1	36.7	37.7	38.2	38.7	38.8	39.7	40.7	41.2	41.7	
16.00	18.70	1.17			18.6	19.2	19.7	20.2	20.7	21.6	22.2	22.7	23.6	24.2	25.2	25.7	26.7	28.1	28.7	29.7	30.2	30.7	30.8	31.7	32.7	33.2	33.7	
9.25	10.90	1.18	28.7	29.2	30.1	30.7	31.2	31.7	32.2	33.1	33.7	34.2	35.0	35.7	36.7	37.2	38.2	39.6	40.2	41.1	41.7	42.2	42.3	43.2	44.2	44.7	45.2	
4.40	5.20	1.18	37.0	37.5	38.4	39.0	39.5	40.0	40.5	41.4	42.0	42.5	43.3	44.0	45.0	45.5	46.5	47.9	48.5	49.4	50.0	50.5	50.6	51.5				
4.65	5.50	1.19	36.5	37.0	37.9	38.5	39.0	39.5	40.0	40.9	41.5	42.0	42.9	43.5	44.5	45.0	46.0	47.4	48.0	49.0	49.5	50.0	50.1	51.0				
6.30	7.50	1.19	33.7	34.2	35.1	35.7	36.2	36.7	37.2	38.1	38.7	39.2	40.0	40.7	41.7	42.2	43.2	44.6	45.2	46.1	46.7	47.2	47.3	48.2				
11.80	14.00	1.19	24.2	24.7	25.6	26.2	26.7	27.2	27.7	28.6	29.2	29.7	30.6	31.2	32.2	32.7	33.7	35.1	35.7	36.7	37.2	37.3	38.2	39.7	40.2	40.7		
6.70	8.00	1.20	32.9	33.4	34.3	34.9	35.4	35.9	36.4	37.3	37.9	38.4	39.3	39.9	40.9	41.4	42.4	43.8	44.4	45.4	46.0	46.5	46.6	47.5				
7.10	8.50	1.20	32.2	32.7	33.6	34.2	34.7	35.2	35.7	36.6	37.2	37.7	38.6	39.2	40.2	40.7	41.7	43.1	43.7	44.7	45.2	45.7	45.8	46.7	47.7	48.2	48.7	
7.50	9.00	1.20	31.5	32.0	32.9	33.5	34.0	34.5	35.0	35.9	36.5	37.0	37.9	38.5	39.5	40.0	41.0	42.4	43.0	44.0	44.5	45.0	45.1	46.0	47.0	47.5	48.0	
12.50	15.00	1.20	22.9	23.4	24.3	24.9	25.4	25.9	26.4	27.3	27.9	28.4	29.2	29.9	30.9	31.4	32.4	33.8	34.4	35.3	35.9	36.4	36.5	37.4	38.4	38.9	39.4	
4.90	5.90	1.21	36.0	36.5	37.4	38.0	38.5	39.0	39.5	40.4	41.0	41.5	42.4	43.0	44.0	44.5	45.5	46.9	47.5	48.5	49.0	49.5	49.6	50.5				
5.90	7.10	1.21	34.3	34.8	35.7	36.3	36.8	37.3	37.8	38.7	39.3	39.8	40.6	41.3	42.3	42.8	43.8	45.2	45.8	46.7	47.3	47.8	47.9	48.8				
8.50	10.30	1.21	29.7	30.2	31.1	31.7	32.2	32.7	33.2	34.1	34.7	35.2	36.1	36.7	37.7	38.2	39.2	40.6	41.2	42.2	42.7	43.2	43.3	44.2	45.2	45.7	46.2	
9.00	10.90	1.21	28.9	29.4	30.3	30.9	31.4	31.9	32.4	33.3	33.9	34.4	35.2	35.9	36.9	37.4	38.4	39.8	40.4	41.3	41.9	42.4	42.5	43.4	44.4	44.9	45.4	
9.75	11.80	1.21	27.6	28.1	29.0	29.6	30.1	30.6	31.1	32.0	32.6	33.1	33.9	34.6	35.6	36.1	37.1	38.5	39.1	40.0	40.6	41.1	41.2	42.1	43.1	43.6	44.1	
10.90	13.20	1.21	25.5	26.0	26.9	27.5	28.0	28.5	29.0	29.9	30.6	31.1	31.9	32.6	33.6	34.1	35.1	36.5	37.1	38.0	38.6	39.1	39.2	40.1	41.1	41.6	42.1	
13.20	16.00	1.21	21.5	22.0	22.9	23.5	24.0	24.5	25.0	25.9	26.5	27.0	27.9	28.5	29.5	30.0	31.0	32.4	33.0	34.0	34.5	35.0	35.1	36.0	37.0	37.5	38.0	
5.20	6.30	1.22	35.5	36.0	36.9	37.5	38.0	38.5	39.0	39.9	40.5	41.0	41.8	42.5	43.5	44.0	45.0	46.4	47.0	47.9	48.5	49.0	49.1	50.0				
5.50	6.70	1.22	34.9	35.4	36.3	36.9	37.4	37.9	38.4	39.3	39.9	40.4	41.1	41.9	42.9	43.4	44.4	45.8	46.4	47.4	47.9	48.4	48.5	49.4				
8.00	9.75	1.22	30.5	31.0	31.9	32.5	33.0	33.5	34.0	34.9	35.5	36.0	36.9	37.5	38.5	39.0	40.0	41.4	42.1	43.0	43.6	44.1	44.2	45.1	46.1	46.6	47.1	
9.25	11.30	1.22	28.3	28.8	29.7	30.3	30.8	31.3	31.8	32.7	33.3	33.8	34.7	35.3	36.3	36.8	37.8	39.2	39.8	40.8	41.3	41.8	41.9	42.8	43.8	44.3	44.8	
10.30	12.50	1.22	26.6	27.1	28.0	28.6	29.1	29.6	30.1	31.0	31.6	32.1	32.9	33.6	34.6	35.1	36.1	37.5	38.1	39.0	39.6	40.1	40.2	41.1	42.1	42.6	43.1	
7.50	9.25	1.24	31.3	31.8	32.7	33.3	33.8	34.3	34.8	35.7	36.3	36.8	37.7	38.3	39.3	39.8	40.8	42.2	42.8	43.8	44.3	44.8	44.9	45.8	46.8	47.3	47.8	
11.30	14.00	1.24	24.6	25.1	26.0	26.6	27.1	27.6	28.1	29.0	29.6	30.1	30.9	31.6	32.6	33.1	34.1	35.5	36.1	37.1	37.6	38.1	38.2	39.1	40.1	40.6	41.1	
15.00	18.70	1.25	17.9	18.4	19.3	19.9	20.4	21.0	21.5	22.4	23.0	23.5	24.3	25.0	26.0	26.5	27.5	28.9	29.5	30.4	31.0	31.5	31.6	32.5	33.5	34.0	34.5	
4.40	5.50	1.26	36.7	37.2	38.1	38.7	39.2	39.7	40.2	41.1	41.7	42.2	43.1	43.7	44.7	45.2	46.2	47.6	48.2	49.2	49.7	50.2	50.3	51.2				
9.00	11.30	1.26	28.5	29.0	29.9	30.5	31.0	31.5	32.0	32.9	33.5	34.0	34.9	35.5	36.5	37.0	38.0	39.4	40.0	41.0	41.5	42.0	42.1	43.0	44.0	44.5	45.0	
4.65	5.90	1.27	36.2	36.7	37.6	38.2	38.7	39.2	39.7	40.6	41.2	41.7	42.6	43.2	44.2	44.7	45.7	47.1	47.7	48.7	49.2	49.7	49.8	50.7				
6.30	8.00	1.27	33.3	33.8	34.7	35.3	35.8	36.3	36.8	37.7	38.3	38.8	39.6	40.3	41.3	41.8	42.8	44.2	44.8	45.7	46.3	46.8	46.9	47.8				
6.70	8.50	1.27	32.5	33.0	34.0	34.6	35.1	35.6	36.1	37.0	37.6	38.1	38.9	39.6	40.6	41.1	42.1	43.5	44.1	45.0	45.6	46.1	46.2	47.1				
7.10	9.00	1.27	31.8	32.3	33.2	33.8	34.3	34.8	35.3	36.2	36.8	37.3	38.2	38.8	39.8	40.3	41.3	42.7	43.3	44.3	44.8	45.3	45.4	46.3	47.3	47.8	48.3	
11.80	15.00	1.27	23.4	23.9	24.8	25.4	25.9	26.4	26.9	27.8	28.4	28.9	29.8	30.4	31.4	31.9	32.9	34.3	34.9	35.9	36.4	36.9	37.0	37.9	38.9	39.4	39.9	
5.90	7.50	1.28	34.0	34.5	35.4	36.0	36.5	37.0	37.5	38.4	39.0	39.5	40.3	41.0	42.0	42.5	43.5	44.9	45.5	46.4	47.0	47.5	47.6	48.5				
9.25	11.80	1.28	27.9	28.4	29.3	29.9	30.4	30.9	31.4	32.3	32.9	33.4	34.3	34.9	35.9	36.4	37.4	38.8	39.4	40.4	40.9	41.4	41.5	42.4	43.4	43.9	44.4	
9.75	12.50	1.28	27.0	27.5	28.4	29.0	29.5	30.0	30.5	31.4	32.0	32.5	33.3	34.0	35.0	35.5	36.5	37.9	3									

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																									Speed Ratio	Sheave Outside Diameters		
5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX		5V	Small Sheave	Large Sheave
1230	1250	1277	1320	1374	1400	1469	1500	1600	1630	1700	1701	1800	1900	2000	2030	2120	2240	2360	2500	2650	2800	3000	3150	3350	3550	1.15	8.50	9.75
47.2	48.2	49.5	51.7	54.4	55.7	59.1	60.7	65.7	67.2	70.7	70.7	75.7	80.7	85.7	87.2	91.7	97.7	103.7	110.7	118.2	125.7	135.7	143.2	153.2	163.2	1.15	9.00	10.30
46.3	47.3	48.7	50.8	53.5	54.8	58.3	59.8	64.8	66.3	69.8	69.9	74.8	79.8	84.8	86.3	90.8	96.8	102.8	109.8	117.3	124.8	134.8	142.3	152.3	162.3	1.15	9.30	10.60
44.1	45.1	46.5	48.6	51.3	52.6	56.1	57.6	62.6	64.1	67.6	67.7	72.6	77.6	82.6	84.1	88.6	94.6	100.6	107.6	115.1	122.6	132.6	140.1	150.1	160.1	1.15	10.30	11.80
43.1	44.1	45.5	47.6	50.3	51.6	55.1	56.6	61.6	63.1	66.6	66.7	71.6	76.6	81.6	83.1	87.6	93.6	99.6	106.6	114.1	121.6	131.6	139.1	149.1	159.1	1.15	10.90	12.50
47.9	48.9	50.3	52.4	55.1	56.4	59.9	61.4	66.4	67.9	71.4	71.5	76.4	81.4	86.4	87.9	92.4	98.4	104.4	111.5	119.0	126.5	136.5	144.0	154.0	164.0	1.16	8.00	9.25
45.0	46.0	47.3	49.5	52.2	53.5	56.9	58.5	63.5	65.0	68.5	68.5	73.5	78.5	83.5	85.0	89.5	95.5	101.5	108.5	116.0	123.5	133.5	141.0	151.0	161.0	1.16	9.75	11.30
42.2	43.2	44.6	46.7	49.4	50.7	54.2	55.7	60.8	62.3	65.8	65.8	70.8	75.8	80.8	82.3	86.8	92.8	98.8	105.8	113.3	120.8	130.8	138.3	148.3	158.3	1.17	11.30	13.20
34.2	35.2	36.6	38.7	41.4	42.7	46.2	47.7	52.7	54.2	57.7	57.8	62.7	67.7	72.7	74.2	78.7	84.7	90.7	97.7	105.2	112.7	122.7	130.2	140.2	150.2	1.17	16.00	18.70
45.7	46.7	48.0	50.2	52.9	54.2	57.6	59.2	64.2	65.7	69.2	69.2	74.2	79.2	84.2	85.7	90.2	96.2	102.2	109.2	116.7	124.2	134.2	141.7	151.7	161.7	1.18	9.25	10.90
54.0	55.0	56.3	58.5	61.2	62.5	65.9	67.5	72.5	74.0	77.5	77.5	82.5	87.5	92.5	94.0	98.5	104.5	110.5	117.5	125.0	132.5	142.5	150.0	160.0	1.19	4.40	5.20	
53.5	54.5	55.9	58.0	60.7	62.0	65.5	67.0	72.0	73.5	77.0	77.0	82.0	87.0	92.0	93.5	98.0	104.0	110.0	117.0	124.5	132.0	142.0	150.0	160.0	1.19	4.65	5.50	
50.7	51.7	53.0	55.2	57.9	59.2	62.6	64.2	69.2	70.7	74.2	74.2	79.2	84.2	89.2	90.7	95.2	101.2	107.2	114.2	121.7	129.2	137.2	147.2	157.2	1.19	6.30	7.50	
41.2	42.2	43.6	45.7	48.4	49.7	53.2	54.7	59.7	61.2	64.7	64.8	69.7	74.7	79.7	81.2	85.7	91.7	97.7	104.7	112.2	119.7	129.7	137.2	147.2	157.2	1.19	11.80	14.00
50.0	51.0	52.3	54.5	57.2	58.5	61.9	63.5	68.5	70.0	73.5	73.5	78.5	83.5	88.5	90.0	94.5	100.5	106.5	113.5	121.0	128.5	138.5	146.0	156.0	1.20	6.70	8.00	
49.2	50.2	51.6	53.7	56.4	57.7	61.2	62.7	67.7	69.2	72.7	72.8	77.7	82.7	87.7	89.2	93.7	99.7	105.7	112.7	120.2	127.7	137.7	145.2	155.2	165.2	1.20	7.10	8.50
48.5	49.5	50.9	53.0	55.7	57.0	60.5	62.0	67.0	68.5	72.0	72.1	77.0	82.0	87.0	88.5	93.0	99.0	105.0	112.0	119.5	127.0	137.0	144.5	154.5	164.5	1.20	7.50	9.00
39.9	40.9	42.2	44.4	47.1	48.4	51.8	53.4	58.4	59.9	63.4	63.4	68.4	73.4	78.4	79.9	84.4	90.4	96.4	103.4	110.9	118.4	128.4	135.9	145.9	155.9	1.20	12.50	15.00
53.0	54.0	55.4	57.5	60.2	61.5	65.0	66.5	71.5	73.0	76.5	76.6	81.5	86.5	91.5	93.0	97.5	103.5	109.5	116.5	124.0	131.5	141.5	149.0	159.0	1.21	4.90	5.90	
51.3	52.3	53.6	55.8	58.5	59.8	63.2	64.8	69.8	71.3	74.8	74.8	79.8	84.8	89.8	91.3	95.8	101.8	107.8	114.8	122.3	129.8	139.8	147.3	157.3	1.21	5.90	7.10	
46.7	47.7	49.1	51.2	53.9	55.2	58.7	60.2	65.2	66.7	70.2	70.3	75.2	80.2	85.2	86.7	91.2	97.2	103.2	110.2	117.7	125.2	135.2	142.7	152.7	162.7	1.21	8.50	10.30
45.9	46.9	48.2	50.4	53.1	54.4	57.8	59.4	64.4	65.9	69.4	69.4	74.4	79.4	84.4	85.9	90.4	96.4	102.4	109.4	116.9	124.4	134.4	141.9	151.9	161.9	1.21	9.00	10.90
44.6	45.6	46.9	49.1	51.8	53.1	56.5	58.1	63.1	64.6	68.1	68.1	73.1	78.1	83.1	84.6	89.1	95.1	101.1	108.1	115.6	123.1	133.1	140.6	150.6	160.6	1.21	9.75	11.80
42.6	43.6	44.9	47.1	49.8	51.1	54.5	56.1	61.1	62.6	66.1	66.1	71.1	76.1	81.1	82.6	87.1	93.1	99.1	106.1	113.6	121.1	131.1	138.6	148.6	158.6	1.21	10.90	13.20
38.5	39.5	40.9	43.0	45.7	47.0	50.5	52.0	57.0	58.5	62.1	62.1	67.1	72.1	77.1	78.6	83.1	89.1	95.1	102.1	109.6	117.1	127.1	134.6	144.6	154.6	1.21	13.20	16.00
52.5	53.5	54.8	57.0	59.7	61.0	64.4	66.0	71.0	72.5	76.0	76.0	81.0	86.0	91.0	92.5	97.0	103.0	109.0	116.0	123.5	131.0	141.0	148.5	158.5	1.22	5.20	6.30	
51.9	52.9	54.3	56.4	59.1	60.4	63.8	65.4	70.4	71.9	75.4	75.4	80.4	85.4	90.4	91.9	96.4	102.4	108.4	115.4	122.9	130.4	140.4	147.9	157.9	1.22	5.50	6.70	
47.6	48.6	49.9	52.1	54.8	56.1	59.5	61.1	66.1	67.6	71.1	71.1	76.1	81.1	86.1	87.6	92.1	98.1	104.1	111.1	118.6	126.1	136.1	143.6	153.6	163.6	1.22	8.00	9.75
45.3	46.3	47.7	49.8	52.6	53.9	57.3	58.9	63.9	65.4	68.9	68.9	73.9	78.9	83.9	85.4	89.9	95.9	101.9	108.9	116.4	123.9	133.9	141.4	151.4	161.4	1.22	9.25	11.30
43.6	44.6	45.9	48.1	50.8	52.1	55.5	57.1	62.1	63.6	67.1	67.1	72.1	77.1	82.1	83.6	88.1	94.1	100.1	107.1	114.6	122.1	132.1	139.6	149.6	159.6	1.22	10.30	12.50
48.3	49.3	50.7	52.8	55.5	56.8	60.3	61.8	66.8	68.3	71.8	71.9	76.8	81.8	86.8	88.3	92.8	98.8	104.8	111.8	119.3	126.8	136.8	144.3	154.3	164.3	1.24	7.50	9.25
41.6	42.6	44.0	46.1	48.8	50.1	53.6	55.1	60.1	61.6	65.1	65.1	70.1	75.1	80.1	81.6	86.1	92.1	98.1	105.1	112.6	120.1	130.1	137.6	147.6	157.6	1.24	11.30	14.00
35.0	36.0	37.3	39.5	42.2	43.5	46.9	48.5	53.5	55.0	58.5	58.6	63.5	68.5	73.5	75.0	79.5	85.5	91.5	98.5	106.0	113.5	123.5	131.0	141.0	151.0	1.25	15.00	18.70
53.7	54.7	56.1	58.2	60.9	62.2	65.7	67.2	72.2	73.7	77.2	77.3	82.2	87.2	92.2	93.7	98.2	104.2	110.2	117.2	124.7	132.2	142.2	149.7	159.7	1.26	4.40	5.50	
45.5	46.5	47.9	50.0	52.7	54.0	57.5	59.0	64.0	65.5	69.0	69.1	74.0	79.0	84.0	85.5	90.0	96.0	102.0	109.1	116.6	124.1	134.1	141.6	151.6	161.6	1.26	9.00	11.30
53.2	54.2	55.6	57.7	60.4	61.7	65.2	66.7	71.7	73.2	76.7	76.8	81.7	86.7	91.7	93.2	97.7	103.7	109.7	116.7	124.2	131.7	141.7	149.2	159.2	1.27	4.65	5.90	
50.3	51.3	52.6	54.8	57.5	58.8	62.2	63.8	68.8	70.3	73.8	73.8	78.8	83.8	88.8	90.3	94.8	100.8	106.8	113.8	121.3	128.8	138.8	146.3	156.3	1.27	6.30	8.00	
49.6	50.6	51.9	54.1	56.8	58.1	61.5	63.1	68.1	69.6	73.1	73.1	78.1	83.1	88.1	89.6	94.1	100.1	106.1	113.1	120.6	128.1	138.1	145.6	155.6	1.27	6.70	8.50	
48.8	49.8	51.2	53.3	56.0	57.3	60.8	62.3	67.3	68.8	72.3	72.3	77.3	82.3	87.3	88.8	93.3	99.3	105.3	112.3	119.8	127.3	137.3	144.8	154.8	164.8	1.27	7.10	9.00
40.4	41.4	42.8	44.9	47.6	48.9	52.4	53.9	58.9	60.4	63.9	64.0	68.9	73.9	78.9	80.4	84.9	90.9	96.9	103.9	111.4	118.9	128.9	136.4	146.4	156.4	1.27	11.80	15.00
51.0	52.0	53.3	55.5	58.2	59.5	62.9	64.5	69.5	71.0	74.5	74.5	79.5	84.5	89.5	91.0	95.5	101.5	107.5	114.5	122.0	129.5	139.5	147.0	157.0	1.28	5.90	7.50	
44.9	45.9	47.3	49.5	52.2	53.5	56.9	58.5	63.5	65.0	68.5	68.5	73.5	78.5	83.5	85.0	89.5	95.5	101.5	108.5	116.0	123.5	133.5	141.0	151.0	161.0	1.28	9.25	11.80
44.0	45.0	46.4	48.5	51.2	52.5	56.0	57.5	62.5	64.0	67.5	67.6	72.5	77.5	82.5	84.0	88.5	94.5	100.5	107.5	115.0	122.5	132.5	140.0	150.0	160.0	1.28	9.75	12.50
43.0	44.0	45.4	47.5	50.2	51.5	55.0	56.5	61.5	63.0	66.5	66.6	71.5	76.5	81.5	83.0	87.5												

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Speed Ratio	V-Belt No. and Center Distance																										
Small Sheave	Large Sheave		5VX 900	5V 918	5VX 930	5V 940	5VX 950	5V 960	5VX 978	5V 990	5VX 1000	5V 1017	5VX 1030	5V 1050	5VX 1060	5V 1080	5VX 1108	5V 1120	5VX 1139	5V 1150	5VX 1160	5V 1180	5VX 1200	5V 1210	5VX 1220				
4.90	7.10	1.37	35.4	35.9	36.8	37.4	37.9	38.4	38.9	39.8	40.4	40.9	41.7	42.4	43.4	43.9	44.9	46.3	46.9	47.8	48.4	48.9	49.0	49.9	51.9				
5.20	7.10	1.37	34.8	35.3	36.2	36.8	37.3	37.8	38.3	39.2	39.8	40.3	41.2	41.8	42.8	43.3	44.3	45.7	46.3	47.3	47.8	48.3	49.4	49.3	51.3				
5.50	7.50	1.37	34.3	34.8	35.7	36.3	36.8	37.3	37.8	38.7	39.3	39.8	40.6	41.3	42.3	42.8	43.8	45.2	45.8	46.7	47.3	47.8	47.9	48.8	50.8				
8.00	10.90	1.37	29.6	30.1	31.0	31.6	32.1	32.6	33.1	34.0	34.6	35.1	36.0	36.6	37.6	38.1	39.1	40.5	41.1	42.1	42.6	43.1	43.2	44.1	45.1	45.6	46.1		
7.10	9.75	1.38	31.2	31.7	32.6	33.2	33.7	34.2	34.7	35.6	36.2	36.7	37.6	38.2	39.2	39.7	40.7	42.1	42.7	43.7	44.2	44.7	44.8	45.7	46.7	47.2	47.7		
7.50	10.30	1.38	30.5	31.0	31.9	32.5	33.0	33.5	34.0	34.9	35.5	36.0	36.8	37.5	38.5	39.0	40.0	41.4	42.0	42.9	43.5	44.0	44.1	45.0	46.0	46.5	47.0		
10.90	15.00	1.38	24.1	24.6	25.5	26.1	26.6	27.1	27.6	28.5	29.1	29.6	30.4	31.1	32.1	32.6	33.6	35.0	35.6	36.6	37.1	37.6	37.7	38.6	39.6	40.1	40.6		
6.70	9.25	1.39	31.9	32.4	33.3	33.9	34.4	34.9	35.4	36.4	37.0	37.5	38.3	39.0	40.0	40.5	41.5	42.9	43.5	44.4	45.0	45.5	45.6	46.5	48.5	50.5			
8.50	11.80	1.39	28.5	29.0	29.9	30.5	31.0	31.5	32.0	32.9	33.5	34.0	34.9	35.5	36.5	37.0	38.0	39.4	40.0	41.0	41.5	42.0	42.1	43.0	44.0	44.5	45.0		
9.00	12.50	1.39	27.6	28.1	29.0	29.6	30.1	30.6	31.1	32.0	32.6	33.1	33.9	34.6	35.6	36.1	37.1	38.5	39.1	40.0	40.6	41.1	41.2	42.1	43.1	43.6	44.1		
8.00	11.30	1.42	29.3	29.8	30.7	31.3	31.8	32.3	32.8	33.7	34.3	34.8	35.7	36.3	37.3	37.8	38.8	40.2	40.8	41.8	42.3	42.8	42.9	43.8	44.8	45.3	45.8		
11.30	16.00	1.42	22.9	23.4	24.3	24.9	25.5	26.0	26.5	27.4	28.0	28.5	29.3	30.0	31.0	31.5	32.5	33.9	34.5	35.4	36.0	36.5	36.6	37.5	38.5	39.0	39.5		
13.20	18.70	1.42	19.2	19.8	20.7	21.3	21.8	22.3	22.8	23.7	24.3	24.8	25.6	26.3	27.3	27.8	28.8	30.2	30.8	31.8	32.3	32.8	32.9	33.8	34.8	35.3	35.8		
15.00	21.20	1.42								19.3	20.2	20.8	21.3	22.2	22.9	23.9	24.4	25.4	26.8	27.4	28.3	28.9	29.4	29.5	30.4	31.4	31.9	32.4	
9.25	13.20	1.43	26.8	27.3	28.2	28.8	29.3	29.8	30.3	31.2	31.8	32.3	33.2	33.8	34.8	35.3	36.3	37.7	38.3	39.3	39.8	40.3	40.4	41.3	42.3	42.8	43.3		
4.40	6.30	1.44	36.1	36.6	37.5	38.1	38.6	39.1	39.6	40.5	41.1	41.6	42.4	43.1	44.1	44.6	45.6	47.0	47.6	48.5	49.1	49.6	49.7	50.6	52.6	54.6			
6.30	9.00	1.44	32.5	33.0	33.9	34.5	35.0	35.5	36.0	36.9	37.5	38.0	38.8	39.5	40.5	41.0	42.0	43.4	44.0	44.9	45.5	46.0	46.1	47.0	48.0	49.0			
7.50	10.90	1.44	25.8	26.3	27.2	27.8	28.3	28.8	29.3	30.2	30.8	31.3	32.1	32.6	33.6	34.1	35.1	36.5	36.7	37.3	38.2	38.8	39.3	39.4	40.3	41.3	41.8	42.3	
4.65	6.70	1.45	35.6	36.1	37.0	37.6	38.1	38.6	39.1	40.0	40.6	41.1	41.9	42.6	43.6	44.1	45.1	46.5	47.1	48.0	48.6	49.1	49.2	50.1	52.1	54.1			
5.20	7.50	1.45	34.5	35.0	35.9	36.5	37.0	37.5	38.0	38.9	39.5	40.0	40.9	41.5	42.5	43.0	44.0	45.4	46.0	47.0	47.5	48.0	48.1	49.0	51.0	53.0			
5.90	8.50	1.45	33.2	33.7	34.6	35.2	35.7	36.2	36.7	37.6	38.2	38.7	39.5	40.2	41.2	41.7	42.7	44.1	44.7	45.6	46.2	46.7	46.8	47.7	49.7	51.7			
4.90	7.10	1.46	35.1	35.6	36.5	37.1	37.6	38.1	38.6	39.5	40.1	40.6	41.4	42.1	43.1	43.6	44.6	46.0	46.6	47.5	48.1	48.6	48.7	49.6	51.6	53.6			
5.50	8.00	1.46	33.9	34.4	35.3	35.9	36.4	36.9	37.4	38.3	38.9	39.4	40.2	40.9	41.9	42.4	43.4	44.8	45.4	46.3	46.9	47.4	47.5	48.4	50.4	52.4			
6.70	9.75	1.46	31.5	32.0	32.9	33.5	34.0	34.5	35.0	35.9	36.5	37.0	37.9	38.6	39.6	40.1	41.1	42.5	43.1	44.0	44.6	45.1	45.2	46.1	48.1	50.1			
7.10	10.30	1.46	30.8	31.3	32.2	32.8	33.3	33.8	34.3	35.2	35.8	36.3	37.1	37.8	38.8	39.3	40.3	41.7	42.3	43.3	43.8	44.3	44.4	45.3	46.3	46.8	47.3		
10.30	15.00	1.46	24.5	25.0	25.9	26.5	27.0	27.5	28.0	28.9	29.5	30.0	30.9	31.5	32.5	33.0	34.0	35.5	36.1	37.0	37.6	38.1	38.2	39.1	40.1	40.6	41.1		
9.00	13.20	1.47	27.0	27.5	28.4	29.0	29.5	30.0	30.5	31.4	32.0	32.5	33.3	34.0	35.0	35.5	36.5	37.9	38.5	39.5	40.0	40.5	40.6	41.5	42.5	43.0	43.5		
10.90	16.00	1.47	23.2	23.7	24.6	25.2	25.7	26.2	26.7	27.6	28.2	28.8	29.6	30.3	31.3	31.8	32.8	34.2	34.8	35.7	36.3	36.8	36.9	37.8	38.8	39.3	39.8		
6.30	9.25	1.48	32.3	32.8	33.7	34.3	34.8	35.3	35.8	36.7	37.3	37.8	38.6	39.3	40.3	40.8	41.8	43.2	43.8	44.7	45.3	45.8	45.9	46.8	48.8	50.8			
8.00	11.80	1.48	28.9	29.4	30.3	30.9	31.4	31.9	32.4	33.3	33.9	34.4	35.2	35.9	36.9	37.4	38.4	39.8	40.4	41.4	41.9	42.4	42.5	43.4	44.4	44.9	45.4		
8.50	12.50	1.48	27.9	28.4	29.3	29.9	30.4	30.9	31.4	32.3	32.9	33.4	34.3	34.9	36.0	36.5	37.5	38.9	39.5	40.4	41.0	41.5	41.6	42.5	43.5	44.0	44.5		
16.00	23.60	1.48								19.8	20.3	21.2	21.8	22.3	22.8	23.3	24.2	24.8	25.3	26.2	26.8	27.1	27.6	28.5	29.2	29.7			
18.70	26.50	1.50								30.0	30.5	31.4	32.0	32.5	33.0	33.5	34.4	35.0	35.5	36.4	37.0	37.5	38.4	39.1	40.0	40.9	41.8		
7.50	11.30	1.51	29.7	30.2	31.1	31.7	32.2	32.7	33.2	34.1	34.7	35.2	36.0	36.7	37.7	38.2	39.2	40.6	41.2	42.1	42.7	43.2	43.3	44.2	45.2	45.7	46.2		
9.25	14.00	1.52	26.1	26.6	27.5	28.1	28.6	29.1	29.6	30.5	31.1	31.7	32.5	33.2	34.2	34.7	35.7	37.1	37.7	38.6	39.2	39.7	39.8	40.7	41.7	42.2	42.7		
14.00	21.20	1.52								19.0	19.5	20.0	20.9	21.6	22.1	22.9	23.6	24.6	25.1	26.1	27.5	28.1	29.1	29.6	30.1	30.2	31.1	32.2	32.7
4.40	6.70	1.53	35.8	36.3	37.2	37.8	38.3	38.8	39.3	40.2	40.8	41.3	42.1	42.8	43.8	44.3	45.3	46.7	47.3	48.2	48.8	49.3	49.4	50.3	52.3	54.3			
5.90	9.00	1.53	32.8	33.3	34.2	34.8	35.3	35.8	36.3	37.2	37.8	38.3	39.1	39.8	40.8	41.3	42.3	43.7	44.3	45.2	45.8	46.3	46.4	47.3	49.3	51.3			
4.65	7.10	1.54	35.3	35.8	36.7	37.3	37.8	38.3	38.8	39.7	40.3	40.8	41.6	42.3	43.3	43.8	44.8	46.2	46.8	47.7	48.3	48.8	48.9	49.8	51.8	53.8			
4.90	7.50	1.54	34.7	35.2	36.1	36.7	37.2	37.7	38.2	39.1	39.7	40.2	41.1	41.7	42.7	43.2	44.2	45.6	46.2	47.2	47.7	48.2	48.3	49.2	51.2	53.2			
7.10	10.90	1.54	30.3	30.8	31.7	32.3	32.8	33.3	33.8	34.7	35.3	35.8	36.7	37.3	38.3	38.8	39.8	41.2	41.8	42.8	43.3	43.8	43.9	44.8	45.8	46.3	46.8		
9.75	15.00	1.54	24.9	25.4	26.3	26.9	27.4	27.9	28.4	29.3	29.9	30.4	31.3	32															

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																					Speed Ratio	Sheave Outside Diameters							
5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX		Small Sheave	Large Sheave						
1230	1250	1277	1320	1374	1400	1469	1500	1600	1630	1700	1701	1800	1900	2000	2030	2120	2240	2360	2500	2650	2800	3000	3150	3350	3550	1.37	4.90	6.70	
52.4	53.4	54.7	56.9	59.6	60.9	64.3	65.9	70.9	75.9	75.9	80.9	85.9	90.9	90.9												1.37	5.20	7.10	
51.8	52.8	54.2	56.3	59.0	60.3	63.8	65.3	70.3	75.3	75.3	80.3	85.3	90.3	90.3												1.37	5.50	7.50	
51.3	52.3	53.6	55.8	58.5	59.8	63.2	64.8	69.8	74.8	74.8	79.8	84.8	89.8	89.8												1.37	7.80	10.90	
46.6	47.6	49.0	51.1	53.8	55.1	58.6	60.1	65.1	66.6	70.1	70.2	75.1	80.1	85.1	86.6	91.1	97.1	103.1	110.1	117.6	125.1	135.1	142.6	152.6	162.6	1.37	8.00	10.90	
48.2	49.2	50.6	52.7	55.5	56.8	60.2	61.8	66.8	68.3	71.8	71.8	76.8	81.8	86.8	88.3	92.8	98.8	104.8	111.8	119.3	126.8	136.8	144.3	154.3	164.3	1.38	7.10	9.75	
47.5	48.5	49.9	52.0	54.7	56.0	59.5	61.0	66.0	67.5	71.0	71.1	76.0	81.0	86.0	87.5	92.0	98.0	104.0	111.0	118.5	126.0	136.0	143.5	153.5	163.5	1.38	7.50	10.30	
41.1	42.1	43.5	45.6	48.3	49.6	53.1	54.6	59.6	61.1	64.6	64.7	69.6	74.6	79.6	81.1	85.6	91.6	97.6	104.6	112.1	119.6	129.6	137.1	147.1	157.1	1.38	10.90	15.00	
49.0	50.0	51.3	53.5	56.2	57.5	60.9	62.5	67.5	69.0	72.5	72.5	77.5	82.5	87.5	87.5											1.39	6.70	9.25	
45.5	46.5	47.9	50.0	52.7	54.0	57.5	59.0	64.0	65.5	69.0	69.1	74.0	79.0	84.0	85.5	90.0	96.0	102.0	109.0	116.5	124.0	134.0	141.5	151.5	161.5	1.39	8.50	11.80	
44.6	45.6	46.9	49.1	51.8	53.1	56.5	58.1	63.1	64.6	68.1	68.1	73.1	78.1	83.1	84.6	89.1	95.1	101.1	108.1	115.6	123.1	133.1	140.6	150.6	160.6	1.39	9.00	12.50	
46.3	47.3	48.7	50.8	53.5	54.8	58.3	59.8	64.8	66.3	69.8	69.9	74.8	79.8	84.8	86.3	90.8	96.8	102.8	109.8	117.3	124.8	134.8	142.3	152.3	162.3	1.42	8.00	11.30	
40.0	41.0	42.3	44.5	47.2	48.5	52.0	53.5	58.5	60.0	63.5	63.6	68.5	73.5	78.5	80.0	84.5	90.5	96.5	103.5	111.0	118.5	128.5	136.0	146.0	156.0	1.42	11.30	16.00	
36.3	37.3	38.7	40.9	43.6	44.9	48.3	49.9	54.9	56.4	59.9	59.9	64.9	69.9	74.9	76.4	80.9	86.9	92.9	99.9	107.4	114.9	124.9	132.4	142.4	152.4	1.42	13.20	18.70	
32.9	33.9	35.3	37.4	40.1	41.5	44.9	46.5	51.5	53.0	56.5	56.5	61.5	66.5	71.5	73.0	77.5	83.5	89.5	96.5	104.0	111.5	121.5	129.0	139.0	149.0	1.42	15.00	21.20	
43.8	44.8	46.2	48.3	51.0	52.3	55.8	57.3	62.3	63.8	67.3	67.4	72.3	77.3	82.3	83.8	88.3	94.3	100.3	107.3	114.9	122.4	132.4	139.9	149.9	159.9	1.43	9.25	13.20	
53.1	54.1	55.4	57.6	60.3	61.6	65.0	66.6	71.6	73.1	76.6	76.6	81.6	86.6	91.6	91.6											1.44	4.40	6.30	
42.8	43.8	45.1	47.3	50.0	51.3	54.8	56.3	61.3	62.8	66.3	66.4	71.3	76.3	81.3	82.8	87.3	93.3	99.3	106.3	113.8	121.3	131.3	138.8	148.8	158.8	1.44	7.75	14.00	
52.6	53.6	54.9	57.1	59.8	61.1	64.5	66.1	71.1	72.6	76.1	76.1	81.1	86.1	91.1	91.1											1.45	4.65	6.70	
51.5	52.5	53.9	56.0	58.7	60.0	63.5	65.0	70.0	71.5	75.0	75.1	80.0	85.0	90.0	90.0											1.45	5.20	7.50	
50.2	51.2	52.5	54.7	57.4	58.7	62.1	63.7	68.7	70.2	73.7	73.7	78.7	83.7	88.7	88.7											1.45	5.90	8.50	
52.1	53.1	54.4	56.6	59.3	60.6	64.0	65.6	70.6	72.1	75.6	75.6	80.6	85.6	90.6	90.6											1.46	4.90	7.10	
50.9	51.9	53.2	55.4	58.1	59.4	62.8	64.4	69.4	70.9	74.4	74.4	79.4	84.4	89.4	89.4											1.46	5.50	8.00	
48.6	49.6	50.9	53.1	55.8	57.1	60.5	62.1	67.1	68.6	72.1	72.1	77.1	82.1	87.1	87.1											1.46	6.70	9.75	
47.8	48.8	50.2	52.3	55.0	56.3	59.8	61.3	66.3	67.8	71.3	71.4	76.3	81.3	86.3	86.3	87.8	92.3	98.3	104.3	111.3	118.8	126.3	136.3	143.8	153.8	163.8	1.46	7.10	10.30
47.0	48.0	49.4	51.5	54.2	55.5	59.0	60.5	65.5	67.0	70.5	70.6	75.5	80.5	85.5	87.0	91.5	97.5	103.5	110.5	118.0	125.5	135.5	143.0	153.0	163.0	1.46	7.50	10.90	
41.6	42.6	43.9	46.1	48.8	50.1	53.5	55.1	60.1	61.6	65.1	65.1	70.1	75.1	80.1	81.6	86.1	92.1	98.1	105.1	112.6	120.1	130.1	137.6	147.6	157.6	1.46	10.30	15.00	
44.0	45.0	46.4	48.5	51.2	52.5	56.0	57.5	62.5	64.0	67.5	67.6	72.5	77.5	82.5	84.0	88.5	94.5	100.5	107.5	115.0	122.5	132.5	140.0	150.0	160.1	1.47	9.00	13.20	
40.3	41.3	42.6	44.8	47.5	48.8	52.3	53.8	58.8	60.3	63.8	63.9	68.8	73.8	78.8	80.3	84.8	90.8	96.8	103.8	111.3	118.8	128.8	136.3	146.3	156.4	1.47	10.90	16.00	
49.3	50.3	51.6	53.8	56.5	57.8	61.2	62.8	67.8	69.3	72.8	72.8	77.8	82.8	87.8	87.8											1.48	6.30	9.25	
45.9	46.9	48.3	50.4	53.1	54.4	57.9	59.4	64.4	65.9	69.4	69.5	74.4	79.4	84.4	85.9	90.4	96.4	102.4	109.4	116.9	124.4	134.4	141.9	151.9	161.9	1.48	8.00	11.80	
45.0	46.0	47.3	49.5	52.2	53.5	56.9	58.5	63.5	65.0	68.5	68.5	73.5	78.5	83.5	85.0	89.5	95.5	101.5	108.5	116.0	123.5	133.5	141.0	151.0	161.0	1.48	8.50	12.50	
30.2	31.2	32.5	34.7	37.4	38.7	42.2	43.7	48.7	50.3	53.8	53.8	58.8	63.8	68.8	70.3	74.8	80.8	86.8	93.8	101.3	108.8	118.8	126.3	136.3	146.3	1.48	16.00	23.60	
36.9	37.9	39.2	41.4	44.1	45.4	48.8	50.4	55.4	56.9	60.4	60.5	65.4	70.4	75.4	76.9	81.4	87.4	93.4	100.4	108.0	115.5	125.5	133.0	143.0	153.0	1.50	12.50	18.70	
46.7	47.7	49.0	51.2	53.9	55.2	58.7	60.2	65.2	66.7	70.2	70.3	75.2	80.2	85.2	86.7	91.2	97.2	103.2	110.2	117.7	125.2	135.2	142.7	152.7	162.7	1.51	7.50	11.30	
43.2	44.2	45.5	47.7	50.4	51.7	55.1	56.7	61.7	63.2	66.7	66.7	71.7	76.7	81.7	83.2	87.7	93.7	99.7	106.7	114.2	121.7	131.7	139.2	149.2	159.2	1.52	9.25	14.00	
33.7	34.7	36.0	38.2	40.9	42.2	45.7	47.2	52.2	53.7	57.2	57.3	62.2	67.2	72.2	73.8	78.3	84.3	90.3	97.3	104.8	112.3	122.3	129.8	139.8	149.8	1.52	14.00	21.20	
52.8	53.8	55.1	57.3	60.0	61.3	64.7	66.3	71.3	72.8	76.3	76.3	81.3	86.3	91.3	91.3											1.53	4.40	6.70	
49.8	50.8	52.1	54.3	57.0	58.3	61.7	63.3	68.3	69.8	73.3	73.3	78.3	83.3	88.3	88.3											1.53	5.90	9.00	
52.3	53.3	54.6	56.8	59.5	60.8	64.2	65.8	70.8	72.3	75.8	75.8	80.8	85.8	90.8	90.8											1.54	4.65	7.10	
51.7	52.7	54.1	56.2	58.9	60.2	63.7	65.2	70.2	71.7	75.2	75.3	80.3	85.3	90.3	90.3											1.54	4.90	7.50	
47.3	48.3	49.7	51.8	54.5	55.8	59.3	60.8	65.8	67.3	70.8	70.9	75.8	80.8	85.8	87.3	91.8	97.8	103.8	110.8	118.3	125.8	135.8	143.4	153.4	163.4	1.54	7.10	10.90	
42.0	43.0	44.3	46.5	49.2	50.5	53.9	55.5	60.5	62.0	65.5	65.6	70.5	75.5	80.5	82.0	86.5	92.5	98.5	105.5	113.0	120.5	130.5	138.0	148.0	158.0	1.54	9.75	15.00	
51.1	52.1	53.5	55.6	58.3	59.6	63.1	64.6	69.6	71.1	74.6	74.7	79.6	84.6	89.6	89.6											1.55	5.20	8.00	
48.1	49.1	50.5	52.6	55.3	56.6	60.1	61.6	66.6	68.1	71.6	71.7	76.6	81.6	86.6	86.6											1.55	6.70	10.30	
50.5	51.5	52.8	55.0	57.7	59.0	62.4	64.0	69.0	70.5	74.0	74.0	79.0	84.0	89.0	89.0											1.56	5.50	8.00	

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																										Speed Ratio	Sheave Outside Diameters		
5VX	5V	5VX	5V	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX		5V	5VX	Small Sheave
619	630	650	660	670	680	690	700	710	720	730	740	750	760	769	780	790	800	810	830	840	850	860	867	880	890	900	1.66	5.90	9.75
18.6	19.1	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	29.1	29.6	30.1	30.6	31.0	31.6	31.6	31.6	1.66	8.00	13.20
14.1	14.6	15.6	16.1	16.6	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.6	22.2	22.7	23.2	23.7	24.7	25.2	25.7	26.2	26.6	26.6	26.6	26.6	1.66	11.30	18.70
15.9	16.5	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.6	27.1	27.6	28.1	28.4	28.6	29.1	1.67	7.10	11.80	
15.0	15.6	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.2	22.6	23.2	23.7	24.2	24.7	25.7	26.2	26.7	27.2	27.5	27.7	28.2	1.67	9.00	15.00	
19.3	19.8	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.4	27.9	28.4	28.9	29.9	30.4	30.9	31.4	31.7	32.4	32.4	1.68	5.50	9.25	
16.7	17.2	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.8	24.2	24.8	25.3	25.8	26.3	27.3	27.8	28.3	28.8	29.1	29.8	1.69	6.70	11.30		
21.5	22.1	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	32.1	32.6	33.1	33.6	34.0	34.6	1.70	12.50	21.20		
20.9	21.5	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.5	32.0	32.5	33.0	33.4	34.0	1.71	4.65	8.00		
17.3	17.8	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.8	25.4	25.9	26.4	26.9	27.9	28.4	28.9	29.4	29.8	30.4	1.71	6.30	10.90		
20.3	20.9	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.9	31.4	31.9	32.4	32.8	33.4	23.4	1.72	9.25	16.00	
19.7	20.3	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.2	27.8	28.3	28.8	29.3	30.3	30.8	31.3	31.8	32.1	32.8	1.75	5.20	9.00		
18.1	18.6	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.6	26.2	26.7	27.2	27.7	28.7	29.2	29.7	30.2	30.5	31.2	1.76	5.90	10.30		
13.3	13.9	14.9	15.4	15.9	16.4	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	24.0	24.5	25.0	25.5	25.9	26.0	26.6	1.76	8.00	14.00	
16.2	16.8	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.8	27.4	27.9	28.4	28.7	29.4	1.77	6.70	11.80		
15.3	15.9	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.5	24.0	24.5	25.0	26.0	26.5	27.0	27.5	27.8	28.0	28.5	1.77	7.10	12.50	
14.4	15.0	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.1	23.6	24.1	25.1	25.6	26.1	26.6	26.9	27.1	27.6	1.77	7.50	13.20	
19.5	20.0	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.0	27.6	28.1	28.6	29.1	30.1	30.6	31.1	31.6	31.9	32.6	1.79	5.20	9.25		
18.9	19.4	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	29.4	29.9	30.4	30.9	31.3	32.0	1.79	5.50	9.75		
16.9	17.5	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.1	25.6	26.1	26.6	27.6	28.1	28.6	29.1	29.4	30.1	1.80	11.80	21.20		
21.1	21.7	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.7	32.2	32.7	33.2	33.6	34.2	20.3	1.81	4.40	8.00	
20.5	21.1	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	31.1	31.6	32.1	32.6	33.0	33.6	1.85	4.65	8.50		
19.9	20.5	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.5	31.0	31.5	32.0	32.4	33.0	1.85	4.90	9.00		
17.6	18.1	19.1	19.6	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.1	25.7	26.2	26.7	27.2	28.2	28.7	29.2	29.7	30.1	30.7	1.86	5.90	10.90		
14.7	15.3	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.9	23.4	23.9	24.4	25.4	25.9	26.4	26.9	27.2	27.4	27.9	1.87	7.10	13.20	
15.6	16.2	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.8	25.3	26.3	26.8	27.3	27.8	28.1	28.8	1.87	15.00	28.00		
13.7	14.2	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.4	20.9	21.3	21.9	22.4	22.9	23.4	24.4	24.9	25.4	25.9	26.3	26.4	26.9	1.88	7.50	14.00	
19.1	19.6	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.2	24.7	25.2	25.7	26.2	26.6	27.2	27.7	28.2	28.7	29.7	30.2	30.7	31.2	31.5	32.2	1.89	5.20	9.75		
18.4	18.9	19.9	20.4	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	25.9	26.5	27.0	27.5	28.0	29.0	29.5	30.0	30.5	30.8	31.5	1.89	5.50	10.30		
16.5	17.1	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	27.1	27.6	28.1	28.7	29.0	29.7	1.89	6.30	11.80		
13.0	14.0	14.5	15.0	15.5	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.7	22.2	23.2	23.7	24.2	24.7	25.0	25.2	25.7	1.89	8.00	15.00		
17.9	18.4	19.4	19.9	20.4	20.9	21.4	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.4	26.0	26.5	27.0	27.5	28.5	29.0	29.5	30.0	30.3	31.0	2.00	5.50	10.90		
15.9	16.4	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.6	27.1	27.6	28.1	28.4	29.1	2.00	6.30	12.50		
19.9	20.5	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.4	28.0	28.5	29.0	29.5	30.5	31.0	31.5	32.0	32.4	33.0	2.01	4.65	9.25		
19.3	19.8	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.8	27.4	27.9	28.4	28.9	29.9	30.4	30.9	31.4	31.8	32.4	2.01	4.90	9.75		
12.7	13.3	14.3	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	19.0	19.5	20.0	20.4	21.0	21.5	22.0	22.5	23.5	24.0	24.5	25.0	25.4	25.6	26.1	2.01	8.00	16.00	
13.0	13.6	14.1	14.6	15.1	15.6	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.3	20.8	21.3	22.3	22.8	23.3	23.8	24.2	24.3	24.8	25.1	2.01	11.80	23.60		
16.8	17.3	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	27.4	27.9	28.4	28.9	29.3	30.0	2.02	5.90	11.80		
																									2.03	9.25	18.70		

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2
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* Diameters below recommended RMA minimum for narrow (3V, 5V, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																									Speed Ratio	Sheave Outside Diameters			
5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V		5VX	Small Sheave	Large Sheave	
1230	1250	1277	1320	1374	1400	1469	1500	1600	1630	1700	1701	1800	1900	2000	2030	2120	2240	2360	2500	2650	2800	3000	3150	3350	3550	1.66	5.90	9.75	
49.2	50.2	51.5	53.7	56.4	57.7	61.1	62.7	67.7	72.7	72.7	77.7	82.7	87.7	88.3	83.3	84.8	89.3	95.3	101.3	108.3	115.8	123.3	133.3	140.8	150.8	160.8	1.66	8.00	13.20
37.8	38.8	40.1	42.3	45.0	46.3	49.8	51.3	56.3	57.8	61.3	61.4	66.3	71.3	76.3	77.9	82.4	88.4	94.4	101.4	108.9	116.4	126.4	133.9	143.9	153.9	1.66	11.30	18.70	
46.6	47.6	48.9	51.1	53.8	55.1	58.6	60.1	65.1	66.6	70.1	70.2	75.1	80.1	85.1	86.6	91.1	97.1	103.1	110.1	117.6	125.1	135.1	142.6	152.6	162.6	1.67	7.10	11.80	
42.5	43.5	44.9	47.1	49.8	51.1	54.5	56.1	61.1	62.6	66.1	66.1	71.1	76.1	81.1	82.6	87.1	93.1	99.1	106.1	113.6	121.1	131.1	138.6	148.6	158.6	1.67	9.00	15.00	
45.7	46.7	48.1	50.2	52.9	54.2	57.7	59.2	64.2	65.7	69.2	69.3	74.2	79.3	84.3	85.8	90.3	96.3	102.3	109.3	116.8	124.3	134.3	141.8	151.8	161.8	1.68	7.50	12.50	
48.9	50.9	52.2	54.4	57.1	58.4	61.8	63.4	68.4	69.7	73.4	73.4	78.4	83.4	88.4	89.3	93.3	99.3	105.3	111.3	118.3	126.3	136.3	143.3	153.3	1.69	5.50	9.25		
31.6	32.6	34.0	36.1	38.9	40.2	43.7	45.2	50.2	51.7	55.3	55.3	60.3	65.3	70.3	71.8	76.3	82.3	88.3	95.3	102.9	110.4	120.4	127.9	137.9	147.9	1.69	14.00	23.60	
47.3	48.3	49.7	51.8	54.5	55.8	59.3	60.8	65.8	67.3	70.8	70.9	75.8	80.8	85.8	86.8	90.8	96.8	102.8	108.8	115.8	123.3	133.3	138.6	148.6	158.6	1.70	6.70	11.30	
34.8	35.8	37.1	39.3	42.0	43.3	46.8	48.3	53.4	54.9	58.4	58.4	63.4	68.4	73.4	74.9	79.4	85.4	91.4	98.4	105.9	113.4	123.5	131.0	141.0	151.0	1.70	12.50	21.20	
52.1	53.1	54.5	56.6	59.3	60.6	64.1	65.6	70.6	72.1	75.6	75.7	80.6	85.6	90.6	91.6	95.6	101.6	107.6	114.6	122.1	130.1	138.1	146.1	156.1	1.72	4.40	7.50		
38.1	39.1	40.4	42.6	45.3	46.6	50.1	51.6	56.6	58.1	61.6	61.7	66.6	71.6	76.6	78.2	82.7	88.7	94.7	101.7	109.2	116.7	126.7	134.2	144.2	154.2	1.72	10.90	18.70	
51.5	52.5	53.9	56.0	58.7	60.0	63.5	65.0	70.0	71.5	75.0	75.1	80.0	85.0	90.0	91.0	95.0	101.0	107.0	114.0	122.0	130.0	138.0	146.0	156.0	1.74	4.65	8.00		
47.9	48.9	50.3	52.4	55.1	56.4	59.9	61.4	66.5	68.0	71.5	71.5	76.5	81.5	86.5	87.5	91.5	97.5	103.5	110.5	118.0	126.0	134.0	142.0	152.0	1.74	6.30	10.90		
41.5	42.5	43.9	46.0	48.8	50.1	53.5	55.1	60.1	61.6	65.1	65.1	70.1	75.1	80.1	81.1	85.1	91.1	97.1	104.1	112.6	120.1	130.1	137.6	147.6	157.6	1.74	9.25	16.00	
50.9	51.9	53.3	55.4	58.1	59.4	62.9	64.5	69.5	71.0	74.5	74.5	79.5	84.5	89.5	90.5	94.5	100.5	106.5	113.5	121.5	129.5	137.5	145.5	155.5	1.75	4.90	8.50		
50.3	51.3	52.7	54.8	57.5	58.8	62.3	63.8	68.8	70.3	73.8	73.8	78.8	83.8	88.8	89.8	93.8	99.8	105.8	112.8	120.8	128.8	136.8	144.8	154.8	1.75	5.20	9.00		
26.3	27.3	28.7	30.9	33.6	34.9	38.4	40.0	45.0	46.6	50.1	50.1	55.1	60.1	65.2	66.7	71.2	77.2	83.2	90.2	97.8	105.3	115.3	122.8	132.8	142.8	1.75	16.00	28.00	
48.7	49.7	51.1	53.2	55.9	57.2	60.7	62.2	67.2	68.7	72.2	72.3	77.2	82.2	87.2	88.2	92.2	98.2	104.2	111.2	118.7	126.7	134.7	142.7	152.7	1.76	5.90	10.30		
44.1	45.1	46.5	48.6	51.3	52.6	56.1	57.6	62.6	64.2	67.7	67.7	72.7	77.7	82.7	84.2	88.7	94.7	100.7	107.7	115.2	122.7	132.7	140.2	150.2	160.2	1.76	8.00	14.00	
46.9	47.9	49.3	51.4	54.1	55.4	58.9	60.4	65.4	66.9	70.4	70.5	75.4	80.4	85.4	86.4	90.4	96.4	102.4	109.4	117.4	125.4	133.4	141.4	151.4	1.77	6.70	11.80		
46.0	47.0	48.4	50.5	53.2	54.5	58.0	59.5	64.5	66.0	69.5	69.6	74.5	79.5	84.5	85.5	89.5	95.5	101.5	108.5	116.5	124.5	132.5	140.5	150.5	1.77	7.10	12.50		
45.2	46.2	47.5	49.7	52.4	53.7	57.1	58.7	63.7	65.2	68.7	68.7	73.7	78.7	83.7	84.7	88.7	94.7	100.7	107.7	115.7	123.7	131.7	139.7	149.7	1.77	5.50	9.25		
42.9	43.9	45.3	47.4	50.1	51.4	54.9	56.4	61.4	62.9	66.4	66.5	71.5	76.5	81.5	82.5	86.5	92.5	98.5	105.5	113.5	121.5	129.5	137.5	147.5	1.77	8.50	15.00		
50.1	51.1	52.5	54.6	57.3	58.6	62.1	63.6	68.6	70.1	73.6	73.7	78.6	83.6	88.6	89.6	93.6	99.6	105.6	112.6	120.6	128.6	136.6	144.6	154.6	1.79	5.20	9.25		
49.5	50.5	51.8	54.0	56.7	58.0	61.4	63.0	68.0	69.5	73.0	73.0	78.0	83.0	88.0	89.0	93.0	99.0	105.0	112.0	120.0	128.0	136.0	144.0	154.0	1.79	5.50	9.75		
41.7	42.7	44.1	46.2	48.9	50.2	53.7	55.3	60.3	61.8	65.3	65.3	70.3	75.3	80.3	81.3	85.3	91.3	97.3	104.3	112.8	120.3	130.3	137.8	147.8	157.8	1.79	9.00	16.00	
42.2	43.2	44.6	46.7	49.4	50.7	54.2	55.8	60.8	62.3	65.8	65.9	70.9	75.9	80.9	81.9	85.9	91.9	97.9	104.9	112.9	120.9	128.9	138.9	148.9	1.79	13.20	23.60		
35.3	36.3	37.6	39.8	42.5	43.8	47.3	48.9	53.9	55.4	58.9	58.9	63.9	68.9	73.9	74.9	78.9	84.9	90.9	97.9	105.9	113.9	121.9	131.9	141.9	151.9	1.80	11.80	21.20	
47.6	48.6	50.0	52.1	54.8	56.1	59.6	61.1	66.1	67.6	71.1	71.2	76.1	81.1	86.1	87.1	91.1	97.1	103.1	110.1	118.1	126.1	134.1	142.1	152.1	1.81	6.30	11.30		
38.5	39.5	40.9	43.0	45.7	47.0	50.5	52.1	57.1	58.6	62.1	62.1	67.1	72.1	77.1	78.6	83.1	89.1	95.1	102.1	109.6	117.1	127.2	134.7	144.7	154.7	1.82	10.30	18.70	
51.7	52.7	54.1	56.2	58.9	60.2	63.7	65.2	70.2	71.7	75.2	75.3	80.2	85.2	90.2	91.2	95.2	101.2	107.2	114.2	122.2	130.2	138.2	146.2	156.2	1.84	4.40	8.00		
51.1	52.1	53.5	55.6	58.3	59.6	63.1	64.6	69.6	71.1	74.6	74.7	79.6	84.6	89.6	90.6	94.6	100.6	106.6	113.6	121.6	129.6	137.6	145.6	155.6	1.85	4.65	8.50		
50.5	51.5	52.9	55.0	57.7	59.0	62.5	64.1	69.1	70.6	74.1	74.1	79.1	84.1	89.1	90.1	94.1	100.1	106.1	113.1	121.1	129.1	137.1	145.1	155.1	1.85	4.90	9.00		
48.2	49.2	50.6	52.7	55.4	56.8	60.2	61.8	66.8	68.3	71.8	71.8	76.8	81.8	86.8	87.8	91.8	97.8	103.8	110.8	118.8	126.8	134.8	142.8	152.8	1.86	5.90	10.90		
45.5	46.5	47.8	50.0	52.7	54.0	57.4	59.0	64.0	65.5	69.0	69.0	74.0	79.0	84.0	85.5	89.5	95.5	101.5	108.5	116.5	124.5	132.5	140.5	150.5	1.87	7.10	13.20		
26.9	28.0	29.4	31.6	34.3	35.6	39.1	40.7	45.8	47.3	50.8	50.9	55.8	60.9	65.9	67.4	71.9	78.0	84.0	91.0	98.5	106.0	116.0	123.6	133.6	143.6	1.87	15.00	28.00	
46.3	47.3	48.7	50.8	53.5	54.8	58.3	59.9	64.9	66.4	69.9	69.9	74.9	79.9	84.9	85.9	89.9	95.9	101.9	108.9	116.9	124.9	132.9	140.9	150.9	1.88	6.70	12.50		
44.5	45.5	46.9	49.0	51.7	53.0	56.5	58.0	63.0	64.5	68.0	68.1	73.0	78.0	83.1	84.6	89.1	95.1	101.1	108.1	115.6	123.1	133.1	140.6	150.6	160.6	1.88	7.50	14.00	
35.6	36.6	38.0	40.2	42.9	44.2	47.7	49.2	54.2	55.8	59.3	59.3	64.3	69.3	74.3	75.8	80.3	86.3	92.3	99.4	106.9	114.4	124.4	131.9	141.9	151.9	1.88	11.30	21.20	
49.7	50.7	52.1	54.2	56.9	58.2	61.7	63.2	68.2	69.7	73.2	73.3	78.2	83.2	88.2	89.2	93.2	99.2	105.2	112.2	120.2	128.2	136.2	144.2	154.2	1.89	5.20	9.75		
49.0	50.0	51.4	53.5	56.2	57.5	61.0	62.5	67.5	69.0	72.5	72.6	77.5	82.5	87.5	88.5	92.5	98.5	104.5	111.5	119.5	127.5	135.5	143.5	153.5	1.89	5.50	10.30		
47.2	48.2	49.6	51.7	54.4	55.7	59.2	60.7	65.7	67.2	70.7	70.8	75.7	80.7	85.7	86.7	90.7	96.7	102.7	109.7	117.7	125.7	133.7	141.7	151.7	1.89	6.30	11.80		
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Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



		V-Belt No. and Center Distance																				Speed Ratio	Sheave Outside Diameters						
5VX	5V 5VP	5VX	5VX	5V 5VP	5VX	5VX	5VX	5V 5VP	5VX	5VX	5VX	5VX	5V 5VP	5VX	5VX	5VX	5V 5VP	5VX	5VX	5V 5VP	5VX		Small Sheave	Large Sheave					
20.3	20.8	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.8	28.4	28.9	29.4	29.9	30.9	31.4	31.9	32.4	32.7	33.4	2.07	* 4.40	9.00		
17.5	18.1	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.2	28.2	28.7	29.2	29.7	30.0	30.7	2.07	* 5.50	11.30		
												15.0	15.5	16.0	16.5	17.0	17.6	18.1	19.1	19.6	20.2	20.7	21.0	21.2	21.7	2.09	* 10.30	21.20	
																						16.9	17.4	17.8	17.9	18.4	2.07	* 9.00	18.70
15.2	15.8	16.8	17.3	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	26.0	26.5	27.0	27.5	27.8	28.5	2.11	* 6.30	13.20		
14.2	14.8	15.8	16.3	16.8	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.0	23.5	24.0	25.0	25.5	26.0	26.5	27.5	2.11	* 6.70	14.00		
																									2.11	* 15.00	31.50		
19.5	20.0	21.0	21.5	22.0	22.5	23.0	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.0	27.6	28.1	28.6	29.1	30.1	30.6	31.1	31.6	31.9	32.6	2.12	* 4.85	9.75		
18.1	18.6	19.6	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.6	26.2	26.7	27.2	27.7	28.7	29.2	29.7	30.2	30.6	31.2	2.12	* 5.20	10.90		
20.1	20.6	21.6	22.1	22.6	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.6	28.2	28.7	29.2	29.7	30.7	31.2	31.7	32.2	32.5	33.2	2.13	* 4.40	9.25		
18.8	19.4	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	29.4	29.9	30.4	30.9	31.3	31.9	2.13	* 4.90	10.30		
13.0	13.6	14.6	15.1	15.6	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.3	20.7	21.3	21.8	22.3	22.8	23.8	24.3	24.8	25.3	25.7	26.3	2.13	* 7.10	15.00		
16.2	16.7	17.7	18.2	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.8	27.3	27.9	28.4	28.7	29.4	2.14	* 5.90	12.50		
17.1	17.6	18.6	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.7	28.2	28.7	29.2	29.6	30.2	2.17	* 5.50	11.80		
																								2.18	* 10.90	23.60			
17.7	18.3	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.9	25.3	25.9	26.4	26.9	27.4	28.4	28.9	29.4	29.9	30.2	30.9	2.19	* 9.75	21.20		
																								18.8	18.8	2.20	* 5.20	11.30	
19.7	20.2	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.3	26.8	27.2	27.8	28.3	28.8	29.3	30.3	30.8	31.3	31.8	32.1	32.8	2.21	* 8.50	18.70		
19.0	19.6	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.6	30.1	30.6	31.1	31.5	32.1	2.24	* 4.65	10.30		
14.5	15.1	16.1	16.6	17.1	17.6	18.1	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.3	25.3	25.8	26.3	26.8	27.1	27.8	2.24	* 6.30	14.00		
18.3	18.9	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.9	29.4	29.9	30.4	30.8	31.4	2.25	* 4.90	10.90		
15.5	16.1	17.1	17.6	18.1	18.6	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	26.2	26.7	27.3	27.8	28.1	28.8	2.25	* 12.50	28.00		
13.3	13.8	14.9	15.4	15.9	16.4	16.9	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.6	22.1	22.6	23.1	24.1	24.6	25.1	25.6	26.0	26.6	2.26	* 5.90	13.20		
																								2.26	* 6.70	15.00			
12.6	13.6	14.2	14.7	15.2	15.7	16.2	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.4	20.9	21.4	21.9	22.9	23.4	23.9	24.5	24.8	25.0	25.5	2.27	* 7.10	16.00		
17.3	17.8	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	28.0	28.5	29.0	29.5	30.5	30.5	2.29	* 4.40	10.30		
16.4	17.0	18.0	18.5	19.0	19.5	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	27.1	27.6	28.1	28.6	29.0	29.7	2.30	* 5.50	12.50		
																								2.30	* 10.30	23.60			
17.9	18.5	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.1	23.6	24.1	24.6	25.1	25.5	26.1	26.6	27.1	27.6	28.6	29.1	29.6	30.1	30.5	31.1	2.33	* 4.90	11.30		
																								2.33	* 8.00	18.70			
19.2	19.7	20.7	21.2	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.7	27.3	27.8	28.3	28.8	29.8	30.3	30.8	31.3	31.7	32.3	2.35	* 16.00	37.50		
18.5	19.0	20.0	20.5	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.0	26.6	27.1	27.6	28.1	29.1	29.6	30.1	30.6	31.0	31.6	2.37	* 4.65	10.90		
																								2.37	* 9.00	21.20			
14.8	15.3	16.4	16.9	17.4	17.9	18.4	18.9	19.4	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.5	26.1	26.6	27.1	27.4	28.1	2.38	* 11.80	28.00		
13.5	14.1	15.1	15.7	16.2	16.7	17.2	17.7	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.9	23.4	24.4	24.9	25.4	25.9	26.3	26.9	2.40	* 5.90	14.00		
																								2.40	* 6.30	15.00			
																								2.40	* 13.20	31.50			
16.6	17.2	18.2	18.7	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	27.4	27.9	28.4	28.9	29.2	29.9	2.41	* 6.70	16.00		
15.8	16.4	17.4	17.9	18.4	18.9	19.4	19.9	20.4	21.0	21.5	22.0	22.5	23.0	23.4	24.0	24.5	25.0	25.5	26.5	27.0	27.5	28.0	28.4	29.1	2.43	* 5.50	13.20		
17.5	18.1	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.7	26.2	26.7	27.2	28.2	28.7	29.2	29.7	30.0	30.7	2.44	* 4.90	11.80		
18.1	18.7	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.3	25.7	26.3	26.8	27.3	27.8	28.8	29.3	29.8	30.3	30.6	31.3	2.44	* 9.75	23.60		
18.6	19.2	20.2	20.7	21.2	21.7	22.2	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.2	26.8	27.3	27.8	28.3	29.3	29.8	30.3	30.8	31.2	31.8	2.51	* 4.65	11.30		
																								2.51	* 4.40	10.90			
																								2.51	* 7.50	18.70			
																								2.51	* 8.50	21.20			
																								2.51	* 15.00	37.50			
																								2.53	* 12.50	31.50			
12.5	13.1	14.1	14.7	15.2	15.7	16.3	16.8	17.3	17.8	18.3	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.5	23.5	24.0	24.5	25.0	25.4	26.0	2.56	* 6.30	16.00		
17.7	18.2	19.2	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	28.4	28.9	29.4	29.9	30.2	30.9	2.57	* 4.65	11.80		
16.0	16.6	17.6	18.1	18.6	19.1	19.6	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.7	27.3	27.8	28.3	28.6	29.3	2.57	* 5.20	13.20		
15.0	15.6	16.6	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.3	21.8	22.3	22.7	23.3	23.8	24.3	24.8	25.8	26.3	26.8	27.4	27.7	28.4	2.57	* 5.50	14.00		
13.8	14.4	15.4	15.9	16.5	17.0	17.5	18.0	18.5	19.0	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.7	25.2	25.7	26.2	26.5	27.2	2.57	* 5.			

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																									Speed Ratio	Sheave Outside Diameters		
5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V	5V		Small Sheave	Large Sheave	
1230	1250	1277	1320	1374	1400	1469	1500	1600	1630	1700	1701	1800	1900	2000	2030	2120	2240	2360	2500	2650	2800	3000	3150	3350	3550	2.07	4.40	9.00
50.9	51.9	53.3	55.4	58.1	59.4	62.9	64.4	69.4	71.7	71.8	76.8	81.8	86.8	89.4	90.2	96.1	101.1	107.6	115.1	125.1	132.6	142.7	152.7	2.07	5.50	11.30		
48.2	49.2	50.6	52.7	55.4	56.7	60.2	61.7	66.7	69.0	69.1	74.1	79.1	84.1	86.7	87.5	93.4	98.4	105.9	115.1	125.1	132.6	142.7	152.7	2.07	10.30	21.20		
36.4	37.4	38.7	40.9	43.6	44.9	48.4	50.0	55.0	56.5	60.0	60.1	65.0	70.0	75.1	76.6	81.1	87.1	93.1	100.1	107.6	115.1	125.1	132.6	142.7	2.09	9.00	18.70	
39.4	40.5	41.8	44.0	46.7	48.0	51.5	53.0	58.0	59.5	63.1	63.1	68.1	73.1	78.1	79.6	84.1	90.1	96.1	103.1	110.6	118.1	128.2	135.7	145.7	2.09	10.30	21.20	
33.5	34.5	35.9	38.1	40.8	42.1	45.6	47.2	52.2	53.7	57.3	57.3	62.3	67.3	72.3	73.8	78.3	84.4	90.4	97.4	104.9	112.4	122.4	129.9	140.0	2.10	11.30	23.60	
46.1	47.1	48.4	50.6	53.3	54.6	58.0	59.6	64.6	66.1	69.7	69.7	74.7	79.7	84.7	86.2	90.7	96.7	103.7	111.2	118.7	128.7	136.2	146.2	2.11	6.30	13.20		
45.1	46.1	47.5	49.6	52.3	53.6	57.1	58.6	63.6	65.1	68.7	68.7	73.7	78.7	83.7	85.2	89.7	95.7	102.7	110.2	117.7	127.7	135.2	145.2	2.11	6.70	14.00		
24.6	26.0	28.3	31.1	32.4	36.0	37.6	42.7	44.2	47.8	47.8	52.8	57.9	62.9	64.5	69.0	75.0	81.1	88.1	95.6	103.1	113.2	120.7	130.7	140.7	2.11	15.00	31.50	
50.1	51.1	52.5	54.6	57.3	58.6	62.1	63.6	68.6	70.1	73.7	73.7	78.7	83.7	88.7	90.2	95.7	101.7	108.7	116.2	124.7	132.2	142.2	150.0	2.12	4.65	9.75		
48.8	49.8	51.1	53.3	56.0	57.3	60.7	62.3	67.3	68.8	72.4	72.4	77.4	82.4	87.4	88.9	94.4	100.4	107.4	115.4	123.4	131.4	141.4	150.0	2.12	5.20	10.90		
50.7	51.7	53.1	55.2	57.9	59.2	62.7	64.2	69.2	70.7	74.3	74.3	79.3	84.3	89.3	90.8	96.3	102.3	109.3	117.3	125.3	133.3	143.3	150.0	2.13	4.40	9.25		
49.5	50.5	51.8	54.0	56.7	58.0	61.5	63.0	68.0	69.5	73.1	73.1	78.1	83.1	88.1	89.6	95.1	101.1	108.1	116.1	124.1	132.1	142.1	150.0	2.13	4.90	10.30		
44.0	45.0	46.3	48.5	51.2	52.5	56.0	57.5	62.5	64.0	67.5	67.5	72.5	77.5	82.5	84.0	88.6	94.6	100.6	107.6	115.1	122.6	132.6	140.1	150.1	2.13	7.10	15.00	
28.2	29.2	30.6	32.8	35.6	36.9	40.4	42.0	47.1	48.6	52.1	52.2	57.2	62.2	67.2	68.7	73.3	79.3	85.3	92.3	99.9	107.4	117.4	124.9	134.9	2.13	13.20	28.00	
46.9	47.9	49.3	51.4	54.1	55.5	58.9	60.5	65.5	67.0	70.5	70.5	75.5	80.5	85.5	87.0	91.6	97.6	103.6	110.6	118.1	126.1	136.1	144.0	2.14	5.90	12.50		
42.8	43.8	45.2	47.4	50.1	51.4	54.8	56.4	61.4	62.9	66.4	66.5	71.4	76.4	81.4	82.9	87.4	93.4	99.4	106.4	114.0	121.5	131.5	139.0	149.0	2.15	7.50	16.00	
47.8	48.8	50.2	52.3	55.0	56.3	59.8	61.3	66.3	67.8	71.3	71.4	76.3	81.3	86.3	87.8	92.3	98.3	104.3	111.3	118.8	126.3	136.3	144.0	2.17	5.50	11.80		
33.8	34.8	36.2	38.4	41.1	42.4	45.9	47.5	52.5	54.0	57.5	57.6	62.6	67.6	72.6	74.1	78.6	84.6	90.6	97.6	105.2	112.7	122.7	130.2	140.3	2.18	10.90	23.60	
36.7	37.8	39.1	41.3	44.0	45.3	48.8	50.4	55.4	56.9	60.4	60.5	65.4	70.4	75.4	77.0	81.5	87.5	93.5	100.5	108.0	115.6	125.6	133.1	143.1	2.19	9.75	21.20	
48.4	49.4	50.8	53.0	55.7	57.0	60.4	62.0	67.0	68.5	72.0	72.0	77.0	82.0	87.0	88.5	93.0	99.0	105.0	112.0	120.0	128.0	138.0	146.0	2.20	5.20	11.30		
39.8	40.8	42.2	44.3	47.1	48.4	51.8	53.4	58.4	59.9	63.4	63.5	68.4	73.4	78.4	79.9	84.4	90.4	96.4	103.4	111.0	118.5	128.5	136.0	146.0	2.21	8.50	18.70	
50.3	51.3	52.7	54.8	57.5	58.8	62.3	63.8	68.8	70.3	73.8	73.9	78.8	83.8	88.8	90.3	94.8	100.8	106.8	113.8	121.3	128.8	138.8	146.0	2.22	4.40	9.75		
49.7	50.7	52.0	54.2	56.9	58.2	61.6	63.2	68.2	69.7	73.2	73.3	78.2	83.2	88.2	89.7	94.2	100.2	106.2	113.2	120.7	128.2	138.2	146.0	2.24	4.65	10.30		
45.4	46.4	47.8	49.9	52.6	53.9	57.4	58.9	63.9	65.4	68.9	69.0	74.0	79.0	84.0	85.5	90.0	96.0	102.0	109.0	116.5	124.0	134.0	142.0	2.24	6.30	14.00		
49.0	50.0	51.4	53.5	56.2	57.5	61.0	62.5	67.5	69.0	72.5	72.6	77.5	82.5	87.5	89.0	93.5	99.5	105.5	112.5	120.0	127.5	137.5	145.0	2.25	4.90	10.90		
28.6	29.7	31.1	33.3	36.1	37.4	40.9	42.5	47.6	49.1	52.6	52.7	57.7	62.7	67.7	69.3	73.8	79.8	85.8	92.9	100.4	107.9	117.9	125.5	135.5	2.25	12.50	28.00	
46.4	47.4	48.7	50.9	53.6	54.9	58.3	59.9	64.9	66.4	69.9	70.0	74.9	79.9	84.9	86.4	90.9	96.9	102.9	109.9	117.4	124.9	134.9	142.0	2.26	5.90	13.20		
44.3	45.3	46.6	48.8	51.5	52.8	56.3	57.8	62.8	64.3	67.8	67.9	72.8	77.8	82.8	84.3	88.8	94.8	100.8	107.8	115.3	122.8	132.8	140.0	2.26	6.70	15.00		
24.2	25.2	26.7	28.9	31.8	33.1	36.7	38.3	43.4	44.9	48.5	48.5	53.5	58.5	63.5	65.0	69.5	75.5	81.5	88.5	96.0	103.5	113.5	121.4	131.5	2.26	14.00	31.50	
43.1	44.1	45.5	47.6	50.4	51.7	55.1	56.7	61.7	63.2	66.7	66.8	71.7	76.7	81.7	83.2	87.7	93.7	99.7	106.7	114.2	121.7	131.7	139.3	149.3	2.27	7.10	16.00	
48.0	49.0	50.4	52.5	55.2	56.6	60.0	61.5	66.5	68.0	71.5	71.6	76.5	81.5	86.5	88.0	92.5	98.5	104.5	111.5	119.0	129.0	137.0	145.0	2.29	5.20	11.80		
47.2	48.2	49.6	51.7	54.5	55.8	59.2	60.8	65.8	67.3	70.8	70.8	75.8	80.8	85.8	87.3	91.8	97.8	103.8	110.8	118.3	128.3	136.3	144.0	2.30	5.50	12.50		
34.2	35.2	36.6	38.8	41.5	42.9	46.3	47.9	53.0	54.5	58.0	58.0	63.0	68.0	73.0	74.6	79.1	85.1	91.1	98.1	105.7	113.2	123.2	130.7	140.7	2.30	10.30	23.60	
37.1	38.1	39.5	41.7	44.4	45.7	49.2	50.7	55.8	57.3	60.8	60.8	65.8	70.8	75.8	77.4	81.9	87.9	93.9	100.9	108.4	115.9	125.9	133.5	143.5	2.31	9.25	21.20	
48.7	49.7	51.0	53.2	55.9	57.2	60.6	62.2	67.2	68.7	72.2	72.3	77.2	82.2	87.2	88.7	93.2	99.2	105.2	112.2	120.2	128.2	138.2	146.0	2.33	4.90	11.30		
40.2	41.2	42.5	44.7	47.4	48.7	52.2	53.8	58.8	60.3	63.8	63.9	68.8	73.8	78.8	80.3	84.8	90.8	96.8	103.8	111.3	118.8	128.8	136.4	146.4	2.35	8.00	18.70	
49.9	50.9	52.2	54.4	57.1	58.4	61.9	63.4	68.4	69.9	73.4	73.4	78.4	83.4	88.4	89.9	94.4	100.4	106.4	113.4	120.9	128.4	138.4	146.0	2.35	16.00	37.50		
49.2	50.2	51.5	53.7	56.4	57.7	61.2	62.7	67.7	69.2	72.7	72.8	77.7	82.7	87.7	89.2	93.7	99.7	105.7	112.7	120.2	127.7	137.7	145.0	2.37	4.40	10.30		
37.3	38.3	39.7	41.8	44.6	45.9	49.4	50.9	55.9	57.4	60.9	61.0	66.0	71.0	76.0	77.5	82.0	88.0	94.0	101.0	108.5	116.0	126.0	133.6	143.7	2.37	9.00	21.20	
29.1	30.1	31.5	33.8	36.5	37.9	41.4	43.0	48.1	49.6	53.1	53.2	58.2	63.2	68.2	69.7	74.2	80.2	86.2	93.2	100.7	108.2	118.2	126.0	136.0	2.38	11.80	28.00	
45.7	46.7	48.0	50.2	52.9	54.2	57.7	59.2	64.2	65.7	69.2	69.3	74.3	79.3	84.3	85.8	90.3	96.3	102.3	109.3	116.8	126.8	134.8	144.0	2.40	5.90	14.00		
44.6	45.6	46.9	49.1	51.8	53.1	56.6	58.1	63.1	64.6	68.1	68.2	73.1	78.1	83.1	84.6	89.1	95.1	101.1	108.1	115.6	125.6	133.6	143.0	2.40	6.30	15.00		
24.7	25.7	27.2	29.5	32.3	33.6	37.2	38.8	43.9	45.4	49.0	49.1	54.1	59.1	64.1	65.6	70.1	76.1	82.1	89.1	96.6	104.1	114.1	122.0	132.1	2.41	13.20	31.50	
43.4	44.4	45.8	47.9	50.7	52.0	55.4	57.0	62.0	63.5	67.0	67.1	72.0	77.0	82.0	83.5	88.0	94.0	100.0	107.0	114.5	124.5	132.5	142.0	2.41</				

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																									Speed Ratio	Sheave Outside Diameters		
5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX	5V	5VX		5V	Small Sheave	Large Sheave
1230	1250	1277	1320	1374	1400	1469	1500	1600	1630	1700	1701	1800	1900	2000	2030	2120	2240	2360	2500	2650	2800	3000	3150	3550				
38.0	39.0	40.4	42.6	45.3	46.6	50.1	51.6	56.7	58.2	61.7	61.8	66.7	71.8	76.8	78.3	82.8	88.8	94.8	101.9	109.4	116.9	126.9	134.4	144.4	154.4	2.67	8.00	21.20
25.6	26.7	28.1	30.4	33.2	34.6	38.2	39.8	44.9	46.4	50.0	50.1	55.1	60.2	65.2	66.8	71.3	77.4	83.4	90.5	98.0	105.5	115.6	123.1	133.1	143.2	2.68	11.80	31.50
48.6	49.6	51.0	53.1	55.9	57.2	60.6	62.2	67.2	68.7	72.2	72.2	77.2	82.2	87.2	89.9	94.5	100.6	106.7	113.8	121.9	130.0	138.1	146.2	154.3	2.69	14.00	37.50	
47.9	48.9	50.2	52.4	55.1	56.4	59.9	61.4	66.4	67.9	71.4	71.5	76.4	81.4	86.4	89.1	93.7	99.8	105.9	113.0	121.1	129.2	137.3	145.4	153.5	2.70	16.20	41.00	
47.1	48.1	49.5	51.6	54.3	55.6	59.1	60.6	65.6	67.1	70.6	70.7	75.6	80.6	85.6	88.3	92.9	99.0	105.1	112.2	120.3	128.4	136.5	144.6	152.7	2.71	18.40	45.00	
46.2	47.2	48.6	50.7	53.4	54.7	58.2	59.7	64.7	66.2	69.7	69.8	74.7	79.7	84.7	87.4	92.0	98.1	104.2	111.3	119.4	127.5	135.6	143.7	151.8	2.72	20.60	49.00	
44.0	45.0	46.4	48.5	51.3	52.6	56.0	57.6	62.6	64.1	67.6	67.7	72.6	77.6	82.6	85.3	89.9	96.0	102.1	109.2	117.3	125.4	133.5	141.6	149.7	2.73	22.80	53.00	
30.1	31.2	32.6	34.8	37.6	38.9	42.4	44.0	49.1	50.6	54.2	54.2	59.3	64.3	69.4	70.9	75.4	81.4	87.5	94.5	102.0	109.6	119.6	127.1	137.1	147.2	2.74	25.00	57.00
45.1	46.2	47.5	49.7	52.4	53.7	57.2	58.7	63.7	65.2	68.7	68.8	73.7	78.7	83.8	86.5	91.1	97.2	103.3	110.4	118.5	126.6	134.7	142.8	150.9	2.75	27.20	61.00	
35.5	36.5	37.9	40.1	42.8	44.1	47.6	49.2	54.3	55.8	59.3	59.4	64.3	69.4	74.4	75.9	80.4	86.5	92.5	99.5	107.0	114.5	124.6	132.1	142.1	152.1	2.76	29.40	65.00
25.9	27.0	28.4	30.7	33.6	34.9	38.5	40.1	45.3	46.8	50.4	50.4	55.5	60.5	65.6	67.1	71.7	77.7	83.8	90.8	98.4	105.9	115.9	123.5	133.5	143.5	2.77	31.60	69.00
41.1	42.1	43.5	45.7	48.4	49.7	53.2	54.7	59.7	61.2	64.8	64.8	69.8	74.8	79.8	82.5	87.1	93.2	99.3	106.8	114.3	122.4	130.5	138.6	146.7	2.78	33.80	73.00	
38.3	39.4	40.7	42.9	45.6	47.0	50.4	52.0	57.0	58.6	62.1	62.1	67.1	72.1	77.2	78.7	83.2	89.2	95.2	102.2	109.7	117.3	127.3	134.8	144.8	154.8	2.79	36.00	77.00
48.1	49.1	50.4	52.6	55.3	56.6	60.0	61.6	66.6	68.1	71.6	71.7	76.6	81.6	86.6	89.3	93.9	100.0	106.1	113.6	121.1	129.2	137.3	145.4	153.5	2.80	38.20	81.00	
47.3	48.3	49.6	51.8	54.5	55.8	59.3	60.8	65.8	67.3	70.8	70.9	75.8	80.8	85.8	88.5	93.1	99.2	105.3	112.8	120.3	128.4	136.5	144.6	152.7	2.81	40.40	85.00	
30.5	31.5	32.9	35.2	37.9	39.3	42.8	44.4	49.5	51.0	54.6	54.6	59.7	64.7	69.8	71.3	75.8	81.8	87.9	94.9	102.4	110.0	120.0	127.5	137.5	147.6	2.82	42.60	89.00
46.4	47.4	48.8	51.0	53.7	55.0	58.4	60.0	65.0	66.5	70.0	70.1	75.0	80.0	85.0	87.7	92.3	98.4	104.5	112.0	120.1	128.2	136.3	144.4	152.5	2.83	44.80	93.00	
26.1	27.2	28.7	31.0	33.8	35.2	38.8	40.4	45.5	47.1	50.6	50.7	55.7	60.7	65.7	67.2	71.8	77.9	84.0	91.5	99.0	107.1	115.2	123.3	131.4	139.5	2.84	47.00	97.00
45.4	46.4	47.7	49.9	52.6	53.9	57.4	58.9	63.9	65.4	69.0	69.0	74.0	79.0	84.0	86.7	91.3	97.4	103.5	111.0	119.1	127.2	135.3	143.4	151.5	2.85	49.20	101.00	
44.3	45.3	46.7	48.8	51.5	52.9	56.3	57.9	62.9	64.4	68.0	68.0	73.0	78.0	83.0	85.7	90.3	96.4	102.5	110.0	118.1	126.2	134.3	142.4	150.5	2.86	51.40	105.00	
35.8	36.9	38.2	40.4	43.2	44.5	48.0	49.6	54.6	56.1	59.7	59.7	64.7	69.7	74.7	76.3	80.8	86.8	92.9	99.9	107.4	114.9	124.9	132.5	142.5	152.5	2.87	53.60	109.00
41.4	42.4	43.8	45.9	48.7	50.0	53.5	55.0	60.0	61.5	65.1	65.1	70.1	75.1	80.1	82.8	87.4	93.5	99.6	107.1	115.2	123.3	131.4	139.5	147.6	2.88	55.80	113.00	
38.6	39.6	41.0	43.2	45.9	47.2	50.7	52.3	57.3	58.9	62.4	62.4	67.4	72.4	77.4	79.9	84.5	90.6	96.7	104.2	112.3	120.4	128.5	136.6	144.7	2.89	58.00	117.00	
47.5	48.5	49.8	52.0	54.7	56.0	59.5	61.0	66.0	67.5	71.0	71.1	76.0	81.0	86.0	88.7	93.3	99.4	105.5	113.0	121.1	129.2	137.3	145.4	153.5	2.90	60.20	121.00	
46.8	47.6	49.0	51.1	53.8	55.2	58.7	60.2	65.2	66.7	70.2	70.2	75.2	80.2	85.2	87.9	92.5	98.6	104.7	112.2	120.3	128.4	136.5	144.6	152.7	2.91	62.40	125.00	
30.8	31.9	33.3	35.5	38.3	39.6	43.2	44.8	49.9	51.4	54.9	55.0	60.0	65.0	70.0	71.6	76.2	82.2	88.2	95.3	102.8	110.3	120.4	127.9	137.9	147.9	2.92	64.60	129.00
26.5	27.6	29.1	31.4	34.2	35.6	39.2	40.8	45.9	47.5	51.1	51.1	56.2	61.3	66.3	67.8	72.4	78.5	84.5	91.6	99.1	106.6	116.7	124.2	134.3	144.3	2.93	66.80	133.00
45.6	46.6	48.0	50.1	52.8	54.1	57.6	59.2	64.2	65.7	69.2	69.2	74.2	79.2	84.2	86.9	91.5	97.6	103.7	111.2	119.3	127.4	135.5	143.6	151.7	2.94	69.00	137.00	
44.5	45.5	46.9	49.1	51.8	53.1	56.6	58.1	63.1	64.6	68.1	68.1	73.1	78.1	83.1	85.8	90.4	96.5	102.6	110.1	118.2	126.3	134.4	142.5	150.6	2.95	71.20	141.00	
31.0	32.0	33.4	35.7	38.5	39.8	43.3	44.9	50.0	51.6	55.1	55.2	60.2	65.2	70.2	71.8	76.3	82.4	88.4	95.5	103.0	110.5	120.6	128.1	138.1	148.1	2.96	73.40	145.00
36.2	37.2	38.6	40.8	43.5	44.8	48.4	49.9	55.0	56.5	60.0	60.1	65.1	70.1	75.1	76.7	81.2	87.3	93.4	100.9	108.4	116.9	125.0	133.1	141.2	149.3	2.97	75.60	149.00
38.9	39.9	41.3	43.5	46.2	47.5	51.0	52.6	57.6	59.1	62.6	62.7	67.7	72.7	77.7	79.3	83.8	89.9	96.0	103.5	111.0	119.1	127.2	135.3	143.4	151.5	2.98	77.80	153.00
41.7	42.7	44.1	46.2	49.0	50.3	53.7	55.3	60.3	61.8	65.3	65.4	70.4	75.4	80.4	82.0	86.5	92.6	98.7	106.2	114.3	122.4	130.5	138.6	146.7	154.8	2.99	80.00	157.00
46.8	47.8	49.2	51.3	54.0	55.3	58.8	60.4	65.4	66.9	70.4	70.4	75.4	80.4	85.4	88.1	92.7	98.8	104.9	112.4	120.5	128.6	136.7	144.8	152.9	3.00	82.20	161.00	
26.9	28.0	29.4	31.7	34.6	35.9	39.5	41.2	46.3	47.9	51.4	51.5	56.5	61.5	66.5	68.1	72.6	78.7	84.8	92.3	99.8	107.3	115.4	123.5	131.6	139.7	3.01	84.40	165.00
45.8	46.8	48.1	50.3	53.0	54.3	57.8	59.3	64.3	65.8	69.3	69.4	74.4	79.4	84.4	87.1	91.7	97.8	103.9	111.4	119.5	127.6	135.7	143.8	151.9	3.02	86.60	169.00	
44.7	45.7	47.1	49.3	52.0	53.3	56.8	58.3	63.3	64.8	68.3	68.4	73.4	78.4	83.4	86.1	90.7	96.8	102.9	110.4	118.5	126.6	134.7	142.8	150.9	3.03	88.80	173.00	
31.3	32.4	33.8	36.0	38.8	40.1	43.7	45.3	50.4	51.9	55.5	55.5	60.5	65.5	70.5	72.1	76.6	82.7	88.8	95.9	103.4	111.5	119.6	127.7	135.8	143.9	3.04	91.00	177.00
48.5	49.5	50.9	53.1	55.8	57.1	60.6	62.2	67.2	68.7	72.2	72.2	77.2	82.2	87.2	89.9	94.5	100.6	106.7	113.8	121.9	129.0	137.1	145.2	153.3	3.05	93.20	181.00	
36.5	37.5	38.9	41.1	43.8	45.1	48.6	50.2	55.3	56.8	60.3	60.4	65.4	70.4	75.4	77.0	81.5	87.6	93.7	101.2	109.3	117.4	125.5	133.6	141.7	149.8	3.06	95.40	185.00
39.2	40.2	41.6	43.8	46.5	47.8	51.3	52.9	57.9	59.4	62.9	63.0	68.0	73.0	78.0	80.7	85.3	91.4	97.5	105.0	113.1	121.2	129.3	137.4	145.5	153.6	3.07	97.60	189.00
27.2	28.3	29.7	32.0	34.9	36.3	39.9	41.5	46.6	48.2	51.7	51.8	56.8	61.8	66.8	68.4	72.9	79.0	85.1	92.6	100.1	108.2	116.3	124.4	132.5	140.6	3.08	99.80	

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Outside Diameters							
5VX	5V	5VX	5VX	5V	5VX	5VX	5VX	5V	5VX	5VX	5V	5VX	5VX	5VX	5V	5VX	5VX	5V	5VX		5VX	Small Sheave	Large Sheave					
619	630	650	660	670	680	690	700	710	720	730	740	750	760	769	780	790	800	810	830	840	850	860	867	870	880	3.97	8.00	31.50
																										3.99	7.10	28.00
																										4.02	12.50	50.00
																										4.05	5.90	23.60
																										4.09	4.65	18.70
																										4.09	9.25	37.50
																										4.14	5.20	21.20
																										4.20	9.00	37.50
																										4.23	6.70	28.00
																										4.24	7.50	31.50
																										4.26	11.80	50.00
																										4.33	4.40	18.70
																										4.35	5.50	23.60
																										4.40	4.90	21.20
																										4.45	8.50	37.50
																										4.46	11.30	50.00
																										4.49	7.10	31.50
																										4.50	6.30	28.00
																										4.61	5.20	23.60
																										4.62	10.90	50.00
																										4.64	4.65	21.20
																										4.73	8.00	37.50
																										4.76	6.70	31.50
																										4.81	5.90	28.00
																										4.89	10.30	50.00
																										4.90	4.90	23.60
																										4.91	4.40	21.20
																										5.05	7.50	37.50
																										5.06	6.30	31.50
																										5.16	4.65	23.60
																										5.17	5.50	28.00
																										5.17	9.75	50.00
																										5.34	7.10	37.50
																										5.41	5.90	31.50
																										5.45	9.25	50.00
																										5.47	4.40	23.60
																										5.47	5.20	28.00
																										5.61	9.00	50.00
																										5.67	6.70	37.50
																										5.81	4.90	28.00
																										5.81	5.50	31.50
																										5.94	8.50	50.00
																										6.03	6.30	37.50
																										6.13	4.65	28.00
																										6.16	5.20	31.50
																										6.32	8.00	50.00
																										6.45	5.90	37.50
																										6.49	4.40	28.00
																										6.54	4.90	31.50
																										6.74	7.50	50.00
																										6.90	4.65	31.50
																										6.93	5.50	37.50
																										7.13	7.10	50.00
																										7.30	4.40	31.50
																										7.33	5.20	37.50
																										7.56	6.70	50.00
																										7.79	4.90	37.50
																										8.05	6.30	50.00
																										8.22	4.65	37.50
																										8.60	5.90	50.00
																										8.70	4.40	37.50
																										9.24	5.50	50.00
																										9.78	5.20	50.00
																										10.40	4.90	50.00
																										10.97	4.65	50.00
																										11.60	4.40	50.00

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2

* Diameters below recommended RMA minimum for narrow (3V, 5V, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B7

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt, Super HC Molded Notch PowerBand Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Speed Ratio	V-Belt No. and Center Distance																								
Small Sheave	Large Sheave		5VX	5V	5VX	5VX	5VX	5V	5VX	5VX	5VX	5VX	5V	5VX	5VX	5VX	5V	5VX	5VX	5VX	5V	5VX	5VX	5VX			
			890	900	918	930	940	950	960	978	990	1000	1017	1030	1050	1060	1080	1108	1120	1139	1150	1160	1162	1180	1200	1210	1220
8.00	31.50	3.97																									
7.10	28.00	3.99																									
12.50	50.00	4.02																									
5.90	23.60	4.05																									
4.65	18.70	4.09																									
9.25	37.50	4.09																									
5.20	21.20	4.14																									
9.00	37.50	4.20																									
6.70	28.00	4.23																									
7.50	31.50	4.24																									
11.80	50.00	4.26																									
4.40	18.70	4.33																									
5.50	23.60	4.35																									
4.90	21.20	4.40																									
8.50	37.50	4.45																									
11.30	50.00	4.46																									
7.10	31.50	4.49																									
6.30	28.00	4.50																									
5.20	23.60	4.61																									
10.90	50.00	4.62																									
4.65	21.20	4.64																									
8.00	37.50	4.73																									
6.70	31.50	4.76																									
5.90	28.00	4.81																									
10.30	50.00	4.89																									
4.90	23.60	4.90																									
4.40	21.20	4.91																									
7.50	37.50	5.05																									
6.30	31.50	5.06																									
4.65	23.60	5.16																									
5.50	28.00	5.17																									
9.75	50.00	5.17																									
7.10	37.50	5.34																									
5.90	31.50	5.41																									
9.25	50.00	5.45																									
4.40	23.60	5.47																									
5.20	28.00	5.47																									
9.00	50.00	5.61																									
6.70	37.50	5.67																									
4.90	28.00	5.81																									
5.50	31.50	5.81																									
8.50	50.00	5.94																									
6.30	37.50	6.03																									
4.65	28.00	6.13																									
5.20	31.50	6.16																									
8.00	50.00	6.32																									
5.90	37.50	6.45																									
4.40	28.00	6.49																									
4.90	31.50	6.54																									
7.50	50.00	6.74																									
4.65	31.50	6.90																									
5.50	37.50	6.93																									
7.10	50.00	7.13																									
4.40	31.50	7.30																									
5.20	37.50	7.33																									
6.70	50.00	7.56																									
4.90	37.50	7.79																									
6.30	50.00	8.05																									
4.65	37.50	8.22																									
5.90	50.00	8.60																									
4.40	37.50	8.70																									
5.50	50.00	9.24																									
5.20	50.00	9.78																									
4.90	50.00	10.40																									
4.65	50.00	10.97																									
4.40	50.00	11.60																									

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2

* Diameters below recommended RMA minimum for narrow (3V, 5V, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B8

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Speed Ratio	V-Belt No. and Center Distance															
Small Sheave	Large Sheave		8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V
			8VP	8VP	8VP	8VP	1250	1320	1400	1500	1600	1700	1800	1900	2000	2120	2240	2360
12.50	12.50	1.00	30.4	33.4	36.4	39.4	42.9	46.4	50.4	55.4	60.4	65.4	70.4	75.4	80.4	86.4	92.4	98.4
13.20	13.20	1.00	29.3	32.3	35.3	38.3	41.8	45.3	49.3	54.3	59.3	64.3	69.3	74.3	79.3	85.3	91.3	97.3
14.00	14.00	1.00	28.0	31.0	34.0	37.0	40.5	44.0	48.0	53.0	58.0	63.0	68.0	73.0	78.0	84.0	90.0	96.0
15.00	15.00	1.00	26.4	29.4	32.4	35.4	38.9	42.4	46.4	51.4	56.4	61.4	66.4	71.4	76.4	82.4	88.4	94.4
16.00	16.00	1.00	24.9	27.9	30.9	33.9	37.4	40.9	44.9	49.9	54.9	59.9	64.9	69.9	74.9	80.9	86.9	92.9
17.00	17.00	1.00	23.3	26.3	29.3	32.3	35.8	39.3	43.3	48.3	53.3	58.3	63.3	68.3	73.3	79.3	85.3	91.3
18.00	18.00	1.00	21.7	24.7	27.7	30.7	34.2	37.7	41.7	46.7	51.7	56.7	61.7	66.7	71.7	77.7	83.7	89.7
19.00	19.00	1.00	23.2	26.2	29.2	32.2	35.7	39.2	43.2	48.2	53.2	58.2	63.2	68.2	73.2	79.2	85.2	91.2
20.00	20.00	1.00		21.6	24.6	27.6	31.1	34.6	38.6	43.6	48.6	53.6	58.6	63.6	68.6	74.6	80.6	86.6
21.20	21.20	1.00		22.7	25.7	28.7	32.2	35.7	39.7	44.7	49.7	54.7	59.7	64.7	69.7	75.7	81.7	87.7
22.40	22.40	1.00				27.3	30.8	34.8	38.8	43.8	48.8	53.8	58.8	63.8	68.8	74.8	80.8	86.8
19.00	20.00	1.05		22.4	25.4	28.4	31.9	35.4	39.4	44.4	49.4	54.4	59.4	64.4	69.4	75.4	81.4	87.4
12.50	13.20	1.06	29.8	32.8	35.8	38.8	42.3	45.8	49.8	54.8	59.8	64.8	69.8	74.8	79.8	85.8	91.8	97.8
13.20	14.00	1.06	28.6	31.6	34.6	37.6	41.1	44.6	48.6	53.6	58.6	63.6	68.6	73.6	78.6	84.6	90.6	96.6
16.00	17.00	1.06	24.1	27.1	30.1	33.1	36.6	40.1	44.1	49.1	54.1	59.1	64.1	69.1	74.1	80.1	86.1	92.1
17.00	18.00	1.06	22.5	25.5	28.5	31.5	35.0	38.5	42.5	47.5	52.5	57.5	62.5	67.5	72.5	78.5	84.5	90.5
18.00	19.00	1.06	20.9	23.9	26.9	29.9	33.4	36.9	40.9	45.9	50.9	55.9	60.9	65.9	70.9	76.9	82.9	88.9
20.00	21.20	1.06		23.6	26.6	30.1	33.6	37.6	42.6	47.6	52.6	57.6	62.6	67.6	72.6	78.6	84.6	90.6
21.20	22.40	1.06				24.7	28.3	31.8	35.8	40.8	45.8	50.8	55.8	60.8	65.8	71.8	77.8	83.8
14.00	15.00	1.07	27.2	30.2	33.2	36.2	39.7	43.2	47.2	52.2	57.2	62.2	67.2	72.2	77.2	83.2	89.2	95.2
15.00	16.00	1.07	25.6	28.6	31.6	34.6	38.1	41.6	45.6	50.6	55.6	60.6	65.6	70.6	75.6	81.6	87.6	93.6
18.00	20.00	1.11		23.1	26.1	29.1	32.6	36.1	40.1	45.1	50.1	55.1	60.1	65.1	70.1	76.1	82.1	88.1
22.40	24.80	1.11				25.4	28.9	32.9	37.9	42.9	47.9	52.9	57.9	62.9	67.9	73.9	79.9	85.9
12.50	14.00	1.12	29.2	32.2	35.2	38.2	41.7	45.2	49.2	54.2	59.2	64.2	69.2	74.2	79.2	85.2	91.2	97.2
17.00	19.00	1.12	21.7	24.7	27.7	30.7	34.2	37.7	41.7	46.7	51.7	56.7	61.7	66.7	71.7	77.7	83.7	89.7
19.00	21.20	1.12		24.4	27.4	30.9	34.4	38.4	43.4	48.4	53.4	58.4	63.4	68.4	74.4	80.4	86.4	92.4
20.00	22.40	1.12		22.7	25.7	29.2	32.7	36.7	41.7	46.7	51.7	56.7	61.7	66.7	72.7	78.7	84.7	90.7
16.00	18.00	1.13	23.3	26.3	29.3	32.3	35.8	39.3	43.3	48.3	53.3	58.3	63.3	68.3	73.3	79.3	85.3	91.3
13.20	15.00	1.14	27.8	30.8	33.8	36.8	40.3	43.8	47.8	52.8	57.8	62.8	67.8	72.8	77.8	83.8	89.8	95.8
14.00	16.00	1.14	26.4	29.4	32.4	35.4	38.9	42.4	46.4	51.4	56.4	61.4	66.4	71.4	76.4	82.4	88.4	94.4
15.00	17.00	1.14	24.8	27.8	30.9	33.9	37.4	40.9	44.9	49.9	54.9	59.9	64.9	69.9	74.9	80.9	86.9	92.9
21.20	24.80	1.17				26.3	29.8	33.8	38.8	43.8	48.8	53.8	58.8	63.8	68.8	74.8	80.8	86.8
17.00	20.00	1.18	20.9	23.9	26.9	29.9	33.4	36.9	40.9	45.9	50.9	55.9	60.9	65.9	70.9	76.9	82.9	88.9
18.00	21.20	1.18		22.2	25.2	28.2	31.7	35.2	39.2	44.2	49.2	54.2	59.2	64.2	69.2	75.2	81.2	87.2
19.00	22.40	1.18		23.4	26.4	29.9	33.4	37.4	42.5	47.5	52.5	57.5	62.5	67.5	73.5	79.5	85.5	91.5
16.00	19.00	1.19	22.5	25.5	28.5	31.5	35.0	38.5	42.5	47.5	52.5	57.5	62.5	67.5	72.5	78.5	84.5	90.5
12.50	15.00	1.20	28.4	31.4	34.4	37.4	40.9	44.4	48.4	53.4	58.4	63.4	68.4	73.4	78.4	84.4	90.4	96.4
15.00	18.00	1.20	24.0	27.0	30.0	33.0	36.6	40.1	44.1	49.1	54.1	59.1	64.1	69.1	74.1	80.1	86.1	92.1
13.20	16.00	1.22	27.0	30.0	33.0	36.0	39.5	43.0	47.0	52.0	57.0	62.1	67.1	72.1	77.1	83.1	89.1	95.1
14.00	17.00	1.22	25.6	28.6	31.6	34.6	38.1	41.6	45.6	50.6	55.6	60.6	65.6	70.6	75.6	81.6	87.6	93.6
20.00	24.80	1.24				27.2	30.7	34.7	39.7	44.7	49.7	54.7	59.7	64.7	70.7	76.7	82.7	88.7
16.00	20.00	1.25	21.6	24.6	27.7	30.7	34.2	37.7	41.7	46.7	51.7	56.7	61.7	66.7	71.7	77.7	83.7	89.7
17.00	21.20	1.25		22.9	25.9	28.9	32.4	35.9	39.9	44.9	50.0	55.0	60.0	65.0	70.0	76.0	82.0	88.0
18.00	22.40	1.25		24.2	27.2	30.7	34.2	38.2	43.2	48.2	53.2	58.2	63.2	68.2	74.2	80.2	86.2	92.2
15.00	19.00	1.27	23.2	26.2	29.2	32.2	35.7	39.2	43.2	48.2	53.2	58.2	63.2	68.2	73.2	79.2	85.2	91.2
12.50	16.00	1.28	27.6	30.6	33.6	36.6	40.1	43.6	47.6	52.6	57.6	62.6	67.6	72.6	77.6	83.6	89.6	95.6
13.20	17.00	1.29	26.2	29.2	32.2	35.2	38.7	42.2	46.2	51.2	56.2	61.2	66.2	71.2	76.2	82.2	88.2	94.2
14.00	18.00	1.29	24.8	27.8	30.8	33.8	37.3	40.8	44.8	49.8	54.8	59.8	64.8	69.8	74.8	80.8	86.8	92.8
19.00	24.80	1.31				24.4	27.9	31.5	35.5	40.5	45.5	50.5	55.5	60.5	65.5	71.5	77.5	83.5
17.00	22.40	1.32		21.9	24.9	27.9	31.4	35.0	39.0	44.0	49.0	54.0	59.0	64.0	69.0	75.0	81.0	87.0
16.00	21.20	1.33	20.6	23.6	26.7	29.7	33.2	36.7	40.7	45.7	50.7	55.7	60.7	65.7	70.7	76.7	82.7	88.7

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2
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Heavy Duty V-Belt Drive Design Manual

Table No. B8

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance															Speed Ratio	Sheave Outside Diameters	
8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V		Small Sheave	Large Sheave
8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP			
105.4	112.9	120.4	130.4	137.9	147.9	157.9	167.9	180.4	192.9	205.4	217.9	230.4	260.4	280.4	1.00	12.50	12.50
104.3	111.8	119.3	129.3	136.8	146.8	156.8	166.8	179.3	191.8	204.3	216.8	229.3	259.3	279.3	1.00	13.20	13.20
103.0	110.5	118.0	128.0	135.5	145.5	155.5	165.5	178.0	190.5	203.0	215.5	228.0	258.0	278.0	1.00	14.00	14.00
101.4	108.9	116.4	126.4	133.9	143.9	153.9	163.9	176.4	188.9	201.4	213.9	226.4	256.4	276.4	1.00	15.00	15.00
99.9	107.4	114.9	124.9	132.4	142.4	152.4	162.4	174.9	187.4	199.9	212.4	224.9	254.9	274.9	1.00	16.00	16.00
98.3	105.8	113.3	123.3	130.8	140.8	150.8	160.8	173.3	185.8	198.3	210.8	223.3	253.3	273.3	1.00	17.00	17.00
96.7	104.2	111.7	121.7	129.2	139.2	149.2	159.2	171.7	184.2	196.7	209.2	221.7	251.7	271.7	1.00	18.00	18.00
95.2	102.7	110.2	120.2	127.7	137.7	147.7	157.7	170.2	182.7	195.2	207.7	220.2	250.2	270.2	1.00	19.00	19.00
93.6	101.1	108.6	118.6	126.1	136.1	146.1	156.1	168.6	181.1	193.6	206.1	218.6	248.6	268.6	1.00	20.00	20.00
91.7	99.2	106.7	116.7	124.2	134.2	144.2	154.2	166.7	179.2	191.7	204.2	216.7	246.7	266.7	1.00	21.20	21.20
89.8	97.3	104.8	114.8	122.3	132.3	142.3	152.3	164.8	177.3	189.8	202.3	214.8	244.8	264.8	1.00	22.40	22.40
94.4	101.9	109.4	119.4	126.9	136.9	146.9	156.9	169.4	181.9	194.4	206.9	219.4	249.4	269.4	1.05	19.00	20.00
104.8	112.3	119.8	129.8	137.3	147.3	157.3	167.3	179.8	192.3	204.8	217.3	229.8	259.8	279.8	1.06	12.50	13.20
103.6	111.1	118.6	128.6	136.1	146.1	156.1	166.1	178.6	191.1	203.6	216.1	228.6	258.6	278.6	1.06	13.20	14.00
99.1	106.6	114.1	124.1	131.6	141.6	151.6	161.6	174.1	186.6	199.1	211.6	224.1	254.1	274.1	1.06	16.00	17.00
97.5	105.0	112.5	122.5	130.0	140.0	150.0	160.0	172.5	185.0	197.5	210.0	222.5	252.5	272.5	1.06	17.00	18.00
95.9	103.4	110.9	120.9	128.4	138.4	148.4	158.4	170.9	183.4	195.9	208.4	220.9	250.9	270.9	1.06	18.00	19.00
92.6	100.1	107.6	117.6	125.1	135.1	145.1	155.1	167.6	180.1	192.6	205.1	217.6	247.6	267.6	1.06	20.00	21.20
90.8	98.3	105.8	115.8	123.3	133.3	143.3	153.3	165.8	178.3	190.8	203.3	215.8	245.8	265.8	1.06	21.20	22.40
102.2	109.7	117.2	127.2	134.7	144.7	154.7	164.7	177.2	189.7	202.2	214.7	227.2	257.2	277.2	1.07	14.00	15.00
100.7	108.2	115.7	125.7	133.2	143.2	153.2	163.2	175.7	188.2	200.7	213.2	225.7	255.7	275.7	1.07	15.00	16.00
95.1	102.6	110.2	120.2	127.7	137.7	147.7	157.7	170.2	182.7	195.2	207.7	220.2	250.2	270.2	1.11	18.00	20.00
87.9	95.4	102.9	112.9	120.4	130.4	140.4	150.4	162.9	175.4	187.9	200.4	212.9	242.9	262.9	1.11	22.40	24.80
104.2	111.7	119.2	129.2	136.7	146.7	156.7	166.7	179.2	191.7	204.2	216.7	229.2	259.2	279.2	1.12	12.50	14.00
96.7	104.2	111.7	121.7	129.2	139.2	149.2	159.2	171.7	184.2	196.7	209.2	221.7	251.7	271.7	1.12	17.00	19.00
93.4	100.9	108.4	118.4	125.9	135.9	145.9	155.9	168.4	180.9	193.4	205.9	218.4	248.4	268.4	1.12	19.00	21.20
91.7	99.2	106.7	116.7	124.2	134.2	144.2	154.2	166.7	179.2	191.7	204.2	216.7	246.7	266.7	1.12	20.00	22.40
98.3	105.8	113.3	123.3	130.8	140.8	150.8	160.8	173.3	185.8	198.3	210.8	223.3	253.3	273.3	1.13	16.00	18.00
102.8	110.3	117.8	127.8	135.3	145.3	155.3	165.3	177.8	190.3	202.8	215.3	227.8	257.8	277.8	1.14	13.20	15.00
101.4	108.9	116.4	126.4	133.9	143.9	153.9	163.9	176.4	188.9	201.4	213.9	226.4	256.4	276.4	1.14	14.00	16.00
99.9	107.4	114.9	124.9	132.4	142.4	152.4	162.4	174.9	187.4	199.9	212.4	224.9	254.9	274.9	1.14	15.00	17.00
88.9	96.4	103.9	113.9	121.4	131.4	141.4	151.4	163.9	176.4	188.9	201.4	213.9	243.9	263.9	1.17	21.20	24.80
95.9	103.4	110.9	120.9	128.4	138.4	148.4	158.4	170.9	183.4	195.9	208.4	220.9	250.9	270.9	1.18	17.00	20.00
94.2	101.7	109.2	119.2	126.7	136.7	146.7	156.7	169.2	181.7	194.2	206.7	219.2	249.2	269.2	1.18	18.00	21.20
92.5	100.0	107.5	117.5	125.0	135.0	145.0	155.0	167.5	180.0	192.5	205.0	217.5	247.5	267.5	1.18	19.00	22.40
97.5	105.0	112.5	122.5	130.0	140.0	150.0	160.0	172.5	185.0	197.5	210.0	222.5	252.5	272.5	1.19	16.00	19.00
103.4	110.9	118.4	128.4	135.9	145.9	155.9	165.9	178.4	190.9	203.4	215.9	228.4	258.4	278.4	1.20	12.50	15.00
99.1	106.6	114.1	124.1	131.6	141.6	151.6	161.6	174.1	186.6	199.1	211.6	224.1	254.1	274.1	1.20	15.00	18.00
102.1	109.6	117.1	127.1	134.6	144.6	154.6	164.6	177.1	189.6	202.1	214.6	227.1	257.1	277.1	1.22	13.20	16.00
100.6	108.1	115.6	125.6	133.1	143.1	153.1	163.1	175.6	188.1	200.6	213.1	225.6	255.6	275.6	1.22	14.00	17.00
89.8	97.3	104.8	114.8	122.3	132.3	142.3	152.3	164.8	177.3	189.8	202.3	214.8	244.8	264.8	1.24	20.00	24.80
96.7	104.2	111.7	121.7	129.2	139.2	149.2	159.2	171.7	184.2	196.7	209.2	221.7	251.7	271.7	1.25	16.00	20.00
95.0	102.5	110.0	120.0	127.5	137.5	147.5	157.5	170.0	182.5	195.0	207.5	220.0	250.0	270.0	1.25	17.00	21.20
93.2	100.7	108.2	118.2	125.7	135.7	145.7	155.7	168.2	180.7	193.2	205.7	218.2	248.2	268.2	1.25	18.00	22.40
98.3	105.8	113.3	123.3	130.8	140.8	150.8	160.8	173.3	185.8	198.3	210.8	223.3	253.3	273.3	1.27	15.00	19.00
102.6	110.1	117.6	127.6	135.1	145.1	155.1	165.1	177.6	190.1	202.6	215.1	227.6	257.6	277.6	1.28	12.50	16.00
101.3	108.8	116.3	126.3	133.8	143.8	153.8	163.8	176.3	188.8	201.3	213.8	226.3	256.3	276.3	1.29	13.20	17.00
99.8	107.3	114.8	124.8	132.3	142.3	152.3	162.3	174.8	187.3	199.8	212.3	224.8	254.8	274.8	1.29	14.00	18.00
90.6	98.1	105.6	115.6	123.1	133.1	143.1	153.1	165.6	178.1	190.6	203.1	215.6	245.6	265.6	1.31	19.00	24.80
94.0	101.5	109.0	119.0	126.5	136.5	146.5	156.5	169.0	181.5	194.0	206.5	219.0	249.0	269.0	1.32	17.00	22.40
95.7	103.3	110.8	120.8	128.3	138.3	148.3	158.3	170.8	183.3	195.8	208.3	220.8	250.8	270.8	1.33	16.00	21.20

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2
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Heavy Duty V-Belt Drive Design Manual

Table No. B8

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Speed Ratio	V-Belt No. and Center Distance																
Small Sheave	Large Sheave		8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	
			8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	
			1000	1060	1120	1180	1250	1320	1400	1500	1600	1700	1800	1900	2000	2120	2240	2360	
15.00	20.00	1.34	22.4	25.4	28.4	31.4	34.9	38.4	42.4	47.4	52.5	57.5	62.5	67.5	72.5	78.5	84.5	90.5	
22.40	30.00	1.34							28.6	33.6	38.7	43.7	48.7	53.7	58.7	64.7	70.7	76.8	
14.00	19.00	1.36	24.0	27.0	30.0	33.0	36.5	40.0	44.0	49.0	54.0	59.0	64.0	69.0	74.0	80.0	86.0	92.0	
12.50	17.00	1.37	26.7	29.7	32.8	35.8	39.3	42.8	46.8	51.8	56.8	61.8	66.8	71.8	76.8	82.8	88.8	94.8	
13.20	18.00	1.37	25.4	28.4	31.4	34.4	37.9	41.4	45.4	50.4	55.4	60.4	65.5	70.5	75.5	81.5	87.5	93.5	
18.00	24.80	1.38					25.2	28.7	32.2	36.2	41.2	46.3	51.3	56.3	61.3	66.3	72.3	78.3	84.3
16.00	22.40	1.41		22.6	25.6	28.7	32.2	35.7	39.7	44.7	49.7	54.7	59.8	64.8	69.8	75.8	81.8	87.8	
15.00	21.20	1.42	21.3	24.4	27.4	30.4	33.9	37.4	41.5	46.5	51.5	56.5	61.5	66.5	71.5	77.5	83.5	89.5	
21.20	30.00	1.42						29.5	34.5	39.5	44.6	49.6	54.6	59.6	65.6	71.6	77.6	83.6	
14.00	20.00	1.43	23.1	26.1	29.1	32.2	35.7	39.2	43.2	48.2	53.2	58.2	63.2	68.2	73.2	79.2	85.2	91.2	
12.50	18.00	1.45	25.9	28.9	31.9	34.9	38.4	42.0	46.0	51.0	56.0	61.0	66.0	71.0	76.0	82.0	88.0	94.0	
13.20	19.00	1.45	24.5	27.6	30.6	33.6	37.1	40.6	44.6	49.6	54.6	59.6	64.6	69.6	74.7	80.7	86.7	92.7	
17.00	24.80	1.46		22.8	25.9	29.4	32.9	36.4	40.5	45.5	50.5	55.5	60.5	65.5	70.5	76.5	82.5	88.5	
15.00	22.40	1.50	20.3	23.3	26.4	29.4	32.9	36.4	40.5	45.5	50.5	55.5	60.5	65.5	70.5	76.5	82.5	88.5	
20.00	30.00	1.51						30.3	35.4	40.4	45.5	50.5	55.5	60.5	66.5	72.6	78.6	84.6	
13.20	20.00	1.52	23.7	26.7	29.7	32.7	36.3	39.8	43.8	48.8	53.8	58.8	63.8	68.8	73.8	79.9	85.9	91.9	
14.00	21.20	1.52	22.1	25.1	28.1	31.1	34.7	38.2	42.2	47.2	52.2	57.2	62.2	67.3	72.3	78.3	84.3	90.3	
12.50	19.00	1.53	25.0	28.1	31.1	34.1	37.6	41.1	45.1	50.2	55.2	60.2	65.2	70.2	75.2	81.2	87.2	93.2	
16.00	24.80	1.56		23.5	26.6		30.1	33.7	37.7	42.7	47.8	52.8	57.8	62.8	67.8	73.8	79.8	85.8	
19.00	30.00	1.59						27.0	31.0	36.1	41.1	46.2	51.2	56.2	61.3	67.3	73.3	79.3	
22.40	35.50	1.59								33.9	39.0	44.0	49.1	54.1	60.2	66.2	72.2	78.2	
12.50	20.00	1.61	24.2	27.2	30.2	33.3	36.8	40.3	44.3	49.3	54.3	59.4	64.4	69.4	74.4	80.4	86.4	92.4	
14.00	22.40	1.61	21.0	24.0	27.1	30.1	33.6	37.2	41.2	46.2	51.2	56.3	61.3	66.3	71.3	77.3	83.3	89.3	
13.20	21.20	1.62	22.6	25.7	28.7	31.7	35.3	38.8	42.8	47.8	52.8	57.8	62.9	67.9	72.9	78.9	84.9	90.9	
15.00	24.80	1.66		24.2	27.3		30.9	34.4	38.4	43.5	48.5	53.5	58.5	63.6	68.6	74.6	80.6	86.6	
18.00	30.00	1.67					27.6	31.7	36.8	41.9	46.9	52.0	57.0	62.0	68.0	74.1	80.1	86.1	
21.20	35.50	1.68								34.7	39.8	44.9	50.0	55.0	61.0	67.1	73.1	79.1	
12.50	21.20	1.71	23.1	26.2	29.2	32.2	35.8	39.3	43.3	48.3	53.4	58.4	63.4	68.4	73.4	79.4	85.4	91.4	
13.20	22.40	1.71	21.5	24.6	27.7	30.7	34.2	37.8	41.8	46.8	51.8	56.9	61.9	66.9	71.9	77.9	83.9	89.9	
17.00	30.00	1.77					28.3	32.4	37.5	42.6	47.6	52.7	57.7	62.7	68.7	74.8	80.8	86.8	
14.00	24.80	1.78		21.9	24.9	28.0	31.6	35.1	39.2	44.2	49.2	54.3	59.3	64.3	69.3	75.3	81.3	87.4	
20.00	35.50	1.78							30.4	35.6	40.7	45.8	50.8	55.9	61.9	68.0	74.0	80.0	
22.40	40.00	1.79								34.9	40.0	45.1	50.2	55.3	60.3	66.4	72.4	78.4	
12.50	22.40	1.80	22.0	25.1	28.2	31.2	34.7	38.3	42.3	47.3	52.4	57.4	62.4	67.4	72.4	78.4	84.4	90.5	
19.00	35.50	1.88								31.1	36.3	41.4	46.5	51.5	56.6	62.7	68.7	74.7	
13.20	24.80	1.89	22.4	25.5	28.6	32.1	35.7	39.7	44.8	49.8	54.8	59.9	64.9	69.9	75.9	81.9	87.9	94.0	
16.00	30.00	1.89					25.4	29.0	33.1	38.2	43.3	48.4	53.4	58.5	63.5	69.5	75.5	81.6	
21.20	40.00	1.90										35.7	40.8	46.0	51.1	57.2	63.2	69.3	
18.00	35.50	1.98								31.8	36.9	42.1	47.2	52.2	57.3	63.4	69.4	75.5	
12.50	24.80	2.00	22.9	26.0	29.1	32.6	36.2	40.2	45.3	50.3	55.4	60.4	65.4	70.4	76.5	82.5	88.5	94.5	
22.40	44.50	2.00										35.7	41.0	46.1	52.3	58.4	64.5	70.6	
15.00	30.00	2.01					26.1	29.7	33.8	38.9	44.0	49.1	54.1	59.2	64.2	70.3	76.3	82.3	
20.00	40.00	2.01								36.5	41.7	46.8	51.9	58.0	64.1	70.2	76.2	82.2	
17.00	35.50	2.10								32.4	37.6	42.8	47.9	53.0	58.0	64.1	70.2	76.2	
21.20	44.50	2.11										36.5	41.8	46.9	53.1	59.3	65.4	71.5	
19.00	40.00	2.12									31.9	37.2	42.4	47.5	52.6	58.7	64.8	70.9	
14.00	30.00	2.16					26.7	30.4	34.5	39.6	44.7	49.8	54.9	59.9	64.9	71.0	77.0	83.1	
16.00	35.50	2.23							27.8	33.1	38.3	43.5	48.6	53.7	58.7	64.8	70.9	76.9	
18.00	40.00	2.24								32.6	37.8	43.0	48.2	53.3	59.4	65.5	71.6	77.6	
20.00	44.50	2.24										37.3	42.6	47.8	53.9	60.1	66.2	72.2	
13.20	24.80	2.29				23.6	27.3	30.9	35.1	40.2	45.3	50.4	55.4	60.5	65.5	71.6	77.6	83.6	

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2

Heavy Duty V-Belt Drive Design Manual

Table No. B8

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance															Speed Ratio	Sheave Outside Diameters	
8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V		Small Sheave	Large Sheave
8VP 2500	8VP 2650	8VP 2800	8VP 3000	8VP 3150	8VP 3350	8VP 3550	8VP 3750	8VP 4000	8VP 4250	8VP 4500	8VP 4750	8VP 5000	8VP 5600	8VP 6000	1.34	15.00	20.00
97.5	105.0	112.5	122.5	130.0	140.0	150.0	160.0	172.5	185.0	197.5	210.0	222.5	252.5	272.5	1.34	22.40	30.00
83.8	91.3	98.8	108.8	116.3	126.3	136.3	146.3	158.8	171.3	183.8	196.3	208.8	238.8	258.8	1.36	14.00	19.00
99.1	106.6	114.1	124.1	131.6	141.6	151.6	161.6	174.1	186.6	199.1	211.6	224.1	254.1	274.1	1.37	12.50	17.00
101.8	109.3	116.8	126.8	134.3	144.3	154.3	164.3	176.8	189.3	201.8	214.3	226.8	256.8	276.8	1.37	12.50	17.00
100.5	108.0	115.5	125.5	133.0	143.0	153.0	163.0	175.5	188.0	200.5	213.0	225.5	255.5	275.5	1.37	13.20	18.00
91.3	98.8	106.3	116.3	123.8	133.8	143.8	153.8	166.4	178.9	191.4	203.9	216.4	246.4	266.4	1.38	18.00	24.80
94.8	102.3	109.8	119.8	127.3	137.3	147.3	157.3	169.8	182.3	194.8	207.3	219.8	249.8	269.8	1.41	16.00	22.40
96.5	104.0	111.5	121.5	129.0	139.0	149.0	159.0	171.5	184.0	196.5	209.0	221.5	251.5	271.5	1.42	15.00	21.20
84.7	92.2	99.7	109.7	117.2	127.2	137.2	147.2	159.7	172.2	184.7	197.2	209.7	239.7	259.7	1.42	21.20	30.00
98.3	105.8	113.3	123.3	130.8	140.8	150.8	160.8	173.3	185.8	198.3	210.8	223.3	253.3	273.3	1.43	14.00	20.00
101.0	108.5	116.0	126.0	133.5	143.5	153.5	163.5	176.0	188.5	201.0	213.5	226.0	256.0	276.0	1.45	12.50	18.00
99.7	107.2	114.7	124.7	132.2	142.2	152.2	162.2	174.7	187.2	199.7	212.2	224.7	254.7	274.7	1.45	13.20	19.00
92.1	99.6	107.1	117.1	124.6	134.6	144.6	154.6	167.1	179.6	192.1	204.6	217.1	247.1	267.1	1.46	17.00	24.80
95.6	103.1	110.6	120.6	128.1	138.1	148.1	158.1	170.6	183.1	195.6	208.1	220.6	250.6	270.6	1.50	15.00	22.40
85.6	93.1	100.6	110.6	118.1	128.1	138.1	148.1	160.7	173.2	185.7	198.2	210.7	240.7	260.7	1.51	20.00	30.00
98.9	106.4	113.9	123.9	131.4	141.4	151.4	161.4	173.9	186.4	198.9	211.4	223.9	253.9	273.9	1.52	13.20	20.00
97.3	104.8	112.3	122.3	129.8	139.8	149.8	159.8	172.3	184.8	197.3	209.8	222.3	252.3	272.3	1.52	14.00	21.20
100.2	107.7	115.2	125.2	132.7	142.7	152.7	162.7	175.2	187.7	200.2	212.7	225.2	255.2	275.2	1.53	12.50	19.00
92.9	100.4	107.9	117.9	125.4	135.4	145.4	155.4	167.9	180.4	192.9	205.4	217.9	247.9	267.9	1.56	16.00	24.80
86.3	93.9	101.4	111.4	118.9	128.9	138.9	148.9	161.4	173.9	186.4	198.9	211.4	241.5	261.5	1.59	19.00	30.00
79.3	86.8	94.3	104.3	111.8	121.8	131.8	141.8	154.4	166.9	179.4	191.9	204.4	234.4	254.4	1.59	22.40	35.50
99.4	106.9	114.4	124.4	131.9	141.9	151.9	161.9	174.4	186.9	199.4	211.9	224.4	254.4	274.4	1.61	12.50	20.00
96.3	103.8	111.3	121.3	128.8	138.8	148.8	158.8	171.4	183.9	196.4	208.9	221.4	251.4	271.4	1.61	14.00	22.40
99.7	107.2	114.7	124.7	132.2	142.2	152.2	162.2	174.7	187.2	199.7	212.2	224.7	254.7	274.7	1.62	13.20	21.20
93.6	101.1	108.6	118.6	126.1	136.2	146.2	156.2	168.7	181.2	193.7	206.2	218.7	248.7	268.7	1.66	15.00	24.80
87.1	94.6	102.1	112.1	119.7	129.7	139.7	149.7	162.2	174.7	187.2	199.7	212.2	242.2	262.2	1.67	18.00	30.00
80.1	87.7	95.2	105.2	112.7	122.8	132.8	142.8	155.3	167.8	180.3	192.8	205.3	235.3	255.3	1.68	21.20	35.50
98.4	105.9	113.4	123.4	131.0	141.0	151.0	161.0	173.5	186.0	198.5	211.0	223.5	253.5	273.5	1.71	12.50	21.20
96.9	104.4	111.9	121.9	129.5	139.5	149.5	159.5	172.0	184.5	197.0	209.5	222.0	252.0	272.0	1.71	13.20	22.40
87.8	95.4	102.9	112.9	120.4	130.4	140.4	150.4	163.0	175.5	188.0	200.5	213.0	243.0	263.0	1.77	17.00	30.00
94.4	101.9	109.4	119.4	126.9	136.9	146.9	156.9	169.4	181.9	194.4	206.9	219.4	249.4	269.4	1.78	14.00	24.80
81.0	88.6	96.1	106.1	113.6	123.7	133.7	143.7	156.2	168.7	181.2	193.7	206.2	236.2	256.2	1.78	20.00	35.50
75.5	83.0	90.6	100.6	108.1	118.2	128.2	138.2	150.7	163.2	175.7	188.2	200.7	230.7	250.7	1.79	22.40	40.00
97.5	105.0	112.5	122.5	130.0	140.0	150.0	160.0	172.5	185.0	197.5	210.0	222.5	252.5	272.5	1.80	12.50	22.40
81.8	89.3	96.8	106.8	114.3	124.4	134.4	144.4	157.0	169.5	182.0	194.5	207.0	237.1	257.1	1.88	19.00	35.50
95.0	102.5	110.0	120.0	127.5	137.5	147.5	157.5	170.1	182.6	195.1	207.6	220.1	250.1	270.1	1.89	13.20	24.80
88.6	96.1	103.6	113.6	121.2	131.2	141.2	151.2	163.7	176.2	188.7	201.2	213.7	243.7	263.7	1.89	16.00	30.00
76.4	83.9	91.5	101.5	109.0	119.1	129.1	139.1	151.6	164.2	176.7	189.2	201.7	231.7	251.7	1.90	21.20	40.00
82.5	90.1	97.6	107.6	115.1	125.2	135.2	145.2	157.7	170.3	182.8	195.3	207.8	237.8	257.8	1.98	18.00	35.50
95.5	103.0	110.5	120.5	128.1	138.1	148.1	158.1	170.6	183.1	195.6	208.1	220.6	250.6	270.6	2.00	12.50	24.80
71.6	79.2	86.8	96.8	104.4	114.4	124.4	134.4	147.0	159.6	172.1	184.6	197.1	227.2	247.2	2.00	22.40	44.50
89.3	96.9	104.4	114.4	121.9	131.9	142.0	152.0	164.5	177.0	189.5	202.0	214.5	244.5	264.5	2.01	15.00	30.00
77.2	84.8	92.3	102.3	109.9	120.0	130.0	140.0	152.5	165.1	177.6	190.1	202.6	232.7	252.7	2.01	20.00	40.00
83.3	90.8	98.3	108.3	115.9	125.9	136.0	146.0	158.5	171.0	183.5	196.0	208.5	238.6	258.6	2.10	17.00	35.50
72.5	80.1	87.6	97.6	105.3	115.3	125.4	135.4	147.9	160.5	173.0	185.5	198.1	228.1	248.1	2.11	21.20	44.50
78.0	85.5	93.1	103.1	110.7	120.7	130.7	140.7	153.3	165.8	178.4	190.9	203.4	233.4	253.4	2.12	19.00	40.00
90.1	97.6	105.1	115.2	122.7	132.7	142.7	152.7	165.2	177.8	190.3	202.8	215.3	245.3	265.3	2.16	14.00	30.00
84.0	91.5	99.1	109.1	116.6	126.7	136.7	146.7	159.3	171.8	184.3	196.8	209.3	239.3	259.3	2.23	16.00	35.50
78.7	86.2	93.8	103.8	111.4	121.4	131.5	141.5	154.1	166.6	179.1	191.6	204.2	234.2	254.2	2.24	18.00	40.00
73.3	80.9	88.5	98.5	106.1	116.2	126.2	136.3	148.8	161.4	173.9	186.4	199.0	229.0	249.0	2.24	20.00	44.50
90.7	98.2	105.7	115.8	123.3	133.3	143.3	153.3	165.9	178.4	190.9	203.4	215.9	245.9	265.9	2.29	13.20	30.00

Key to Horsepower Correction Factor

- 0.7
- 0.8
- 0.9
- 1.0
- 1.1
- 1.2

Heavy Duty V-Belt Drive Design Manual

Table No. B8

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters			V-Belt No. and Center Distance															
Small Sheave	Large Sheave	Speed Ratio	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V
			8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX	8VX
			1000	1060	1120	1180	1250	1320	1400	1500	1600	1700	1800	1900	2000	2120	2240	2360
19.00	44.50	2.36																
17.00	40.00	2.37																
22.40	53.00	2.38																
15.00	35.50	2.39																
12.50	30.00	2.42																
18.00	44.50	2.49																
21.20	53.00	2.51																
16.00	40.00	2.52																
14.00	35.50	2.56																
17.00	44.50	2.64																
20.00	53.00	2.67																
15.00	40.00	2.69																
13.20	35.50	2.72																
16.00	44.50	2.80																
19.00	53.00	2.81																
22.40	63.00	2.83																
12.50	35.50	2.87																
14.00	40.00	2.88																
18.00	53.00	2.97																
15.00	44.50	2.99																
21.20	63.00	2.99																
13.20	40.00	3.06																
17.00	53.00	3.14																
20.00	63.00	3.17																
22.40	71.00	3.19																
14.00	44.50	3.21																
12.50	40.00	3.24																
16.00	53.00	3.34																
19.00	63.00	3.34																
21.20	71.00	3.37																
13.20	44.50	3.41																
18.00	63.00	3.53																
15.00	53.00	3.57																
20.00	71.00	3.58																
12.50	44.50	3.60																
17.00	63.00	3.74																
19.00	71.00	3.77																
14.00	53.00	3.83																
16.00	63.00	3.97																
18.00	71.00	3.98																
13.20	53.00	4.06																
17.00	71.00	4.21																
15.00	63.00	4.24																
12.50	53.00	4.29																
16.00	71.00	4.48																
14.00	63.00	4.55																
15.00	71.00	4.78																
13.20	63.00	4.83																
12.50	63.00	5.11																
14.00	71.00	5.13																
13.20	71.00	5.45																
12.50	71.00	5.76																

Key to Horsepower Correction Factor



Heavy Duty V-Belt Drive Design Manual

Table No. B8

Super HC® V-Belt, Super HC Molded Notch® V-Belt, Predator® V-Belt, Super HC PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																Speed Ratio	Sheave Outside Diameters	
8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V	8V		Small Sheave	Large Sheave
8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP	8VP			
2500	2650	2800	3000	3150	3350	3550	3750	4000	4250	4500	4750	5000	5600	6000				
74.0	81.6	89.2	99.3	106.9	116.9	127.0	137.0	149.6	162.1	174.7	187.2	199.7	229.8	249.8	2.36	19.00	44.50	
79.4	87.0	94.5	104.6	112.1	122.2	132.2	142.3	154.8	167.3	179.9	192.4	204.9	235.0	255.0	2.37	17.00	40.00	
63.9	71.6	79.3	89.5	97.1	107.2	117.3	127.4	139.9	152.5	165.1	177.6	190.2	220.2	240.3	2.38	22.40	53.00	
84.7	92.3	99.8	109.9	117.4	127.4	137.5	147.5	160.0	172.5	185.1	197.6	210.1	240.1	260.1	2.39	15.00	35.50	
91.2	98.7	106.3	116.3	123.8	133.8	143.9	153.9	166.4	178.9	191.4	203.9	216.4	246.5	266.5	2.42	12.50	30.00	
74.7	82.3	89.9	100.0	107.6	117.7	127.7	137.8	150.3	162.9	175.4	187.9	200.5	230.5	250.6	2.49	18.00	44.50	
64.8	72.5	80.1	90.3	97.9	108.1	118.2	128.2	140.8	153.4	166.0	178.5	191.1	221.2	241.2	2.51	21.20	53.00	
80.1	87.7	95.3	105.3	112.9	122.9	133.0	143.0	155.6	168.1	180.6	193.1	205.7	235.7	255.7	2.52	16.00	40.00	
85.4	93.0	100.5	110.6	118.1	128.2	138.2	148.2	160.8	173.3	185.8	198.3	210.8	240.9	260.9	2.56	14.00	35.50	
75.4	83.1	90.7	100.8	108.3	118.4	128.5	138.5	151.1	163.6	176.2	188.7	201.2	231.3	251.3	2.64	17.00	44.50	
65.6	73.3	81.0	91.2	98.8	108.9	119.0	129.1	141.7	154.3	166.8	179.4	192.0	222.1	242.1	2.67	20.00	53.00	
80.8	88.4	96.0	106.1	113.6	123.7	133.7	143.8	156.3	168.8	181.4	193.9	206.4	236.5	256.5	2.69	15.00	40.00	
86.0	93.6	101.1	111.2	118.7	128.8	138.8	148.8	161.4	173.9	186.4	198.9	211.5	241.5	261.5	2.72	13.20	35.50	
76.1	83.8	91.4	101.5	109.1	119.1	129.2	139.3	151.8	164.4	176.9	189.4	202.0	232.0	252.0	2.80	16.00	44.50	
66.3	74.0	81.7	91.9	99.5	109.6	119.7	129.8	142.4	155.0	167.6	180.1	192.7	222.8	242.9	2.81	19.00	53.00	
54.1	62.1	70.0	80.3	88.1	98.3	108.5	118.7	131.4	144.0	156.6	169.2	181.8	212.0	232.0	2.83	22.40	63.00	
86.5	94.1	101.6	111.7	119.2	129.3	139.3	149.4	161.9	174.4	186.9	199.5	212.0	242.0	262.0	2.87	12.50	35.50	
81.6	89.1	96.7	106.8	114.3	124.4	134.5	144.5	157.1	169.6	182.1	194.7	207.2	237.2	257.3	2.88	14.00	40.00	
66.9	74.7	82.4	92.6	100.2	110.3	120.5	130.6	143.2	155.8	168.3	180.9	193.4	223.6	243.6	2.97	18.00	53.00	
76.8	84.5	92.1	102.2	109.8	119.9	129.9	140.0	152.6	165.1	177.7	190.2	202.7	232.8	252.8	2.99	15.00	44.50	
54.8	62.9	70.8	81.2	88.9	99.2	109.4	119.5	132.2	144.9	157.5	170.1	182.7	212.8	232.9	2.99	21.20	63.00	
82.1	89.7	97.3	107.4	114.9	125.0	135.1	145.1	157.6	170.2	182.7	195.3	207.8	237.8	257.9	3.06	13.20	40.00	
67.6	75.4	83.1	93.3	100.9	111.1	121.2	131.3	143.9	156.5	169.1	181.6	194.2	224.3	244.4	3.14	17.00	53.00	
55.6	63.6	71.6	82.0	89.7	100.0	110.2	120.4	133.1	145.7	158.4	171.0	183.6	213.7	233.8	3.17	20.00	63.00	
77.5	85.2	92.8	102.9	110.5	120.6	130.7	140.7	153.3	165.9	178.4	190.9	203.5	233.6	253.6	3.21	14.00	44.50	
82.6	90.2	97.8	107.9	115.4	125.5	135.6	145.6	158.2	170.7	183.3	195.8	208.3	238.4	258.4	3.24	12.50	40.00	
68.3	76.0	83.8	94.0	101.6	111.8	121.9	132.0	144.6	157.2	169.8	182.4	194.9	225.0	245.1	3.34	16.00	53.00	
56.2	64.3	72.2	82.7	90.4	100.7	110.9	121.1	133.8	146.4	159.1	171.7	184.3	214.5	234.6	3.34	19.00	63.00	
78.1	85.8	93.4	103.5	111.1	121.2	131.2	141.3	153.9	166.4	179.0	191.5	204.1	234.2	254.2	3.41	13.20	44.50	
56.9	64.9	72.9	83.3	91.1	101.4	111.6	121.8	134.5	147.2	159.8	172.4	185.0	215.2	235.3	3.53	18.00	63.00	
69.0	76.7	84.4	94.7	102.3	112.5	122.6	132.7	145.3	157.9	170.5	183.1	195.7	225.8	245.9	3.57	15.00	53.00	
55.0	63.3	71.4	82.0	92.5	102.9	113.1	123.2	135.8	148.4	161.0	173.6	186.2	216.3	236.4	3.58	20.00	71.00	
78.6	86.2	93.9	104.0	111.6	121.7	131.8	141.8	154.4	167.0	179.5	192.1	204.6	234.7	254.7	3.60	12.50	44.50	
57.5	65.6	73.5	84.0	91.8	102.1	112.3	122.5	135.2	147.9	160.5	173.1	185.7	215.9	236.0	3.74	17.00	63.00	
46.9	55.6	64.0	74.7	82.7	93.2	103.5	113.8	126.6	139.4	152.1	164.8	177.4	207.7	227.8	3.77	19.00	71.00	
69.6	77.4	85.1	95.4	103.0	113.2	123.3	133.5	146.1	158.7	171.3	183.8	196.4	226.5	246.6	3.83	14.00	53.00	
51.1	66.2	74.2	84.7	92.5	102.8	113.0	123.2	135.9	148.6	161.2	173.9	186.5	216.7	236.8	3.97	16.00	63.00	
47.5	56.2	64.6	75.4	83.4	93.8	104.2	114.5	127.3	140.1	152.8	165.5	178.1	208.4	228.6	3.98	18.00	71.00	
70.2	78.0	85.7	95.9	103.6	113.8	123.9	134.0	146.7	159.3	171.9	184.4	197.0	227.1	247.2	4.06	13.20	53.00	
48.1	56.8	65.2	76.0	84.0	94.5	104.9	115.2	128.0	140.8	153.5	166.2	178.8	209.1	229.3	4.21	17.00	71.00	
58.8	66.9	74.9	85.3	93.1	103.4	113.7	123.9	136.6	149.3	162.0	174.6	187.2	217.4	237.5	4.24	15.00	63.00	
70.6	78.4	86.2	96.4	104.1	114.3	124.4	134.5	147.2	159.8	172.4	184.9	197.5	227.7	247.7	4.29	12.50	53.00	
48.7	57.5	65.8	76.7	84.7	95.2	105.6	115.9	128.7	141.5	154.2	166.9	179.6	209.9	230.0	4.48	16.00	71.00	
59.4	67.5	75.5	86.0	93.8	104.1	114.4	124.6	137.3	150.0	162.7	175.3	187.9	218.1	238.3	4.55	14.00	63.00	
49.3	58.1	66.5	77.3	85.3	95.8	106.2	116.6	129.4	142.2	154.9	167.6	180.3	210.6	230.8	4.78	15.00	71.00	
59.9	68.0	76.0	86.5	94.3	104.7	114.9	125.2	137.9	150.6	163.2	175.9	188.5	218.7	238.9	4.83	13.20	63.00	
60.3	68.5	76.5	87.0	94.8	105.2	115.4	125.7	138.4	151.1	163.8	176.4	189.0	219.2	239.4	5.11	12.50	63.00	
49.8	58.7	67.1	78.0	86.0	96.5	106.9	117.3	130.1	142.9	155.6	168.3	181.0	211.3	231.5	5.13	14.00	71.00	
50.3	59.2	67.6	78.5	86.5	97.0	107.5	117.8	130.7	143.4	156.2	168.9	181.6	211.9	232.1	5.45	13.20	71.00	
50.7	59.6	68.0	78.9	87.0	97.5	107.9	118.3	131.1	143.9	156.7	169.4	182.1	212.4	232.6	5.76	12.50	71.00	

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2
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Table No. B9



Rated Horsepower per Belt for 3V Super HC® V-Belts and Super HC PowerBand® Belts

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Outside Diameter															RPM of Faster Shaft	Additional Horsepower per Belt for Speed Ratio														
	2.65	2.80	3.00	3.15	3.35	3.65	4.12	4.50	4.75	5.00	5.30	5.60	6.00	6.50	8.00		10.6	1.00 to 1.01	1.02 to 1.05	1.06 to 1.11	1.12 to 1.18	1.19 to 1.26	1.27 to 1.38	1.39 to 1.57	1.58 to 1.94	1.95 to 3.38	3.39 and over				
575	.66	.75	.88	.97	1.09	1.28	1.57	1.80	1.95	2.10	2.28	2.46	2.69	2.99	3.22	3.85	5.32	0.00	0.01	0.03	0.05	0.07	0.08	0.10	0.11	0.12	0.12				
690	.76	.88	1.02	1.13	1.28	1.50	1.84	2.11	2.29	2.47	2.68	2.89	3.17	3.52	3.79	4.54	6.26	0.00	0.01	0.03	0.06	0.08	0.10	0.11	0.13	0.14	0.15				
725	.80	.91	1.07	1.18	1.34	1.57	1.92	2.21	2.39	2.58	2.80	3.02	3.31	3.67	3.96	4.74	6.54	0.00	0.01	0.04	0.06	0.08	0.10	0.12	0.14	0.15	0.16				
870	.92	1.06	1.24	1.38	1.56	1.83	2.25	2.59	2.81	3.03	3.29	3.55	3.89	4.32	4.66	5.57	7.67	0.00	0.02	0.04	0.07	0.10	0.12	0.14	0.16	0.18	0.19				
950	.99	1.14	1.34	1.49	1.68	1.98	2.43	2.80	3.03	3.27	3.55	3.84	4.21	4.67	5.03	6.02	8.28	0.00	0.02	0.05	0.08	0.11	0.13	0.16	0.18	0.19	0.20				
1160	1.16	1.34	1.58	1.76	1.99	2.35	2.89	3.33	3.61	3.89	4.23	4.57	5.01	5.56	5.99	7.16	9.79	0.00	0.02	0.06	0.10	0.14	0.16	0.19	0.22	0.24	0.25				
1425	1.36	1.58	1.87	2.08	2.37	2.79	3.45	3.97	4.31	4.65	5.05	5.45	5.98	6.63	7.14	8.51	11.6	0.00	0.03	0.07	0.12	0.17	0.20	0.24	0.27	0.29	0.31				
1750	1.60	1.86	2.20	2.46	2.80	3.31	4.09	4.72	5.12	5.53	6.00	6.48	7.10	7.86	8.46	10.0	13.5	0.00	0.03	0.09	0.15	0.20	0.25	0.29	0.33	0.36	0.38				
2850	2.27	2.67	3.20	3.59	4.11	4.87	6.03	6.95	7.54	8.11	8.79	9.45	10.3	11.3	12.1	14.0	18.0	0.00	0.05	0.14	0.25	0.33	0.40	0.47	0.53	0.58	0.61				
3450	2.57	3.04	3.65	4.11	4.71	5.69	6.92	7.95	8.60	9.24	9.98	10.7	11.6	12.6	13.4	15.6	20.0	0.00	0.06	0.17	0.30	0.40	0.49	0.57	0.65	0.70	0.74				
400	.27	.31	.35	.39	.43	.50	.61	.70	.75	.81	.88	.95	1.04	1.15	1.23	1.48	2.04	0.00	0.00	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.04				
400	.49	.55	.64	.71	.80	.93	1.14	1.30	1.41	1.52	1.64	1.77	1.94	2.15	2.32	2.78	3.84	0.00	0.01	0.02	0.03	0.05	0.06	0.07	0.07	0.08	0.09				
600	.68	.78	.91	1.01	1.14	1.33	1.63	1.87	2.02	2.18	2.37	2.55	2.80	3.10	3.34	4.01	5.53	0.00	0.01	0.03	0.05	0.07	0.09	0.10	0.11	0.12	0.13				
800	.86	.99	1.16	1.29	1.45	1.70	2.09	2.41	2.61	2.81	3.05	3.30	3.61	4.01	4.32	5.18	7.13	0.00	0.01	0.04	0.07	0.09	0.11	0.13	0.15	0.16	0.17				
1000	1.03	1.19	1.40	1.55	1.76	2.07	2.54	2.92	3.17	3.42	3.72	4.01	4.40	4.88	5.26	6.30	8.65	0.00	0.02	0.05	0.09	0.12	0.14	0.17	0.19	0.20	0.22				
1200	1.19	1.38	1.62	1.81	2.05	2.41	2.98	3.43	3.72	4.01	4.36	4.70	5.16	5.72	6.17	7.37	10.1	0.00	0.02	0.06	0.10	0.14	0.17	0.20	0.22	0.24	0.26				
1400	1.35	1.56	1.84	2.05	2.33	2.75	3.39	3.91	4.25	4.58	4.98	5.37	5.89	6.53	7.03	8.39	11.4	0.00	0.03	0.07	0.12	0.16	0.20	0.23	0.26	0.29	0.30				
1600	1.49	1.73	2.05	2.29	2.60	3.07	3.80	4.38	4.75	5.13	5.57	6.01	6.59	7.30	7.86	9.36	12.6	0.00	0.03	0.08	0.14	0.19	0.23	0.27	0.30	0.33	0.35				
1800	1.63	1.90	2.25	2.52	2.87	3.39	4.19	4.83	5.25	5.66	6.15	6.63	7.26	8.04	8.65	10.3	13.7	0.00	0.03	0.09	0.15	0.21	0.26	0.30	0.34	0.37	0.39				
2000	1.76	2.06	2.45	2.74	3.12	3.69	4.57	5.27	5.72	6.17	6.70	7.22	7.91	8.75	9.40	11.1	14.7	0.00	0.04	0.10	0.17	0.23	0.28	0.33	0.37	0.41	0.43				
2200	1.89	2.21	2.64	2.95	3.37	3.99	4.94	5.69	6.18	6.66	7.23	7.79	8.52	9.42	10.1	11.9	15.6	0.00	0.04	0.11	0.19	0.26	0.31	0.37	0.41	0.45	0.47				
2400	2.02	2.36	2.82	3.16	3.60	4.27	5.29	6.09	6.62	7.13	7.74	8.33	9.11	10.0	10.8	12.1	16.5	0.00	0.04	0.12	0.21	0.28	0.34	0.40	0.45	0.49	0.52				
2600	2.13	2.50	2.99	3.35	3.83	4.54	5.63	6.48	7.04	7.58	8.22	8.85	9.66	10.6	11.4	13.3	17.4	0.00	0.05	0.13	0.22	0.30	0.37	0.43	0.49	0.53	0.56				
2800	2.24	2.64	3.16	3.54	4.05	4.80	5.95	6.86	7.44	8.01	8.68	9.33	10.2	11.2	12.0	13.9	18.3	0.00	0.05	0.14	0.24	0.33	0.40	0.47	0.52	0.57	0.60				
3000	2.35	2.77	3.32	3.73	4.26	5.06	6.27	7.21	7.82	8.41	9.11	9.79	10.7	11.7	12.5	14.4	19.2	0.00	0.05	0.15	0.26	0.35	0.43	0.50	0.56	0.61	0.65				
3200	2.45	2.89	3.47	3.90	4.47	5.30	6.56	7.55	8.18	8.80	9.52	10.2	11.1	12.1	12.9	14.9	20.1	0.00	0.06	0.16	0.28	0.37	0.45	0.53	0.60	0.65	0.69				
3400	2.55	3.01	3.62	4.07	4.66	5.53	6.85	7.87	8.52	9.16	9.89	10.6	11.5	12.6	13.3	15.4	21.0	0.00	0.06	0.17	0.29	0.40	0.48	0.56	0.64	0.69	0.73				
3600	2.64	3.12	3.76	4.23	4.85	5.75	7.12	8.17	8.84	9.49	10.2	11.0	11.9	12.9	13.6	15.7	21.9	0.00	0.07	0.18	0.31	0.42	0.51	0.60	0.67	0.73	0.78				
3800	2.72	3.23	3.89	4.38	5.02	5.96	7.37	8.45	9.14	9.80	10.6	11.3	12.2	13.2	13.9	16.0	22.8	0.00	0.07	0.19	0.33	0.44	0.54	0.63	0.71	0.77	0.82				
4000	2.80	3.33	4.02	4.52	5.19	6.16	7.61	8.72	9.41	10.1	10.8	11.6	12.5	13.5	14.4	16.5	23.7	0.00	0.07	0.20	0.34	0.47	0.57	0.66	0.75	0.81	0.86				
4200	2.88	3.42	4.13	4.66	5.34	6.34	7.83	8.96	9.66	10.3	11.1	11.8	12.8	13.8	14.7	16.8	24.6	0.00	0.08	0.21	0.36	0.49	0.60	0.70	0.79	0.86	0.91				
4400	2.95	3.51	4.24	4.78	5.49	6.51	8.03	9.17	9.88	10.6	11.3	12.0	13.0	14.0	15.0	17.1	25.5	0.00	0.08	0.22	0.38	0.51	0.62	0.73	0.82	0.90	0.95				
4600	3.01	3.59	4.35	4.90	5.63	6.67	8.22	9.37	10.1	10.8	11.5	12.5	13.5	14.5	15.5	17.6	26.4	0.00	0.08	0.23	0.40	0.54	0.65	0.76	0.86	0.94	0.99				
4800	3.07	3.66	4.44	5.01	5.75	6.82	8.38	9.54	10.3	10.9	11.6	12.6	13.6	14.6	15.6	17.7	27.3	0.00	0.09	0.24	0.41	0.56	0.68	0.80	0.90	0.98	1.04				
5000	3.12	3.73	4.53	5.11	5.87	6.95	8.53	9.69	10.4	11.0	11.7	12.7	13.7	14.7	15.7	17.8	28.2	0.00	0.09	0.25	0.43	0.59	0.71	0.83	0.93	1.02	1.08				

Drives for rpm-diameter combinations where no horsepower is shown may be practical if all conditions are known. See your local Gates representative

Table No. B10



Rated Horsepower per Belt for 3VX Super HC® Molded Notch V-Belts and Super HC Molded Notch PowerBand® Belts

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Outside Diameter																	RPM of Faster Shaft	Additional Horsepower per Belt for Speed Ratio												
	2.20	2.35	2.50	2.65	2.80	3.00	3.15	3.35	3.65	4.12	4.50	4.75	5.00	5.30	5.60	6.00	6.50		8.00	10.6	1.00	1.02	1.04	1.07	1.10	1.14	1.19	1.26	1.36	1.58	
575	0.55	0.64	0.73	0.83	0.92	1.04	1.13	1.25	1.43	1.72	1.94	2.09	2.24	2.41	2.59	2.82	3.11	3.34	3.97	5.42	0.00	0.01	0.02	0.03	0.04	0.05	0.05	0.05	0.06	0.07	0.08
690	0.64	0.75	0.86	0.97	1.08	1.22	1.33	1.48	1.69	2.02	2.29	2.47	2.64	2.85	3.06	3.33	3.67	3.95	4.69	6.39	0.00	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.09	0.10	0.10
725	0.66	0.78	0.90	1.01	1.13	1.28	1.39	1.54	1.77	2.12	2.40	2.58	2.76	2.98	3.20	3.49	3.84	4.13	4.90	6.69	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10
870	0.77	0.91	1.05	1.18	1.32	1.50	1.63	1.81	2.08	2.49	2.82	3.04	3.26	3.51	3.77	4.11	4.53	4.87	5.78	7.87	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.10	0.11	0.12	0.13
950	0.83	0.98	1.13	1.28	1.42	1.62	1.77	1.96	2.25	2.70	3.06	3.29	3.52	3.80	4.08	4.45	4.91	5.27	6.25	8.51	0.00	0.01	0.03	0.04	0.06	0.07	0.09	0.10	0.12	0.13	0.13
1160	0.98	1.16	1.34	1.52	1.69	1.93	2.10	2.34	2.68	3.22	3.65	3.93	4.21	4.55	4.88	5.32	5.87	6.30	7.47	10.1	0.00	0.02	0.04	0.05	0.07	0.09	0.11	0.13	0.15	0.16	0.16
1425	1.16	1.38	1.59	1.81	2.02	2.31	2.52	2.80	3.22	3.86	4.38	4.72	5.06	5.46	5.86	6.38	7.03	7.55	8.94	12.1	0.00	0.02	0.04	0.07	0.09	0.11	0.14	0.17	0.19	0.22	0.25
1750	1.37	1.63	1.89	2.15	2.41	2.75	3.01	3.34	3.85	4.63	5.25	5.65	6.06	6.53	7.01	7.63	8.40	9.01	10.6	14.2	0.00	0.03	0.06	0.08	0.11	0.14	0.17	0.20	0.22	0.25	0.25
2850	2.00	2.41	2.81	3.21	3.61	4.14	4.53	5.05	5.82	6.99	7.92	8.53	9.12	9.82	10.5	11.4	12.5	13.3	15.5	20.0	0.00	0.04	0.09	0.13	0.18	0.22	0.27	0.31	0.36	0.40	0.40
3450	2.30	2.78	3.26	3.74	4.21	4.82	5.28	5.89	6.78	8.15	9.21	9.90	10.6	11.4	12.1	13.1	14.3	15.2	18.0	23.0	0.00	0.05	0.11	0.16	0.22	0.27	0.33	0.38	0.43	0.49	0.49
200	0.22	0.26	0.29	0.33	0.36	0.41	0.44	0.48	0.55	0.66	0.74	0.80	0.85	0.92	0.98	1.07	1.18	1.27	1.50	2.05	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03
400	0.40	0.47	0.54	0.60	0.67	0.75	0.82	0.91	1.03	1.24	1.40	1.50	1.61	1.73	1.86	2.03	2.23	2.40	2.85	3.89	0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.04	0.04	0.05	0.05
600	0.57	0.66	0.76	0.86	0.95	1.08	1.18	1.30	1.49	1.78	2.02	2.17	2.33	2.51	2.69	2.93	3.23	3.47	4.13	5.63	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.08	0.08
800	0.72	0.85	0.98	1.10	1.23	1.39	1.52	1.68	1.93	2.31	2.62	2.82	3.02	3.26	3.50	3.81	4.20	4.51	5.36	7.30	0.00	0.01	0.03	0.04	0.05	0.06	0.08	0.09	0.10	0.11	0.11
1000	0.87	1.02	1.18	1.34	1.49	1.69	1.85	2.05	2.35	2.82	3.20	3.45	3.69	3.98	4.27	4.66	5.14	5.52	6.55	8.90	0.00	0.02	0.03	0.05	0.06	0.08	0.09	0.11	0.13	0.14	0.14
1200	1.01	1.19	1.38	1.56	1.74	1.99	2.17	2.41	2.76	3.32	3.76	4.05	4.34	4.69	5.03	5.48	6.04	6.49	7.69	10.4	0.00	0.02	0.04	0.06	0.08	0.09	0.11	0.13	0.15	0.17	0.17
1400	1.14	1.36	1.57	1.78	1.99	2.27	2.48	2.75	3.17	3.80	4.32	4.65	4.98	5.37	5.77	6.29	6.93	7.43	8.80	11.9	0.00	0.02	0.04	0.07	0.09	0.11	0.13	0.15	0.18	0.20	0.20
1600	1.27	1.52	1.76	1.99	2.23	2.55	2.78	3.09	3.56	4.28	4.85	5.23	5.60	6.04	6.48	7.06	7.78	8.35	9.87	13.2	0.00	0.03	0.05	0.08	0.10	0.13	0.15	0.18	0.20	0.23	0.23
1800	1.40	1.67	1.94	2.20	2.47	2.82	3.08	3.43	3.94	4.74	5.38	5.79	6.21	6.70	7.18	7.82	8.61	9.23	10.9	14.5	0.00	0.03	0.06	0.09	0.11	0.14	0.17	0.20	0.23	0.25	0.25
2000	1.52	1.82	2.11	2.40	2.70	3.08	3.37	3.75	4.32	5.19	5.89	6.34	6.79	7.33	7.86	8.55	9.41	10.1	11.9	15.7	0.00	0.03	0.06	0.09	0.13	0.16	0.19	0.22	0.25	0.28	0.28
2200	1.64	1.96	2.28	2.60	2.92	3.34	3.65	4.07	4.68	5.63	6.39	6.88	7.37	7.94	8.51	9.26	10.2	10.9	12.8	16.8	0.00	0.03	0.07	0.10	0.14	0.17	0.21	0.24	0.28	0.31	0.31
2400	1.75	2.10	2.45	2.80	3.14	3.59	3.93	4.38	5.04	6.06	6.88	7.40	7.92	8.54	9.15	9.95	10.9	11.7	13.7	18.0	0.00	0.04	0.08	0.11	0.15	0.19	0.23	0.26	0.30	0.34	0.34
2600	1.87	2.24	2.61	2.98	3.35	3.84	4.20	4.68	5.39	6.48	7.35	7.91	8.47	9.12	9.77	10.6	11.6	12.4	14.5	19.0	0.00	0.04	0.08	0.12	0.16	0.20	0.25	0.29	0.33	0.37	0.37
2800	1.97	2.37	2.77	3.17	3.56	4.08	4.47	4.98	5.73	6.89	7.81	8.40	8.99	9.68	10.4	11.2	12.3	13.1	15.3	20.0	0.00	0.04	0.09	0.13	0.18	0.22	0.26	0.31	0.35	0.40	0.40
3000	2.08	2.50	2.93	3.35	3.76	4.31	4.72	5.26	6.06	7.29	8.26	8.88	9.50	10.2	10.9	11.8	13.0	13.8	16.0	21.0	0.00	0.05	0.09	0.14	0.19	0.24	0.28	0.33	0.38	0.42	0.42
3200	2.18	2.63	3.08	3.52	3.96	4.54	4.98	5.55	6.39	7.69	8.69	9.34	9.99	10.7	11.5	12.4	13.6	14.4	16.8	22.0	0.00	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.45
3400	2.28	2.75	3.23	3.69	4.16	4.77	5.22	5.82	6.71	8.05	9.11	9.79	10.5	11.2	12.0	13.0	14.1	15.0	17.5	23.0	0.00	0.05	0.11	0.16	0.21	0.27	0.32	0.37	0.43	0.48	0.48
3600	2.37	2.87	3.37	3.86	4.35	4.99	5.46	6.09	7.01	8.42	9.52	10.2	10.9	11.7	12.5	13.5	14.7	15.7	18.5	24.0	0.00	0.06	0.11	0.17	0.23	0.28	0.34	0.40	0.45	0.51	0.51
3800	2.47	2.99	3.51	4.02	4.53	5.20	5.70	6.35	7.31	8.77	9.91	10.6	11.3	12.2	13.0	14.0	15.2	16.3	19.5	25.0	0.00	0.06	0.12	0.18	0.24	0.30	0.36	0.42	0.48	0.54	0.54
4000	2.56	3.10	3.65	4.18	4.71	5.41	5.92	6.60	7.60	9.11	10.3	11.0	11.8	12.6	13.4	14.4	15.6	16.8	20.5	26.0	0.00	0.06	0.13	0.19	0.25	0.31	0.38	0.44	0.50	0.57	0.57
4200	2.64	3.21	3.78	4.33	4.89	5.61	6.15	6.85	7.88	9.44	10.6	11.4	12.1	13.0	13.8	14.8	15.9	17.2	21.0	27.0	0.00	0.07	0.14	0.20	0.26	0.33	0.40	0.46	0.53	0.59	0.59
4400	2.73	3.32	3.91	4.48	5.06	5.81	6.36	7.09	8.15	9.75	11.0	11.8	12.5	13.4	14.2	15.2	16.4	17.8	22.0	28.0	0.00	0.07	0.14	0.21	0.28	0.35	0.42	0.48	0.55	0.62	0.62
4600	2.81	3.42	4.03	4.63	5.22	6.00	6.57	7.32	8.41	10.1	11.3	12.1	12.9	13.7	14.6	15.6	16.8	18.3	23.0	29.0	0.00	0.07	0.14	0.22	0.29	0.36	0.43	0.51	0.58	0.65	0.65
4800	2.89	3.52	4.15	4.77	5.38	6.18	6.77	7.54	8.66	10.3	11.6	12.4	13.2	14.0	14.9	16.0	17.2	18.8	24.0	30.0	0.00	0.08	0.15	0.23	0.30	0.38	0.45	0.53	0.60	0.68	0.68
5000	2.96	3.62	4.27	4.91	5.53	6.36	6.96	7.75	8.90	10.6	11.9	12.7	13.5	14.3	15.2	16.4	17.6	19.2	25.0	31.0	0.00	0.08	0.16	0.24	0.31	0.39	0.47	0.55	0.63	0.71	0.71
5200	3.03	3.71	4.38	5.04	5.68	6.53	7.15	7.96	9.13	10.9	12.2	13.0	13.8	14.6	15.4	16.3	17.3	18.4	25.0	32.0	0.00	0.09	0.16	0.25	0.33	0.41	0.49	0.57	0.65	0.74	0.74
5400	3.10	3.80	4.49	5.16	5.83	6.69	7.33	8.15	9.35	11.1	12.4	13.2	14.0	14.8	15.6	16.5	17.5	18.6	26.0	33.0	0.00	0.09	0.17	0.25	0.34	0.42	0.51	0.59	0.68	0.76	0.76
5600	3.17	3.89	4.59	5.28	5.96	6.85	7.50	8.34	9.56	11.3	12.6	13.4	14.2	15.0	15.8	16.7	17.7	18.8	27.0	34.0	0.00	0.09	0.18	0.26	0.35	0.44	0.53	0.62	0.71	0.79	0.79
5800	3.23	3.97	4.69	5.40	6.10	7.00	7.66	8.52	9.76	11.6	12.9	13.7	14.5	15.3	16.1	17.0	18.0	19.1	28.0	35.0	0.00	0.09	0.18	0.27	0.36	0.46	0.55	0.64	0.73	0.82	0.82
6000	3.29	4.05	4.79	5.51	6.22	7.15	7.82	8.69	9.94	11.7	13.0	13.8	14.6	15.4	16.2	17.1	18.1	19.2	29.0	36.0	0										

Table No. B11



Rated Horsepower per Belt for 5V Super HC® V-Belts and Super HC PowerBand® Belts

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Outside Diameter																RPM of Faster Shaft	Additional Horsepower per Belt for Speed Ratio															
	7.1	7.5	8.0	8.5	9.0	9.25	9.75	10.3	10.9	11.3	11.8	12.5	13.2	14.0	15.0	16.0		1.00 to 1.01	1.02 to 1.05	1.06 to 1.11	1.12 to 1.18	1.19 to 1.26	1.27 to 1.38	1.39 to 1.58	1.59 to 1.95	3.39 and over							
435	4.99	5.48	6.10	6.72	7.33	7.64	8.25	8.91	9.64	10.1	10.7	11.5	12.4	13.3	14.5	15.6	0.00	0.04	0.11	0.20	0.27	0.33	0.38	0.43	0.47	0.50							
485	5.48	6.03	6.71	7.40	8.07	8.41	9.08	9.82	10.6	11.1	11.8	12.7	13.6	14.7	15.9	17.2	0.00	0.05	0.13	0.22	0.30	0.37	0.43	0.48	0.53	0.56							
575	6.35	6.99	7.79	8.58	9.37	9.76	10.5	11.4	12.3	12.9	13.7	14.8	15.8	17.0	18.5	19.9	0.00	0.06	0.15	0.26	0.36	0.43	0.51	0.57	0.62	0.66							
690	7.42	8.18	9.12	10.1	11.0	11.4	12.4	13.4	14.4	15.2	16.1	17.3	18.5	19.9	21.6	23.3	0.00	0.07	0.18	0.32	0.43	0.52	0.61	0.69	0.75	0.79							
725	7.74	8.53	9.51	10.5	11.5	11.9	12.9	13.9	15.1	15.8	16.7	18.0	19.3	20.8	22.5	24.3	0.00	0.07	0.19	0.33	0.45	0.55	0.64	0.72	0.79	0.83							
870	9.02	9.95	11.1	12.2	13.4	13.9	15.1	16.3	17.6	18.5	19.5	21.0	22.5	24.1	26.2	28.1	0.00	0.08	0.23	0.40	0.54	0.66	0.77	0.86	0.94	1.00							
950	9.70	10.7	11.9	13.2	14.4	15.0	16.2	17.5	18.9	19.9	21.0	22.6	24.2	25.9	28.0	30.1	0.00	0.09	0.25	0.43	0.59	0.72	0.84	0.94	1.03	1.09							
1160	11.4	12.6	14.1	15.5	17.0	17.7	19.1	20.6	22.2	23.3	24.6	26.4	28.2	30.2	32.5	34.8	0.00	0.11	0.30	0.53	0.72	0.87	1.02	1.15	1.26	1.33							
1425	13.4	14.8	16.5	18.2	19.9	20.7	22.3	24.1	25.9	27.1	28.6	30.6	32.6	34.7	37.2	39.5	0.00	0.14	0.37	0.65	0.89	1.07	1.26	1.42	1.54	1.63							
1750	15.6	17.2	19.2	21.2	23.0	24.0	25.8	27.7	29.7	31.0	32.6	34.7	36.7	38.8			0.00	0.17	0.46	0.80	1.09	1.32	1.55	1.74	1.90	2.01							
2850	20.5	22.5	24.9	27.1													0.00	0.27	0.75	1.30	1.77	2.15	2.52	2.83	3.09	3.27							
3450	21.3																0.00	0.33	0.90	1.58	2.15	2.60	3.05	3.43	3.74	3.96							
100	1.36	1.48	1.64	1.80	1.96	2.04	2.19	2.36	2.55	2.67	2.83	3.04	3.26	3.50	3.80	4.11	0.00	0.01	0.03	0.05	0.06	0.08	0.09	0.10	0.11	0.11							
200	2.52	2.76	3.06	3.36	3.66	3.81	4.11	4.44	4.79	5.03	5.32	5.73	6.14	6.60	7.18	7.75	0.00	0.02	0.05	0.09	0.12	0.15	0.18	0.20	0.22	0.23							
300	3.60	3.96	4.40	4.83	5.27	5.49	5.92	6.40	6.91	7.25	7.68	8.27	8.86	9.54	10.4	11.2	0.00	0.03	0.08	0.14	0.19	0.23	0.26	0.30	0.32	0.34							
400	4.63	5.10	5.67	6.24	6.81	7.09	7.66	8.27	8.94	9.39	9.94	10.7	11.5	12.3	13.4	14.5	0.00	0.04	0.10	0.18	0.25	0.30	0.35	0.40	0.43	0.46							
500	5.63	6.19	6.90	7.60	8.29	8.64	9.33	10.1	10.9	11.4	12.1	13.1	14.0	15.1	16.4	17.7	0.00	0.05	0.13	0.23	0.31	0.38	0.44	0.50	0.54	0.57							
600	6.58	7.25	8.08	8.91	9.73	10.1	10.9	11.8	12.8	13.4	14.2	15.3	16.4	17.6	19.2	20.7	0.00	0.06	0.16	0.27	0.37	0.45	0.53	0.60	0.65	0.69							
700	7.51	8.28	9.23	10.2	11.1	11.6	12.5	13.5	14.6	15.4	16.3	17.5	18.7	20.1	21.9	23.6	0.00	0.07	0.18	0.32	0.44	0.53	0.62	0.70	0.76	0.80							
800	8.41	9.27	10.3	11.4	12.5	13.0	14.0	15.2	16.4	17.2	18.2	19.6	21.0	22.5	24.4	26.3	0.00	0.08	0.21	0.37	0.50	0.60	0.71	0.80	0.87	0.92							
900	9.28	10.2	11.4	12.6	13.8	14.3	15.5	16.7	18.1	19.0	20.1	21.6	23.1	24.8	26.9	28.9	0.00	0.09	0.24	0.41	0.56	0.68	0.79	0.89	0.97	1.03							
1000	10.1	11.2	12.5	13.8	15.0	15.7	16.9	18.3	19.7	20.7	21.9	23.5	25.2	27.0	29.2	31.3	0.00	0.10	0.26	0.46	0.62	0.75	0.88	0.99	1.08	1.15							
1100	10.9	12.1	13.5	14.9	16.2	16.9	18.3	19.7	21.3	22.3	23.6	25.4	27.1	29.0	31.3	33.6	0.00	0.11	0.29	0.50	0.68	0.83	0.97	1.09	1.19	1.26							
1200	11.7	13.0	14.5	15.9	17.4	18.1	19.6	21.1	22.8	23.9	25.3	27.1	28.9	30.9	33.3	35.6	0.00	0.12	0.31	0.55	0.75	0.91	1.06	1.19	1.30	1.38							
1300	12.5	13.8	15.4	17.0	18.5	19.3	20.8	22.5	24.2	25.4	26.8	28.7	30.6	32.7	35.2	37.5	0.00	0.13	0.34	0.59	0.81	0.98	1.15	1.29	1.41	1.49							
1400	13.2	14.6	16.3	18.0	19.6	20.4	22.0	23.8	25.6	26.8	28.3	30.3	32.2	34.3	36.8	39.2	0.00	0.13	0.37	0.64	0.87	1.06	1.24	1.39	1.52	1.61							
1500	13.9	15.4	17.2	18.9	20.7	21.5	23.2	25.0	26.9	28.1	29.6	31.7	33.7	35.8	38.3	40.6	0.00	0.14	0.39	0.69	0.93	1.13	1.32	1.49	1.62	1.72							
1600	14.6	16.2	18.0	19.9	21.7	22.5	24.3	26.1	28.1	29.4	30.9	33.0	35.0	37.1	39.6		0.00	0.15	0.42	0.73	1.00	1.21	1.41	1.59	1.73	1.84							
1700	15.3	16.9	18.8	20.7	22.6	23.5	25.3	27.2	29.2	30.5	32.1	34.2	36.1	38.2			0.00	0.16	0.45	0.78	1.06	1.28	1.50	1.69	1.84	1.95							
1800	15.9	17.6	19.6	21.6	23.5	24.4	26.2	28.2	30.2	31.5	33.1	35.2	37.2				0.00	0.17	0.47	0.82	1.12	1.36	1.59	1.79	1.95	2.06							
1900	16.5	18.2	20.3	22.3	24.3	25.3	27.1	29.1	31.2	32.5	34.1	36.1					0.00	0.18	0.50	0.87	1.18	1.43	1.68	1.89	2.06	2.18							
2000	17.1	18.8	21.0	23.1	25.1	26.1	27.9	29.9	32.0	33.3	34.9						0.00	0.19	0.52	0.91	1.24	1.51	1.77	1.99	2.17	2.29							
2200	18.1	20.0	22.2	24.4	26.4	27.4	29.4	31.4	33.4								0.00	0.21	0.58	1.01	1.37	1.66	1.94	2.19	2.38	2.52							
2400	19.0	20.9	23.3	25.5	27.6	28.5	30.5	32.4									0.00	0.23	0.63	1.10	1.49	1.81	2.12	2.39	2.60	2.75							
2600	19.8	21.8	24.1	26.3	28.4	29.4											0.00	0.25	0.68	1.19	1.62	1.96	2.30	2.58	2.82	2.98							
2800	20.4	22.4	24.8	26.9													0.00	0.27	0.73	1.28	1.74	2.11	2.47	2.78	3.03	3.21							
3000	20.9	22.9	25.2														0.00	0.29	0.79	1.37	1.87	2.26	2.65	2.98	3.25	3.44							
3200	21.2	23.1															0.00	0.31	0.84	1.46	1.99	2.41	2.83	3.18	3.47	3.67							
3400	21.3																0.00	0.33	0.89	1.55	2.12	2.56	3.00	3.38	3.68	3.90							

Drives for rpm-diameter combinations where no horsepower is shown may be practical if all conditions are known. See your local Gates representative

Table No. B12



Rated Horsepower per Belt for 5VX Super HC® Molded Notch V-Belts and Super HC Molded Notch PowerBand® Belts

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Outside Diameter																	RPM of Slower Shaft	Additional Horsepower per Belt for Speed Ratio																	
	4.40	4.65	4.90	5.20	5.50	5.90	6.30	6.70	7.10	7.50	8.00	8.50	9.00	9.25	9.75	10.3	10.9		11.3	11.8	12.5	13.2	14.0	15.0	16.0	1.00	1.02	1.04	1.07	1.10	1.14	1.18	1.25	1.35	1.57	over
435	2.57	2.90	3.22	3.61	3.99	4.51	5.01	5.52	6.03	6.53	7.16	7.78	8.40	8.71	9.32	10.0	10.7	11.2	11.8	12.7	13.5	14.5	15.6	16.8	435	0.00	0.03	0.07	0.10	0.14	0.17	0.21	0.24	0.28	0.31	0.35
485	2.82	3.18	3.54	3.97	4.40	4.96	5.53	6.09	6.65	7.20	7.90	8.58	9.27	9.61	10.3	11.0	11.8	12.4	13.1	14.0	14.9	16.0	17.3	18.6	485	0.00	0.04	0.08	0.12	0.16	0.19	0.23	0.27	0.31	0.35	0.41
575	3.27	3.69	4.11	4.61	5.11	5.77	6.43	7.09	7.74	8.40	9.21	10.0	10.8	11.2	12.0	12.9	13.8	14.4	15.2	16.3	17.4	18.6	20.1	21.6	575	0.00	0.05	0.09	0.14	0.18	0.23	0.28	0.32	0.37	0.41	0.50
690	3.82	4.32	4.81	5.41	6.00	6.78	7.57	8.34	9.12	8.88	10.8	11.8	12.7	13.2	14.1	15.2	16.3	17.0	17.9	19.2	20.5	21.9	23.7	25.4	690	0.00	0.06	0.11	0.17	0.22	0.28	0.33	0.39	0.44	0.50	0.52
725	3.98	4.50	5.02	5.65	6.27	7.09	7.90	8.72	9.53	10.3	11.3	12.3	13.3	13.8	14.8	15.9	17.0	17.8	18.7	20.1	21.4	22.9	24.7	26.6	725	0.00	0.06	0.12	0.17	0.23	0.29	0.35	0.41	0.46	0.52	0.52
870	4.64	5.26	5.88	6.61	7.35	8.32	9.28	10.2	11.2	12.1	13.3	14.5	15.7	16.2	17.4	18.6	20.0	20.9	22.0	23.6	25.1	26.9	29.0	31.1	870	0.00	0.07	0.14	0.21	0.28	0.35	0.42	0.49	0.56	0.63	0.63
950	5.00	5.67	6.34	7.13	7.93	8.98	10.0	11.1	12.1	13.1	14.4	15.7	16.9	17.5	18.8	20.1	21.6	22.6	23.8	25.5	27.1	29.0	31.3	33.5	950	0.00	0.08	0.15	0.23	0.30	0.38	0.46	0.53	0.61	0.68	0.68
1160	5.90	6.71	7.51	8.46	9.42	10.7	11.9	13.2	14.4	15.6	17.1	18.7	20.1	20.9	22.4	24.0	25.7	26.8	28.2	30.2	32.1	34.3	36.9	39.5	1160	0.00	0.09	0.19	0.28	0.37	0.46	0.56	0.65	0.74	0.84	0.84
1425	6.98	7.95	8.92	10.1	11.2	12.7	14.2	15.7	17.2	18.6	20.5	22.2	24.0	24.9	26.6	28.5	30.5	31.8	33.5	35.7	37.9	40.4	43.4	46.2	1425	0.00	0.11	0.23	0.34	0.46	0.57	0.68	0.80	0.91	1.03	1.03
1750	8.23	9.40	10.6	11.9	13.3	15.1	16.9	18.7	20.4	22.1	24.3	26.4	28.4	29.4	31.4	33.6	35.9	37.4	39.3	41.8	44.2	46.9	49.4	51.6	1750	0.00	0.14	0.28	0.42	0.56	0.70	0.84	0.98	1.12	1.26	1.26
2850	11.9	13.6	15.4	17.4	19.4	22.1	24.6	27.2	29.6	32.0	34.9	37.6													2850	0.00	0.23	0.46	0.68	0.91	1.14	1.37	1.60	1.83	2.05	2.05
3450	13.4	15.5	17.5	19.8	22.1	25.1	27.9	30.7	33.3																3450	0.00	0.28	0.55	0.83	1.10	1.38	1.66	1.93	2.21	2.48	2.48
4000	14.7	17.1	19.5	22.1	24.9	28.1	31.1	34.1	37.1	40.1	43.1	46.1	49.1	52.1	55.1	58.1	61.1	64.1	67.1	70.1	73.1	76.1	79.1	4000	0.00	0.31	0.61	0.91	1.21	1.51	1.81	2.11	2.41	2.71	2.71	
4800	16.4	19.1	21.8	24.7	27.6	31.1	34.1	37.1	40.1	43.1	46.1	49.1	52.1	55.1	58.1	61.1	64.1	67.1	70.1	73.1	76.1	79.1	82.1	4800	0.00	0.35	0.67	1.01	1.35	1.69	2.03	2.37	2.71	3.05	3.05	
5600	18.2	21.2	24.2	27.4	30.6	34.1	37.1	40.1	43.1	46.1	49.1	52.1	55.1	58.1	61.1	64.1	67.1	70.1	73.1	76.1	79.1	82.1	85.1	5600	0.00	0.40	0.75	1.11	1.47	1.83	2.19	2.55	2.91	3.27	3.27	
6000	19.5	22.7	25.9	29.3	32.7	36.1	39.1	42.1	45.1	48.1	51.1	54.1	57.1	60.1	63.1	66.1	69.1	72.1	75.1	78.1	81.1	84.1	87.1	6000	0.00	0.43	0.79	1.17	1.55	1.93	2.31	2.69	3.07	3.45	3.45	
6500	20.8	24.2	27.6	31.1	34.6	38.1	41.1	44.1	47.1	50.1	53.1	56.1	59.1	62.1	65.1	68.1	71.1	74.1	77.1	80.1	83.1	86.1	89.1	6500	0.00	0.46	0.83	1.21	1.59	1.97	2.35	2.73	3.11	3.49	3.49	
7000	22.1	25.7	29.3	32.9	36.5	40.1	43.1	46.1	49.1	52.1	55.1	58.1	61.1	64.1	67.1	70.1	73.1	76.1	79.1	82.1	85.1	88.1	91.1	7000	0.00	0.49	0.87	1.25	1.63	1.99	2.37	2.75	3.13	3.51	3.51	
7500	23.4	27.1	30.8	34.5	38.2	41.9	45.1	48.1	51.1	54.1	57.1	60.1	63.1	66.1	69.1	72.1	75.1	78.1	81.1	84.1	87.1	90.1	93.1	7500	0.00	0.52	0.91	1.29	1.67	2.03	2.41	2.79	3.17	3.55	3.55	
8000	24.7	28.5	32.3	36.1	39.9	43.7	47.1	50.1	53.1	56.1	59.1	62.1	65.1	68.1	71.1	74.1	77.1	80.1	83.1	86.1	89.1	92.1	95.1	8000	0.00	0.55	0.95	1.33	1.71	2.07	2.45	2.83	3.21	3.59	3.59	
8500	26.0	29.9	33.8	37.7	41.6	45.5	49.1	52.1	55.1	58.1	61.1	64.1	67.1	70.1	73.1	76.1	79.1	82.1	85.1	88.1	91.1	94.1	97.1	8500	0.00	0.58	0.99	1.37	1.75	2.11	2.49	2.87	3.25	3.63	3.63	
9000	27.3	31.3	35.3	39.3	43.3	47.3	50.1	53.1	56.1	59.1	62.1	65.1	68.1	71.1	74.1	77.1	80.1	83.1	86.1	89.1	92.1	95.1	98.1	9000	0.00	0.61	1.01	1.39	1.77	2.13	2.51	2.89	3.27	3.65	3.65	
9500	28.6	32.7	36.8	40.9	45.0	49.1	52.1	55.1	58.1	61.1	64.1	67.1	70.1	73.1	76.1	79.1	82.1	85.1	88.1	91.1	94.1	97.1	100.1	9500	0.00	0.64	1.05	1.43	1.81	2.17	2.55	2.93	3.31	3.69	3.69	
10000	29.9	34.1	38.3	42.5	46.7	50.9	53.1	56.1	59.1	62.1	65.1	68.1	71.1	74.1	77.1	80.1	83.1	86.1	89.1	92.1	95.1	98.1	101.1	10000	0.00	0.67	1.09	1.47	1.85	2.21	2.59	2.97	3.35	3.73	3.73	
10500	31.2	35.5	39.8	44.1	48.4	52.7	55.1	58.1	61.1	64.1	67.1	70.1	73.1	76.1	79.1	82.1	85.1	88.1	91.1	94.1	97.1	100.1	103.1	10500	0.00	0.70	1.13	1.51	1.89	2.25	2.63	3.01	3.39	3.77	3.77	
11000	32.5	36.9	41.3	45.7	50.1	54.5	57.1	60.1	63.1	66.1	69.1	72.1	75.1	78.1	81.1	84.1	87.1	90.1	93.1	96.1	99.1	102.1	105.1	11000	0.00	0.73	1.17	1.55	1.93	2.29	2.67	3.05	3.43	3.81	3.81	
11500	33.8	38.3	42.8	47.3	51.8	56.3	59.1	62.1	65.1	68.1	71.1	74.1	77.1	80.1	83.1	86.1	89.1	92.1	95.1	98.1	101.1	104.1	107.1	11500	0.00	0.76	1.21	1.59	1.97	2.33	2.71	3.09	3.47	3.85	3.85	
12000	35.1	39.7	44.3	48.9	53.5	58.1	61.1	64.1	67.1	70.1	73.1	76.1	79.1	82.1	85.1	88.1	91.1	94.1	97.1	100.1	103.1	106.1	109.1	12000	0.00	0.79	1.25	1.63	2.01	2.37	2.75	3.13	3.51	3.89	3.89	
12500	36.4	41.1	45.8	50.5	55.2	59.9	62.1	65.1	68.1	71.1	74.1	77.1	80.1	83.1	86.1	89.1	92.1	95.1	98.1	101.1	104.1	107.1	110.1	12500	0.00	0.82	1.29	1.67	2.05	2.41	2.79	3.17	3.55	3.93	3.93	
13000	37.7	42.5	47.3	52.1	56.9	61.7	64.1	67.1	70.1	73.1	76.1	79.1	82.1	85.1	88.1	91.1	94.1	97.1	100.1	103.1	106.1	109.1	112.1	13000	0.00	0.85	1.33	1.71	2.09	2.45	2.83	3.21	3.59	3.97	3.97	
13500	39.0	43.9	48.8	53.7	58.6	63.5	65.1	68.1	71.1	74.1	77.1	80.1	83.1	86.1	89.1	92.1	95.1	98.1	101.1	104.1	107.1	110.1	113.1	13500	0.00	0.88	1.37	1.75	2.13	2.49	2.87	3.25	3.63	4.01	4.01	
14000	40.3	45.3	50.3	55.3	60.3	65.3	67.1	70.1	73.1	76.1	79.1	82.1	85.1	88.1	91.1	94.1	97.1	100.1	103.1	106.1	109.1	112.1	115.1	14000	0.00	0.91	1.41	1.79	2.17	2.53	2.91	3.29	3.67	4.05	4.05	
14500	41.6	46.7	51.8	56.9	62.0	67.1	69.1	72.1	75.1	78.1	81.1	84.1	87.1	90.1	93.1	96.1	99.1	102.1	105.1	108.1	111.1	114.1	117.1	14500	0.00	0.94	1.45	1.83	2.21	2.57	2.95	3.33	3.71	4.09	4.09	
15000	42.9	48.1	53.3	58.5	63.7	68.9	71.1	74.1	77.1	80.1	83.1	86.1	89.1	92.1	95.1	98.1	101.1	104.1	107.1	110.1	113.1	116.1	119.1	15000	0.00	0.97	1.49	1.87	2.25	2.61	2.99	3.37	3.75	4.13	4.13	
15500	44.2	49.5	54.8	60.1	65.4	70.7	72.1	75.1	78.1	81.1	84.1	87.1	90.1	93.1	96.1	99.1	102.1	105.1	108.1	111.1	114.1	117.1	120.1	15500	0.00	1.00	1.53	1.91	2.29	2.65	3.03	3.41	3.79	4.17	4.17	
16000	45.5	50.9	56.3	61.7	67.1	72.5	74.1	77.1	80.1	83.1	86.1	89.1	92.1	95.1	98.1	101.1	104.1	107.1	110.1																	

Table No. B13



Rate of Horsepower per Foot of Small Sheave Outside Diameter

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Outside Diameter																RPM of Faster Shaft	Additional Horsepower per Belt for Speed Ratio															
	7.10	7.50	8.00	8.50	9.00	9.25	9.75	10.30	10.90	11.30	11.80	12.50	13.20	14.00	15.00	16.00		1.00	1.02	1.03	1.04	1.06	1.07	1.09	1.12	1.16	1.24						
435	7.47	8.48	9.74	11.0	12.2	12.9	14.1	15.5	17.0	18.0	19.2	20.9	22.6	24.6	27.0	29.4	435	0.00	0.06	0.11	0.17	0.23	0.29	0.34	0.40	0.46	0.52						
485	8.25	9.37	10.8	12.2	13.5	14.2	15.6	17.1	18.8	19.9	21.2	23.2	25.1	27.2	29.9	32.6	485	0.00	0.06	0.13	0.19	0.26	0.32	0.38	0.45	0.51	0.58						
575	9.61	10.9	12.6	14.2	15.8	16.7	18.3	20.1	22.0	23.3	24.9	27.1	29.3	31.9	35.0	38.2	575	0.00	0.08	0.15	0.23	0.30	0.38	0.45	0.53	0.61	0.68						
690	11.3	12.9	14.8	16.8	18.7	19.7	21.6	23.7	26.0	27.5	29.4	32.1	34.7	37.7	41.4	45.1	690	0.00	0.09	0.18	0.27	0.36	0.45	0.55	0.64	0.73	0.82						
725	11.8	13.5	15.5	17.5	19.6	20.6	22.6	24.8	27.2	28.8	30.8	33.6	36.3	39.4	43.3	47.2	725	0.00	0.10	0.19	0.29	0.38	0.48	0.57	0.67	0.76	0.86						
870	13.9	15.9	18.3	20.7	23.1	24.3	26.7	29.3	32.1	34.8	36.3	39.6	42.8	46.5	51.0	55.5	870	0.00	0.11	0.23	0.34	0.46	0.57	0.69	0.80	0.92	1.03						
950	15.0	17.1	19.8	22.4	25.0	26.3	28.9	31.7	34.8	36.8	39.3	42.8	46.3	50.3	55.2	60.0	950	0.00	0.13	0.25	0.38	0.50	0.63	0.75	0.88	1.00	1.13						
1160	17.9	20.4	23.6	26.7	29.8	31.4	34.5	37.8	41.5	43.9	46.9	51.0	55.2	59.8	65.5	71.1	1160	0.00	0.15	0.31	0.46	0.61	0.76	0.92	1.07	1.22	1.38						
1425	21.3	24.3	28.1	31.9	35.6	37.5	41.2	45.2	49.5	52.3	55.9	60.7	65.5	70.9	77.5	83.9	1425	0.00	0.19	0.38	0.56	0.75	0.94	1.13	1.31	1.50	1.69						
1750	25.2	28.9	33.4	37.8	42.2	44.4	48.8	53.4	58.5	61.8	65.8	71.4	76.9	82.9			1750	0.00	0.23	0.46	0.69	0.92	1.15	1.38	1.61	1.84	2.08						
2850	35.8	41.0	47.4	53.6													2850	0.00	0.38	0.75	1.13	1.50	1.88	2.25	2.63	3.00	3.38						
3450	39.5																3450	0.00	0.45	0.91	1.36	1.82	2.27	2.73	3.18	3.64	4.09						
100	1.95	2.20	2.50	2.81	3.11	3.27	3.57	3.90	4.27	4.51	4.81	5.23	5.66	6.14	6.73	7.33	100	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.09	0.11	0.12						
200	3.68	4.16	4.76	5.36	5.95	6.25	6.84	7.49	8.20	8.67	9.26	10.1	10.9	11.8	13.0	14.2	200	0.00	0.03	0.05	0.08	0.11	0.13	0.16	0.18	0.21	0.24						
300	5.33	6.04	6.92	7.80	8.68	9.12	9.99	11.0	12.0	12.7	13.6	14.8	16.0	17.4	19.1	20.8	300	0.00	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36						
400	6.93	7.86	9.02	10.2	11.3	11.9	13.1	14.3	15.7	16.6	17.8	19.3	20.9	22.7	25.0	27.2	400	0.00	0.05	0.11	0.16	0.21	0.26	0.32	0.37	0.42	0.47						
500	8.48	9.63	11.1	12.5	13.9	14.6	16.1	17.6	19.3	20.4	21.9	23.8	25.8	28.0	30.8	33.5	500	0.00	0.07	0.13	0.20	0.26	0.33	0.40	0.46	0.53	0.59						
600	9.99	11.4	13.1	14.8	16.5	17.3	19.0	20.9	22.9	24.2	25.9	28.2	30.5	33.1	36.4	39.7	600	0.00	0.08	0.16	0.24	0.32	0.40	0.47	0.55	0.63	0.71						
700	11.5	13.1	15.0	17.0	19.0	19.9	21.9	24.0	26.4	27.9	29.8	32.5	35.2	38.2	41.9	45.7	700	0.00	0.09	0.18	0.28	0.37	0.46	0.55	0.65	0.74	0.83						
800	12.9	14.7	17.0	19.2	21.4	22.5	24.7	27.1	29.8	31.5	33.7	36.7	39.7	43.1	47.3	51.5	800	0.00	0.11	0.21	0.32	0.42	0.53	0.63	0.74	0.84	0.95						
900	14.3	16.3	18.8	21.3	23.8	25.0	27.5	30.2	33.1	35.0	37.5	40.8	44.1	47.9	52.6	57.2	900	0.00	0.12	0.24	0.36	0.47	0.59	0.71	0.83	0.95	1.07						
1000	15.7	17.9	20.7	23.4	26.2	27.5	30.2	33.2	36.4	38.5	41.2	44.8	48.5	52.6	57.7	62.7	1000	0.00	0.13	0.26	0.40	0.53	0.66	0.79	0.92	1.05	1.19						
1100	17.1	19.5	22.5	25.5	28.5	29.9	32.9	36.1	39.6	41.9	44.8	48.7	52.7	57.1	62.6	68.0	1100	0.00	0.14	0.29	0.43	0.58	0.72	0.87	1.01	1.16	1.30						
1200	18.4	21.0	24.3	27.5	30.7	32.3	35.5	39.0	42.7	45.2	48.3	52.6	56.8	61.5	67.4	73.1	1200	0.00	0.16	0.32	0.47	0.63	0.79	0.95	1.11	1.26	1.42						
1300	19.7	22.5	26.0	29.5	32.9	34.6	38.1	41.8	45.8	48.4	51.7	56.3	60.8	65.8	72.0	78.0	1300	0.00	0.17	0.34	0.51	0.69	0.86	1.03	1.20	1.37	1.54						
1400	21.0	24.0	27.7	31.4	35.1	36.9	40.5	44.5	48.7	51.6	55.0	59.9	64.6	69.9	76.4	82.7	1400	0.00	0.18	0.37	0.55	0.74	0.92	1.11	1.29	1.48	1.66						
1500	22.2	25.4	29.4	33.3	37.2	39.1	43.0	47.1	51.6	54.6	58.3	63.3	68.3	73.9	80.6	87.2	1500	0.00	0.20	0.40	0.59	0.79	0.99	1.19	1.38	1.58	1.78						
1600	23.4	26.8	31.0	35.2	39.3	41.3	45.3	49.7	54.4	57.5	61.4	66.7	71.8	77.6	84.6		1600	0.00	0.21	0.42	0.63	0.84	1.05	1.26	1.48	1.69	1.90						
1700	24.6	28.2	32.6	37.0	41.3	43.4	47.6	52.2	57.2	60.4	64.4	69.9	75.2	81.2			1700	0.00	0.22	0.45	0.67	0.90	1.12	1.34	1.57	1.79	2.02						
1800	25.8	29.5	34.1	38.7	43.2	45.4	49.9	54.6	59.8	63.1	67.3	72.9	78.5				1800	0.00	0.24	0.47	0.71	0.95	1.19	1.42	1.66	1.90	2.13						
1900	26.9	30.8	35.6	40.4	45.1	47.4	52.0	57.0	62.3	65.8	70.0	75.9					1900	0.00	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25						
2000	28.0	32.1	37.1	42.0	46.9	49.3	54.1	59.2	64.7	68.3	72.7						2000	0.00	0.26	0.53	0.79	1.05	1.32	1.58	1.84	2.11	2.37						
2200	30.1	34.4	39.9	45.2	50.4	52.9	58.0	63.4	69.2								2200	0.00	0.29	0.58	0.87	1.16	1.45	1.74	2.03	2.32	2.61						
2400	32.0	36.7	42.4	48.1	53.6	56.3	61.6	67.3									2400	0.00	0.32	0.63	0.95	1.27	1.58	1.90	2.21	2.53	2.85						
2600	33.8	38.7	44.8	50.7	56.5	59.3											2600	0.00	0.34	0.69	1.03	1.37	1.71	2.06	2.40	2.74	3.08						
2800	35.4	40.6	46.9	53.1													2800	0.00	0.37	0.74	1.11	1.48	1.84	2.21	2.58	2.95	3.32						
3000	36.9	42.3	48.8														3000	0.00	0.40	0.79	1.19	1.58	1.98	2.37	2.77	3.16	3.56						
3200	38.1	43.7															3200	0.00	0.42	0.84	1.26	1.69	2.11	2.53	2.95	3.37	3.79						
3400	39.2																3400	0.00	0.45	0.90	1.34	1.79	2.24	2.69	3.14	3.58	4.03						

Drives for rpm-diameter combinations where no horsepower is shown may be practical if all conditions are known. See your local Gates representative.

Table No. B15



Rate of Rotation of Shaft (rpm) vs. Basic Horsepower per Belt for Small Sheave Outside Diameter

Rate of Rotation of Shaft (rpm)	Basic Horsepower per Belt for Small Sheave Outside Diameter										RPM of Faster Shaft	Additional Horsepower per Belt for Speed Ratio										
	12.50	13.20	14.00	15.00	16.00	17.00	18.00	19.00	20.00	21.20		22.40	1.00 to 1.01	1.02 to 1.03	1.04 to 1.05	1.07 to 1.09	1.10 to 1.13	1.14 to 1.18	1.19 to 1.25	1.26 to 1.36	1.36 to 1.58	
435	20.2	22.5	25.1	28.3	31.4	34.6	37.7	40.8	43.8	47.5	51.1	435	0.00	0.23	0.46	0.70	0.93	1.16	1.39	1.63	1.86	2.09
485	22.2	24.7	27.5	31.0	34.5	38.0	41.4	44.8	48.1	52.1	56.1	485	0.00	0.26	0.52	0.78	1.04	1.29	1.55	1.81	2.07	2.33
575	25.6	28.5	31.8	35.8	39.9	43.9	47.8	51.7	55.6	60.2	64.7	575	0.00	0.31	0.61	0.92	1.23	1.53	1.84	2.15	2.46	2.76
690	29.7	33.1	36.9	41.7	46.4	51.0	55.6	60.1	64.5	69.7	74.8	690	0.00	0.37	0.74	1.10	1.47	1.84	2.21	2.58	2.95	3.31
725	30.9	34.5	38.5	43.4	48.3	53.1	57.8	62.5	67.0	72.4	77.7	725	0.00	0.39	0.77	1.16	1.55	1.93	2.32	2.71	3.10	3.48
870	35.7	39.8	44.4	50.1	55.7	61.2	66.5	71.8	76.9	82.9	88.7	870	0.00	0.46	0.93	1.39	1.86	2.32	2.79	3.25	3.72	4.18
950	38.1	42.5	47.5	53.5	59.4	65.2	70.9	76.4	81.8	88.0	94.0	950	0.00	0.51	1.01	1.52	2.03	2.53	3.04	3.55	4.06	4.56
1160	43.9	49.0	54.6	61.5	68.2	74.6	80.8	86.7	92.4	98.9		1160	0.00	0.62	1.24	1.86	2.48	3.10	3.72	4.34	4.96	5.57
1425	49.8	55.5	61.8	69.3	76.5	83.2						1425	0.00	0.76	1.52	2.28	3.04	3.80	4.57	5.33	6.09	6.85
1750	54.7	60.8	67.3									1750	0.00	0.93	1.87	2.80	3.74	4.67	5.61	6.54	7.48	8.41
50	2.99	3.29	3.64	4.06	4.49	4.91	5.33	5.75	6.17	6.67	7.17	50	0.00	0.03	0.05	0.08	0.11	0.13	0.16	0.19	0.21	0.24
100	5.57	6.15	6.81	7.63	8.44	9.25	10.1	10.9	11.7	12.6	13.6	100	0.00	0.05	0.11	0.16	0.21	0.27	0.32	0.37	0.43	0.48
150	7.99	8.84	9.80	11.0	12.2	13.4	14.6	15.7	16.9	18.3	19.7	150	0.00	0.08	0.16	0.24	0.32	0.40	0.48	0.56	0.64	0.72
200	10.3	11.4	12.7	14.2	15.8	17.3	18.9	20.4	22.0	23.8	25.6	200	0.00	0.11	0.21	0.32	0.43	0.53	0.64	0.75	0.85	0.96
250	12.5	13.9	15.4	17.4	19.3	21.2	23.1	25.0	26.8	29.1	31.3	250	0.00	0.13	0.27	0.40	0.53	0.67	0.80	0.93	1.07	1.20
300	14.7	16.3	18.1	20.4	22.7	24.9	27.2	29.4	31.6	34.2	36.9	300	0.00	0.16	0.32	0.48	0.64	0.80	0.96	1.12	1.28	1.44
350	16.8	18.6	20.8	23.4	26.0	28.6	31.1	33.7	36.2	39.3	42.3	350	0.00	0.19	0.37	0.56	0.75	0.93	1.12	1.31	1.50	1.68
400	18.8	20.9	23.3	26.3	29.2	32.1	35.0	37.9	40.8	44.2	47.5	400	0.00	0.21	0.43	0.64	0.85	1.07	1.28	1.49	1.71	1.92
450	20.8	23.2	25.8	29.1	32.4	35.6	38.8	42.0	45.1	48.9	52.6	450	0.00	0.24	0.48	0.72	0.96	1.20	1.44	1.68	1.92	2.16
500	22.8	25.3	28.2	31.8	35.4	39.0	42.5	46.0	49.4	53.5	57.6	500	0.00	0.27	0.53	0.80	1.07	1.33	1.60	1.87	2.14	2.40
550	24.7	27.4	30.6	34.5	38.4	42.3	46.1	49.8	53.6	58.0	62.4	550	0.00	0.29	0.59	0.88	1.17	1.47	1.76	2.06	2.35	2.64
600	26.5	29.5	32.9	37.1	41.3	45.5	49.5	53.6	57.6	62.3	67.0	600	0.00	0.32	0.64	0.96	1.28	1.60	1.92	2.24	2.56	2.88
650	28.3	31.5	35.2	39.7	44.2	48.6	52.9	57.2	61.5	66.5	71.4	650	0.00	0.35	0.69	1.04	1.39	1.73	2.08	2.43	2.78	3.12
700	30.1	33.5	37.4	42.2	46.9	51.6	56.2	60.7	65.2	70.5	75.7	700	0.00	0.37	0.75	1.12	1.49	1.87	2.24	2.62	2.99	3.36
750	31.8	35.4	39.5	44.6	49.6	54.5	59.4	64.1	68.8	74.4	79.7	750	0.00	0.40	0.80	1.20	1.60	2.00	2.40	2.80	3.20	3.60
800	33.4	37.3	41.6	46.9	52.2	57.4	62.4	67.4	72.3	78.0	83.6	800	0.00	0.43	0.85	1.28	1.71	2.13	2.56	2.99	3.42	3.84
850	35.0	39.1	43.6	49.2	54.7	60.1	65.4	70.6	75.6	81.5	87.3	850	0.00	0.45	0.91	1.36	1.81	2.27	2.72	3.18	3.63	4.08
900	36.6	40.8	45.6	51.4	57.1	62.7	68.2	73.6	78.8	84.9	90.8	900	0.00	0.48	0.96	1.44	1.92	2.40	2.88	3.36	3.84	4.32
950	38.1	42.5	47.5	53.5	59.4	65.2	70.9	76.4	81.8	88.0	94.0	950	0.00	0.51	1.01	1.52	2.03	2.53	3.04	3.55	4.06	4.56
1000	39.6	44.1	49.3	55.5	61.7	67.7	73.5	79.1	84.6	90.9	97.0	1000	0.00	0.53	1.07	1.60	2.13	2.67	3.20	3.74	4.27	4.80
1050	41.0	45.7	51.0	57.5	63.8	70.0	75.9	81.7	87.3	93.7	99.8	1050	0.00	0.56	1.12	1.68	2.24	2.80	3.36	3.92	4.49	5.04
1100	42.4	47.2	52.7	59.4	65.9	72.1	78.2	84.1	89.7	96.2	102.3	1100	0.00	0.59	1.17	1.76	2.35	2.94	3.52	4.11	4.70	5.28
1150	43.7	48.7	54.3	61.2	67.8	74.2	80.4	86.3	92.0	98.5		1150	0.00	0.61	1.23	1.84	2.46	3.07	3.68	4.30	4.91	5.52
1200	44.9	50.1	55.9	62.9	69.6	76.2	82.4	88.4	94.1			1200	0.00	0.64	1.28	1.92	2.56	3.20	3.85	4.48	5.13	5.76
1250	46.1	51.4	57.3	64.5	71.4	78.0	84.3	90.3				1250	0.00	0.67	1.33	2.00	2.67	3.34	4.01	4.67	5.34	6.00
1300	47.3	52.7	58.7	66.0	73.0	79.6	86.0	92.0				1300	0.00	0.69	1.39	2.08	2.78	3.47	4.17	4.86	5.55	6.24
1350	48.3	53.9	60.0	67.4	74.5	81.2	87.5					1350	0.00	0.72	1.44	2.16	2.88	3.60	4.33	5.05	5.77	6.49
1400	49.4	55.0	61.2	68.7	75.8	82.6						1400	0.00	0.75	1.49	2.24	2.99	3.74	4.49	5.23	5.98	6.73
1450	50.3	56.0	62.4	69.9	77.1	83.9						1450	0.00	0.77	1.55	2.32	3.10	3.87	4.65	5.42	6.19	6.97
1500	51.2	57.0	63.4	71.1	78.2							1500	0.00	0.80	1.60	2.40	3.20	4.00	4.81	5.61	6.41	7.21
1550	52.0	57.9	64.4	72.1	79.3							1550	0.00	0.83	1.65	2.48	3.31	4.14	4.97	5.79	6.62	7.45
1600	52.8	58.8	65.3	73.0								1600	0.00	0.85	1.71	2.56	3.42	4.27	5.13	5.98	6.84	7.69
1650	53.5	59.5	66.1	73.7								1650	0.00	0.88	1.76	2.64	3.52	4.40	5.29	6.17	7.05	7.93
1700	54.1	60.2	66.7									1700	0.00	0.91	1.81	2.72	3.63	4.54	5.45	6.35	7.26	8.17
1750	54.7	60.8	67.3									1750	0.00	0.93	1.87	2.80	3.74	4.67	5.61	6.54	7.48	8.41
1800	55.2	61.3										1800	0.00	0.96	1.92	2.88	3.84	4.80	5.77	6.73	7.69	8.65
1850	55.6	61.7										1850	0.00	0.99	1.97	2.96	3.95	4.94	5.93	6.91	7.90	8.89
1900	55.9											1900	0.00	1.01	2.03	3.04	4.06	5.07	6.09	7.10	8.12	9.13
1950	56.2											1950	0.00	1.04	2.08	3.12	4.16	5.20	6.25	7.29	8.33	9.37

Drives for rpm-diameter combinations where no horsepower is shown may be practical if all conditions are known. See your local Gates representative

Table No. B16



Rate of rotation of motor and driven shafts

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Outside Diameter										Additional Horsepower per Belt for Speed Ratio										
	12.50	13.20	14.00	15.00	16.00	17.00	18.00	19.00	20.00	21.20	22.40	1.00	1.02	1.03	1.04	1.06	1.07	1.09	1.12	1.16	1.24
435	26.6	31.5	37.1	44.1	51.0	57.9	64.8	71.6	78.4	86.6	94.7	0.00	0.33	0.67	1.00	1.33	1.66	2.00	2.33	2.66	3.00
485	29.2	34.7	40.8	48.5	56.2	63.9	71.5	79.0	86.5	95.5	104.5	0.00	0.37	0.74	1.11	1.48	1.86	2.23	2.60	2.97	3.34
575	33.7	40.1	47.4	56.4	65.4	74.3	83.2	92.0	100.8	111.2	121.6	0.00	0.44	0.88	1.32	1.76	2.20	2.64	3.08	3.52	3.96
690	39.3	46.8	55.4	66.0	76.6	87.1	97.6	107.9	118.2	130.4	142.5	0.00	0.53	1.06	1.58	2.11	2.64	3.17	3.70	4.22	4.75
725	40.9	48.8	57.7	68.9	79.9	90.9	101.8	112.6	123.3	136.1	148.7	0.00	0.55	1.11	1.66	2.22	2.77	3.33	3.88	4.44	4.99
870	47.3	56.6	67.1	80.2	93.2	106.0	118.7	131.3	143.7	158.4	172.9	0.00	0.67	1.33	2.00	2.66	3.33	3.99	4.66	5.33	5.99
950	50.6	60.7	72.1	86.2	100.1	113.9	127.5	141.0	154.3	170.0	185.4	0.00	0.73	1.45	2.18	2.91	3.64	4.36	5.09	5.82	6.54
1160	58.6	70.5	84.0	100.6	116.9	133.0	148.8	164.3	179.5	197.3		0.00	0.89	1.78	2.66	3.55	4.44	5.33	6.21	7.10	7.99
1425	67.0	81.0	96.8	116.1	134.9	153.3						0.00	1.09	2.18	3.27	4.36	5.45	6.54	7.63	8.72	9.81
1750	74.5	90.6	108.6									0.00	1.34	2.68	4.02	5.36	6.70	8.04	9.37	10.71	12.05
50	3.90	4.52	5.22	6.10	6.97	7.84	8.71	9.58	10.4	11.5	12.5	0.00	0.04	0.08	0.11	0.15	0.19	0.23	0.27	0.31	0.34
100	7.28	8.48	9.85	11.6	13.3	15.0	16.7	18.3	20.0	22.1	24.1	0.00	0.08	0.15	0.23	0.31	0.38	0.46	0.54	0.61	0.69
150	10.5	12.2	14.3	16.8	19.3	21.8	24.3	26.8	29.3	32.3	35.2	0.00	0.11	0.23	0.34	0.46	0.57	0.69	0.80	0.92	1.03
200	13.5	15.8	18.5	21.8	25.1	28.4	31.7	35.0	38.3	42.2	46.1	0.00	0.15	0.31	0.46	0.61	0.77	0.92	1.07	1.22	1.38
250	16.4	19.3	22.6	26.7	30.8	34.9	39.0	43.1	47.1	52.0	56.8	0.00	0.19	0.38	0.57	0.77	0.96	1.15	1.34	1.53	1.72
300	19.3	22.7	26.7	31.6	36.4	41.3	46.1	51.0	55.8	61.6	67.3	0.00	0.23	0.46	0.69	0.92	1.15	1.38	1.61	1.84	2.07
350	22.1	26.1	30.6	36.3	41.9	47.5	53.2	58.7	64.3	71.0	77.6	0.00	0.27	0.54	0.80	1.07	1.34	1.61	1.87	2.14	2.41
400	24.8	29.3	34.5	40.9	47.3	53.7	60.0	66.4	72.7	80.2	87.7	0.00	0.31	0.61	0.92	1.22	1.53	1.84	2.14	2.45	2.76
450	27.4	32.5	38.2	45.4	52.6	59.7	66.8	73.9	80.9	89.3	97.6	0.00	0.34	0.69	1.03	1.38	1.72	2.07	2.41	2.75	3.10
500	30.0	35.6	41.9	49.9	57.8	65.6	73.4	81.2	89.0	98.2	107.4	0.00	0.38	0.77	1.15	1.53	1.91	2.30	2.68	3.06	3.44
550	32.5	38.6	45.6	54.2	62.9	71.4	80.0	88.4	96.9	106.9	116.9	0.00	0.42	0.84	1.26	1.68	2.10	2.53	2.95	3.37	3.79
600	35.0	41.6	49.1	58.5	67.9	77.1	86.4	95.5	104.6	115.5	126.3	0.00	0.46	0.92	1.38	1.84	2.30	2.76	3.21	3.67	4.13
650	37.4	44.5	52.6	62.7	72.8	82.7	92.6	102.5	112.2	123.9	135.4	0.00	0.50	0.99	1.49	1.99	2.49	2.98	3.48	3.98	4.48
700	39.7	47.4	56.1	66.9	77.6	88.2	98.8	109.3	119.7	132.1	144.3	0.00	0.54	1.07	1.61	2.14	2.68	3.21	3.75	4.29	4.82
750	42.0	50.2	59.4	70.9	82.3	93.6	104.8	115.9	127.0	140.1	153.0	0.00	0.57	1.15	1.72	2.30	2.87	3.44	4.02	4.59	5.17
800	44.2	52.9	62.7	74.8	86.9	98.9	110.7	122.4	134.1	147.9	161.5	0.00	0.61	1.22	1.84	2.45	3.06	3.67	4.29	4.90	5.51
850	46.4	55.5	65.9	78.7	91.4	104.0	116.5	128.8	141.0	155.4	169.7	0.00	0.65	1.30	1.95	2.60	3.25	3.90	4.55	5.20	5.85
900	48.5	58.1	69.0	82.5	95.8	109.0	122.1	135.0	147.8	162.8	177.7	0.00	0.69	1.38	2.07	2.76	3.44	4.13	4.82	5.51	6.20
950	50.6	60.7	72.1	86.2	100.1	113.9	127.5	141.0	154.3	170.0	185.4	0.00	0.73	1.45	2.18	2.91	3.64	4.36	5.09	5.82	6.54
1000	52.6	63.1	75.0	89.8	104.3	118.7	132.9	146.8	160.6	176.9	192.8	0.00	0.76	1.53	2.30	3.06	3.83	4.59	5.36	6.12	6.89
1050	54.5	65.5	77.9	93.2	108.4	123.3	138.0	152.5	166.8	183.6	200.0	0.00	0.80	1.61	2.41	3.21	4.02	4.82	5.62	6.43	7.23
1100	56.4	67.8	80.7	96.6	112.3	127.8	143.0	158.0	172.7	190.0	206.8	0.00	0.84	1.68	2.52	3.37	4.21	5.05	5.89	6.73	7.58
1150	58.2	70.1	83.4	99.9	116.2	132.1	147.9	163.3	178.4	196.1		0.00	0.88	1.76	2.64	3.52	4.40	5.28	6.16	7.04	7.92
1200	60.0	72.2	86.1	103.1	119.9	136.3	152.5	168.4	183.9			0.00	0.92	1.84	2.75	3.67	4.59	5.51	6.43	7.35	8.27
1250	61.7	74.3	88.6	106.2	123.5	140.4	157.0	173.2				0.00	0.96	1.91	2.87	3.83	4.78	5.74	6.70	7.65	8.61
1300	63.3	76.3	91.1	109.2	126.9	144.3	161.3	177.9				0.00	0.99	1.99	2.98	3.98	4.97	5.97	6.96	7.96	8.95
1350	64.8	78.3	93.4	112.0	130.2	148.0	165.4					0.00	1.03	2.07	3.10	4.13	5.17	6.20	7.23	8.26	9.30
1400	66.3	80.1	95.7	114.7	133.4	151.6						0.00	1.07	2.14	3.21	4.29	5.36	6.43	7.50	8.57	9.60
1450	67.7	81.9	97.8	117.4	136.4	155.0						0.00	1.11	2.22	3.33	4.44	5.55	6.66	7.77	8.88	9.99
1500	69.0	83.6	99.9	119.9	139.3							0.00	1.15	2.30	3.44	4.59	5.74	6.89	8.04	9.18	10.33
1550	70.3	85.1	101.8	122.2	142.1							0.00	1.19	2.37	3.56	4.75	5.93	7.12	8.30	9.49	10.68
1600	71.4	86.6	103.7	124.5								0.00	1.22	2.45	3.67	4.90	6.12	7.35	8.57	9.79	11.02
1650	72.5	88.0	105.4	126.6								0.00	1.26	2.53	3.79	5.05	6.31	7.58	8.84	10.10	11.36
1700	73.5	89.4	107.1									0.00	1.30	2.60	3.90	5.20	6.51	7.81	9.11	10.41	11.71
1750	74.5	90.6	108.6									0.00	1.34	2.68	4.02	5.36	6.70	8.04	9.37	10.71	12.05
1800	75.3	91.7										0.00	1.38	2.75	4.13	5.51	6.89	8.27	9.64	11.02	12.40
1850	76.1	92.7										0.00	1.42	2.83	4.25	5.66	7.08	8.49	9.91	11.33	12.74
1900	76.7											0.00	1.45	2.91	4.36	5.82	7.27	8.72	10.18	11.63	13.09
1950	77.3											0.00	1.49	2.98	4.48	5.97	7.46	8.95	10.45	11.94	13.43

Drives for rpm-diameter combinations where no horsepower is shown may be practical if all conditions are known. See your local Gates representative.

Heavy Duty V-Belt Drive Design Manual

Table No. B17

Hi-Power® II V-Belts and PowerBand® Belt Sizes

(PowerBand Belts are available in 2, 3, 4 or 5 bands in sizes shown, or wider, on a standard non-stock basis.)



A Section						B Section							
Hi-Power II V-Belt No.	Outside Circum. (in)	Hi-Power II V-Belt No.	Outside Circum. (in)	Hi-Power II V-Belt No.	Outside Circum. (in)	Hi-Power II V-Belt No.	Outside Circum. (in)	Hi-Power II V-Belt No.	Outside Circum. (in)	Hi-Power II V-Belt No.	Outside Circum. (in)	Hi-Power II V-Belt No.	Outside Circum. (in)
A20*	22	A73*	75	A137*	139	B24*	27	B78	81	B134*	137	B201*	204
A21*	23	A74	76	A140*	142	B25*	28	B79	82	B135*	138	B204*	207
A22*	24	A75	77	A144	146	B26*	29	B80	83	B136	139	B205*	208
A23*	25	A76*	78	A148*	150	B27*	30	B81	84	B137*	140	B206*	209
A24*	26	A77	79	A152*	154	B28*	31	B82	85	B138	141	B210	213
A25*	27	A78	80	A156*	158	B29*	32	B83	86	B139	142	B212*	213
A26*	28	A79*	81	A157*	159	B30*	33	B84	87	B140*	143	B215*	216
A27*	29	A80	82	A158	160	B31*	34	B85	88	B141	144	B217*	218
A28*	30	A81	83	A162*	164	B32*	35	B86	89	B142*	145	B218	219
A29*	31	A82*	84	A167*	169	B33*	36	B87	90	B143*	146	B220*	221
A29.8*	31.8	A83	85	A173	175	B34*	37	B88	91	B144	147	B221*	222
A30*	32	A84*	86	A180	182	B35	38	B89*	92	B145*	148	B223*	224
A31*	33	A85	87	A187*	189	B36*	39	B90	93	B146*	149	B225	226
A32*	34	A86*	88	A197*	199	B37*	40	B91*	94	B147*	150	B228*	229
A33*	35	A87*	89	A200*	202	B38	41	B92	95	B148	151	B230*	231
A34*	36	A88*	90			B39*	42	B93*	96	B149*	152	B234*	235
A35*	37	A89*	91			B40	43	B94*	97	B150	153	B235*	236
A36*	38	A90	92			B41*	44	B95	98	B151*	154	B236*	237
A37*	39	A91*	93			B42	45	B96	99	B152*	155	B237*	238
A38*	40	A92	94			B43	46	B97	100	B153*	156	B240	241
A39*	41	A93*	95			B44	47	B98*	101	B154	157	B248*	249
A40*	42	A94*	96			B45*	48	B99	102	B156*	159	B253*	254
A41*	43	A95*	97			B46	49	B100	103	B157*	160	B255	256
A42	44	A96	98			B47	50	B101*	104	B158	161	B265*	266
A43	45	A97*	99			B48	51	B102*	105	B160	163	B270	271
A44	46	A98*	100			B49*	52	B103	106	B161*	164	B276*	277
A45*	47	A99*	101			B50	53	B104	107	B162	165	B279*	280
A46	48	A100	102			B51	54	B105	108	B164*	167	B280*	281
A47	49	A101*	103			B52	55	B106*	109	B165*	168	B285*	286
A48	50	A102*	104			B53	56	B107*	110	B166*	169	B290*	291
A49	51	A103*	105			B54	57	B108	111	B167*	170	B292*	293
A50*	52	A104*	106			B55	58	B109	112	B168	171	B293*	294
A51	53	A105	107			B56	59	B110	113	B169*	172	B300	301
A52	54	A106*	108			B57	60	B111*	114	B170*	173	B310*	311
A53	55	A107*	109			B58	61	B112	115	B172*	175	B315	316
A54	56	A108*	110			B59	62	B113	116	B173	176	B330*	331
A55	57	A110	112			B60	63	B114	117	B174*	177	B340*	341
A56	58	A112	114			B61	64	B115	118	B175*	178	B345*	346
A57	59	A113*	115			B62	65	B116	119	B177*	180	B355*	356
A58	60	A114*	116			B63	66	B117*	120	B178*	181	B360*	361
A59*	61	A115*	117			B64	67	B118	121	B180	183	B394*	395
A60	62	A116*	118			B65	68	B119*	122	B182*	185	B433*	434
A61*	63	A117*	119			B66	69	B120	123	B184*	187	B472*	473
A62	64	A118*	120			B67	70	B122*	125	B185	188		
A63*	65	A120	122			B68	71	B123*	126	B186*	189		
A64	66	A124*	126			B69*	72	B124	127	B187*	190		
A65	67	A125*	127			B70	73	B125*	128	B188*	191		
A66	68	A127*	129			B71	74	B126*	129	B190	193		
A67*	69	A128	130			B72	75	B127*	130	B191*	194		
A68	70	A130*	132			B73	76	B128	131	B192*	195		
A69*	71	A132*	134			B74	77	B130	133	B195	198		
A70	72	A133*	135			B75	78	B131*	134	B197*	200		
A71	73	A134*	136			B76*	79	B132*	135	B199*	202		
A72*	74	A136	138			B77	80	B133	136	B200*	203		

* Not Available in A PowerBand

* Not Available in B PowerBand

Heavy Duty V-Belt Drive Design Manual

Table No. B18

Hi-Power® II V-Belts and PowerBand® Belt Sizes — continued

(PowerBand Belts are available in 2, 3, 4 or 5 bands in sizes shown, or wider, on a standard non-stock basis.)



C Section								D Section				E Section	
Hi-Power II V-Belt No.	Outside Circum. (in)	Hi-Power II V-Belt No.	Outside Circum. (in)	Hi-Power II V-Belt No.	Outside Circum. (in)	Hi-Power II V-Belt No.	Outside Circum. (in)	Hi-Power II V-Belt No.	Outside Circum. (in)	Hi-Power II V-Belt No.	Outside Circum. (in)	Hi-Power II V-Belt No.	Outside Circum. (in)
C44*	48	C98*	102	C153*	157	C245*	247	D90*	95	D450	453	E144	149
C45*	49	C99	103	C154*	158	C246*	248	D98*	103	D480	483	E158	165
C46*	50	C100	104	C155*	159	C248*	250	D104*	109	D540	543	E180	187
C47*	51	C101*	105	C156*	160	C250*	252	D105*	110	D600	603	E195	202
C48*	52	C102*	106	C157*	161	C255	257	D107*	112	D660	663	E210	217
C49*	53	C103*	107	C158	162	C264*	266	D108*	113			E240	244
C50*	54	C104*	108	C160*	164	C265*	267	D110*	115			E250	254
C51*	55	C105	109	C162	166	C270	272	D112*	117			E270	274
C52*	56	C106*	110	C164*	168	C275*	277	D120*	125			E300	304
C53*	57	C107*	111	C165*	169	C276*	278	D124*	129			E310	314
C54*	58	C108	112	C166*	170	C280*	282	D128*	133			E330	334
C55*	59	C109	113	C167*	171	C285	287	D132*	137			E360	364
C56*	60	C110*	114	C168*	172	C290*	292	D135*	140			E390	394
C57*	61	C111*	115	C169*	173	C295*	297	D136*	141			E420	424
C58*	62	C112	116	C170*	174	C297*	299	D140*	145			E441	445
C59*	63	C113*	117	C173	177	C300	302	D144	149			E460	464
C60	64	C114*	118	C175*	179	C303*	305	D148*	153			E480	484
C61*	65	C115*	119	C176*	180	C314*	316	D152*	157			E540	544
C62*	66	C116*	120	C177*	181	C315	317	D154*	159			E600	604
C63*	67	C117*	121	C178*	182	C320*	322	D158	163			E660	664
C64*	68	C118*	122	C180	184	C330	332	D160*	165				
C65*	69	C119*	123	C181*	185	C345	347	D162*	167				
C66*	70	C120	124	C182*	186	C360	362	D164*	169				
C67*	71	C121*	125	C183*	187	C390	392	D165*	170				
C68	72	C122*	126	C184*	188	C420	422	D166*	171				
C69*	73	C123*	127	C185	189	C450*	452	D167*	172				
C70*	74	C124	128	C187*	191			D170*	175				
C71*	75	C125*	129	C188*	192			D171*	176				
C72	76	C126	130	C189*	193			D173	178				
C73*	77	C127*	131	C190	194			D180	185				
C74*	78	C128	132	C193*	197			D195	200				
C75	79	C130*	134	C195	199			D205*	210				
C76*	80	C131*	135	C197*	201			D210	215				
C77*	81	C132*	136	C198*	202			D220*	223				
C78	82	C133*	137	C200*	204			D225	228				
C79*	83	C134*	138	C202*	206			D230*	233				
C80	84	C135*	139	C204	208			D240	243				
C81	85	C136	140	C205*	209			D248*	251				
C82*	86	C137*	141	C206*	210			D255	258				
C83*	87	C138*	142	C207*	211			D260*	263				
C84*	88	C139*	143	C208*	212			D270	273				
C85	89	C140*	144	C210	214			D280*	283				
C86*	90	C141*	145	C214*	216			D285	288				
C87	91	C142*	146	C215*	217			D300	303				
C88*	92	C143*	147	C218*	220			D315	318				
C89*	93	C144	148	C220*	222			D330	333				
C90	94	C145*	149	C221*	223			D335*	338				
C91*	95	C146	150	C225	227			D345	348				
C92*	96	C147*	151	C228*	230			D354*	357				
C93*	97	C148*	152	C229*	231			D360	363				
C94*	98	C149*	153	C230*	232			D390	393				
C95*	99	C150*	154	C235*	237			D394*	397				
C96	100	C151	155	C238*	240			D420	423				
C97*	101	C152*	156	C240	242			D441*	444				

* Not Available in C PowerBand

* Not Available in D PowerBand

Heavy Duty V-Belt Drive Design Manual

Table No. B19

Tri-Power® Molded Notch V-Belt Sizes

AX

BX

CX

AX Section				BX Section				CX Section	
Tri-Power II V-Belt No.	Outside Circum. (in)	Tri-Power II V-Belt No.	Outside Circum. (in)	Tri-Power II V-Belt No.	Outside Circum. (in)	Tri-Power II V-Belt No.	Outside Circum. (in)	Tri-Power II V-Belt No.	Outside Circum. (in)
AX21	23	AX75	77	BX24	27	BX78	81	CX51	55
AX22	24	AX76	78	BX25	28	BX79	82	CX60	64
AX23	25	AX77	79	BX26	29	BX80	83	CX68	72
AX24	26	AX78	80	BX27	30	BX81	84	CX75	79
AX25	27	AX79	81	BX28	31	BX82	85	CX78	82
AX26	28	AX80	82	BX29	32	BX83	86	CX81	85
AX27	29	AX81	83	BX30	33	BX84	87	CX85	89
AX28	30	AX82	84	BX31	34	BX85	88	CX90	94
AX29	31	AX83	85	BX32	35	BX86	89	CX96	100
AX30	32	AX84	86	BX33	36	BX87	90	CX100	104
AX31	33	AX85	87	BX34	37	BX88	91	CX101	105
AX32	34	AX86	88	BX35	38	BX89	92	CX105	109
AX33	35	AX87	89	BX36	39	BX90	93	CX106	110
AX34	36	AX88	90	BX37	40	BX91	94	CX109	113
AX35	37	AX89	91	BX38	41	BX92	95	CX112	116
AX36	38	AX90	92	BX39	42	BX93	96	CX115	119
AX37	39	AX91	93	BX40	43	BX94	97	CX120	124
AX38	40	AX92	94	BX41	44	BX95	98	CX123	127
AX39	41	AX93	95	BX42	45	BX96	99	CX128	132
AX40	42	AX94	96	BX43	46	BX97	100	CX133	137
AX41	43	AX95	97	BX44	47	BX98	101	CX136	140
AX42	44	AX96	98	BX45	48	BX99	102	CX144	148
AX43	45	AX97	99	BX46	49	BX100	103	CX150	154
AX44	46	AX98	100	BX47	50	BX103	106	CX158	162
AX45	47	AX100	102	BX48	51	BX105	108	CX162	166
AX46	48	AX103	105	BX49	52	BX106	109	CX173	177
AX47	49	AX105	107	BX50	53	BX108	111	CX180	184
AX48	50	AX110	110	BX51	54	BX110	113	CX187	191
AX49	51	AX112	114	BX52	55	BX112	115	CX190	194
AX50	52	AX120	122	BX53	56	BX113	116	CX195	199
AX51	53	AX128	130	BX54	57	BX115	118	CX210	212
AX52	54	AX144	146	BX55	58	BX116	119	CX225	227
AX53	55	AX173	175	BX56	59	BX120	123	CX240	242
AX54	56			BX57	60	BX124	127	CX255	257
AX55	57			BX58	61	BX128	131	CX270	272
AX56	58			BX59	62	BX133	136	CX300	302
AX57	59			BX60	63	BX136	139	CX330	332
AX58	60			BX61	64	BX140	143	CX360	362
AX59	61			BX62	65	BX144	147		
AX60	62			BX63	66	BX150	153		
AX61	63			BX64	67	BX158	161		
AX62	64			BX65	68	BX162	165		
AX63	65			BX66	69	BX173	176		
AX64	66			BX67	70	BX180	183		
AX65	67			BX68	71	BX195	198		
AX66	68			BX69	72	BX205	208		
AX67	69			BX70	73	BX210	213		
AX68	70			BX71	74	BX225	220		
AX69	71			BX72	75	BX255	256		
AX70	72			BX73	76	BX270	271		
AX71	73			BX74	77	BX300	301		
AX72	74			BX75	78				
AX73	75			BX76	79				
AX74	76			BX77	80				

Heavy Duty V-Belt Drive Design Manual

Table No. B20

Classical Predator and Predator PowerBand® Belts



AP Section		BP Section		CP Section	
Predator Single V-Belt No.	Outside Circumference (in)	Predator Single V-Belt No.	Outside Circumference (in)	Predator Single V-Belt No.	Outside Circumference (in)
AP31	33	BP32	35	CP85	89
AP33	35	BP38	41	3/CP85	89
AP35	37	BP40	43	CP90	94
AP38	40	BP42	45	3/CP90	94
AP40	42	BP44	47	CP96	100
AP42	44	BP46	49	CP99	103
AP43	45	BP48	51	3/CP99	103
AP44	46	BP50	53	CP100	104
AP45	47	BP51	54	CP105	109
AP46	48	BP52	55	CP112	116
AP47	49	BP53	56	CP120	124
AP48	50	BP54	57	CP128	132
AP50	52	BP55	58	CP136	140
AP51	53	BP56	59	CP144	148
AP52	54	BP57	60	CP158	162
AP53	55	BP58	61	CP162	166
AP54	56	BP59	62	CP173	177
AP55	57	BP60	63	CP180	184
AP56	58	BP61	64	CP195	199
AP58	60	BP62	65	5/CP195	199
AP59	61	BP63	66	5/CP225	227
AP60	62	BP64	67	CP240	242
AP61	63	BP65	68	4/CP240	242
AP62	64	BP66	69	5/CP255	257
AP63	65	BP68	71	4/CP330	332
AP64	66	BP70	73	4/CP345	347
AP66	68	BP71	74	4/CP360	362
AP68	70	BP75	78		
AP70	72	BP78	81		
AP71	73	BP80	83		
AP85	87	BP81	84		
AP87	89	BP83	86		
AP90	92	BP85	88		
AP91	93	BP90	93		
		BP93	96		
		BP95	98		
		BP97	100		
		BP100	103		
		BP103	106		
		BP105	108		
		BP108	111		
		BP112	115		
		BP120	123		
		BP124	127		
		BP128	131		
		BP136	139		
		BP144	147		
		BP158	161		
		BP173	176		
		BP195	198		

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																									Speed Ratio	Sheave Datum Diameters	
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		A	Small Sheave
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	1.00	* 2.20	* 2.20
17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	1.00	* 2.40	* 2.40
17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	1.00	* 2.60	* 2.60
17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	1.00	* 2.80	* 2.80
16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	1.00		
16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	1.00	3.00	3.00
16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	1.00	3.20	3.20
15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	1.00	3.40	3.40
15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	1.00	3.60	3.60
15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	1.00	3.80	3.80
14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	1.00	4.00	4.00
14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	1.00	4.20	4.20
14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	1.00	4.40	4.40
13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	1.00	4.60	4.60
13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	1.00	4.80	4.80
13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	1.00	5.00	5.00
13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	1.00	5.20	5.20
12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	1.00	5.40	5.40
12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	1.00	5.60	5.60
12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	1.00	5.80	5.80
11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	1.00	6.00	6.00
11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	1.00	6.20	6.20
11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	1.00	6.40	6.40
10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	1.00	6.60	6.60
10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	1.00	7.00	7.00
12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	1.03	5.60	5.80
11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	1.03	5.80	6.00
11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	1.03	6.00	6.20
11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	1.03	6.20	6.40
10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	1.03	6.40	6.60
10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	1.04	4.20	4.40
10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	1.04	4.40	4.60
10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	1.04	4.60	4.80
14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	1.04	5.00	5.20
13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	1.04	5.20	5.40
13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	1.04	5.40	5.60
13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	1.04	5.60	5.80
12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	1.04	5.80	6.00
12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	1.04	5.40	5.60
15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	1.05	3.40	3.60
15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	1.05	3.60	3.80
15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	1.05	3.80	4.00
14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	1.05	4.00	4.20
16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	1.06	3.00	3.20
16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	1.06	3.20	3.40
15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	2							

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																								Speed Ratio	Sheave Datum Diameters		
A AX	A AX	A AX AP	A AX AP	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	Small Sheave		Large Sheave		
88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	110	112	113	114	1.00	2.20	2.20
41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	50.7	51.2	51.7	52.2	52.7	53.2	1.00	2.40	2.40
40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.4	52.9	1.00	2.60	2.60
40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6	51.1	51.6	52.1	52.6	1.00	2.80	2.80
40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3	51.8	52.3	1.00	3.00	3.00
39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.4	51.9	1.00	3.20	3.20
39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6	51.1	51.6	1.00	3.40	3.40
39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3	1.00	3.60	3.60
39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5	51.0	1.00	4.00	4.00
38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	50.7	1.00	4.20	4.20
38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	1.00	4.40	4.40
38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	1.00	4.60	4.60
37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	1.00	5.00	5.00
37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	1.00	5.20	5.20
37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	1.00	5.40	5.40
36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	1.00	6.00	6.00
36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	1.00	6.20	6.20
36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	1.00	6.40	6.40
35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	1.00	6.60	6.60
35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	1.00	6.80	6.80
35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	1.00	7.00	7.00
35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	1.00	7.20	7.20
34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	1.00	6.20	6.20
34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	1.00	6.40	6.40
34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	1.00	6.60	6.60
33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	1.00	6.80	6.80
35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	1.03	5.60	5.80
35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	1.03	5.80	6.00
35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	1.03	6.00	6.20
34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	1.03	6.20	6.40
34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	1.03	6.40	6.60
34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	1.03	6.60	6.80
33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	1.03	6.80	7.00
33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	1.03	7.00	7.20
33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	1.03	7.20	7.40
32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	1.03	7.40	7.60
32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	1.03	7.60	7.80
32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	1.03	7.80	8.00
32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	1.03	8.00	8.20
31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	1.03	8.20	8.40
31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	1.03	8.40	8.60
31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	1.03	8.60	8.80
30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	1.03	8.80	9.00
30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	1.03	9.00	9.20
30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	1.03	9.20	9.40
29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	1.03	9.40	9.60
29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34																	

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																			
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
2.95	2.95	2.20	2.20	1.00																				
3.15	3.15	2.40	2.40	1.00																				
3.35	3.35	2.60	2.60	1.00																				
3.55	3.55	2.80	2.80	1.00																				
3.75	3.75	3.00	3.00	1.00	53.4	53.9	54.4	54.9	55.9	57.9	58.4	59.4	59.9	60.9	61.9	62.4	62.9	63.9	64.4	65.9	67.9	69.9	71.9	
3.95	3.95	3.20	3.20	1.00	53.1	53.6	54.1	54.6	55.6	57.6	58.1	59.1	59.6	60.6	61.6	62.1	62.6	63.6	64.1	65.6	67.6	69.6	71.6	
4.15	4.15	3.40	3.40	1.00	52.8	53.3	53.8	54.3	55.3	57.3	57.8	58.8	59.3	60.3	61.3	61.8	62.3	63.3	63.8	65.3	67.3	69.3	71.3	
4.35	4.35	3.60	3.60	1.00	52.5	53.0	53.5	54.0	55.0	57.0	57.5	58.5	59.0	60.0	61.0	61.5	62.0	63.0	63.5	65.0	67.0	69.0	71.0	
4.55	4.55	3.80	3.80	1.00	52.2	52.7	53.2	53.7	54.7	56.7	57.2	58.2	58.7	59.7	60.7	61.2	61.7	62.7	63.2	64.7	66.7	68.7	70.7	
4.75	4.75	4.00	4.00	1.00	51.9	52.4	52.9	53.4	54.4	56.4	56.9	57.9	58.4	59.4	60.4	60.9	61.4	62.4	62.9	64.4	66.4	68.4	70.4	
4.95	4.95	4.20	4.20	1.00	51.6	52.1	52.6	53.1	54.1	56.1	56.6	57.6	58.1	59.1	60.1	60.6	61.1	62.1	62.6	64.1	66.1	68.1	70.1	
5.15	5.15	4.40	4.40	1.00	51.2	51.7	52.2	52.7	53.7	55.7	56.2	57.2	57.7	58.7	59.7	60.2	60.7	61.7	62.2	63.7	65.7	67.7	69.7	
5.35	5.35	4.60	4.60	1.00	50.9	51.4	51.9	52.4	53.4	55.4	55.9	56.9	57.4	58.4	59.4	59.9	60.4	61.4	61.9	63.4	65.4	67.4	69.4	
5.55	5.55	4.80	4.80	1.00	50.6	51.1	51.6	52.1	53.1	55.1	55.6	56.6	57.1	58.1	59.1	59.6	60.1	61.1	61.6	63.1	65.1	67.1	69.1	
5.75	5.75	5.00	5.00	1.00	50.3	50.8	51.3	51.8	52.8	54.8	55.3	56.3	56.8	57.8	58.8	59.3	59.8	60.8	61.3	62.8	64.8	66.8	68.8	
5.95	5.95	5.20	5.20	1.00	50.0	50.5	51.0	51.5	52.5	54.5	55.0	56.0	56.5	57.5	58.5	59.0	59.5	60.5	61.0	62.5	64.5	66.5	68.5	
6.15	6.15	5.40	5.40	1.00	49.7	50.2	50.7	51.2	52.2	54.2	54.7	55.7	56.2	57.2	58.2	58.7	59.2	60.2	60.7	62.2	64.2	66.2	68.2	
6.35	6.35	5.60	5.60	1.00	49.4	49.9	50.4	50.9	51.9	53.9	54.4	55.4	55.9	56.9	57.9	58.4	58.9	59.9	60.4	61.9	63.9	65.9	67.9	
6.55	6.55	5.80	5.80	1.00	49.0	49.5	50.0	50.5	51.5	53.5	54.0	55.0	55.5	56.5	57.5	58.0	58.5	59.5	60.0	61.5	63.5	65.5	67.5	
6.75	6.75	6.00	6.00	1.00	48.7	49.2	49.7	50.2	51.2	53.2	53.7	54.7	55.2	56.2	57.2	57.7	58.2	59.2	59.7	61.2	63.2	65.2	67.2	
6.95	6.95	6.20	6.20	1.00	48.4	48.9	49.4	49.9	50.9	52.9	53.4	54.4	54.9	55.9	56.9	57.4	57.9	58.9	59.4	60.9	62.9	64.9	66.9	
7.15	7.15	6.40	6.40	1.00	48.1	48.6	49.1	49.6	50.6	52.6	53.1	54.1	54.6	55.6	56.6	57.1	57.6	58.6	59.1	60.6	62.6	64.6	66.6	
7.35	7.35	6.60	6.60	1.00	47.8	48.3	48.8	49.3	50.3	52.3	52.8	53.8	54.3	55.3	56.3	56.8	57.3	58.3	58.8	60.3	62.3	64.3	66.3	
7.55	7.55	7.00	7.00	1.00	47.2	47.7	48.2	48.7	49.7	51.7	52.2	53.2	53.7	54.7	55.2	55.7	56.2	57.2	57.7	59.2	61.2	63.2	65.2	
6.35	6.55	5.60	5.80	1.03	49.2	49.7	50.2	50.7	51.7	53.7	54.2	55.2	55.7	56.7	57.7	58.2	58.7	59.7	60.2	61.7	63.7	65.7	67.7	
6.55	6.75	5.80	6.00	1.03	48.9	49.4	49.9	50.4	51.4	53.4	53.9	54.9	55.4	56.4	57.4	57.9	58.4	59.4	59.9	61.4	63.4	65.4	67.4	
6.75	6.95	6.00	6.20	1.03	48.6	49.1	49.6	50.1	51.1	53.1	53.6	54.6	55.1	56.1	57.1	57.6	58.1	59.1	59.6	61.1	63.1	65.1	67.1	
6.95	7.15	6.20	6.40	1.03	48.3	48.8	49.3	49.8	50.8	52.8	53.3	54.3	54.8	55.8	56.8	57.3	57.8	58.8	59.3	60.8	62.8	64.8	66.8	
7.15	7.35	6.40	6.60	1.03	47.9	48.4	48.9	49.4	50.4	52.4	52.9	53.9	54.4	55.4	56.4	56.9	57.4	58.4	58.9	60.4	62.4	64.4	66.4	
4.95	5.15	4.20	4.40	1.04	51.4	51.9	52.4	52.9	53.9	55.9	56.4	57.4	57.9	58.9	59.9	60.4	60.9	61.9	62.4	63.9	65.9	67.9	69.9	
5.15	5.35	4.40	4.60	1.04	51.1	51.6	52.1	52.6	53.6	55.6	56.1	57.1	57.6	58.6	59.6	60.1	60.6	61.6	62.1	63.6	65.6	67.6	69.6	
5.35	5.55	4.60	4.80	1.04	50.8	51.3	51.8	52.3	53.3	55.3	55.8	56.8	57.3	58.3	59.3	59.8	60.3	61.3	61.8	63.3	65.3	67.3	69.3	
5.55	5.75	4.80	5.00	1.04	50.5	51.0	51.5	52.0	53.0	55.0	55.5	56.5	57.0	58.0	59.0	59.5	60.0	61.0	61.5	63.0	65.0	67.0	69.0	
5.75	5.95	5.00	5.20	1.04	50.1	50.6	51.1	51.6	52.6	54.6	55.1	56.1	56.6	57.6	58.6	59.1	59.6	60.6	61.1	62.6	64.6	66.6	68.6	
5.95	6.15	5.20	5.40	1.04	49.8	50.3	50.8	51.3	52.3	54.3	54.8	55.8	56.3	57.3	58.3	58.8	59.3	60.3	60.8	62.3	64.3	66.3	68.3	
6.15	6.35	5.40	5.60	1.04	49.5	50.0	50.5	51.0	52.0	54.0	54.5	55.5	56.0	57.0	58.0	58.5	59.0	60.0	60.5	62.0	64.0	66.0	68.0	
4.15	4.35	3.40	3.60	1.05	52.7	53.2	53.7	54.2	55.2	57.2	57.7	58.7	59.2	60.2	61.2	61.7	62.2	63.2	63.7	65.2	67.2	69.2	71.2	
4.35	4.55	3.60	3.80	1.05	52.3	52.8	53.3	53.8	54.8	56.8	57.3	58.3	58.8	59.8	60.8	61.3	61.8	62.8	63.3	64.8	66.8	68.8	70.8	
4.55	4.75	3.80	4.00	1.05	52.0	52.5	53.0	53.5	54.5	56.5	57.0	58.0	58.5	59.5	60.5	61.0	61.5	62.5	63.0	64.5	66.5	68.5	70.5	
4.75	4.95	4.00	4.20	1.05	51.7	52.2	52.7	53.2	54.2	56.2	56.7	57.7	58.2	59.2	60.2	60.7	61.2	62.2	62.7	64.2	66.2	68.2	70.2	
3.75	3.95	3.00	3.20	1.06	53.3	53.8	54.3	54.8	55.8	57.8	58.3	59.3	59.8	60.8	61.8	62.3	62.8	63.8	64.3	65.8	67.8	69.8	71.8	
3.95	4.15	3.20	3.40	1.06	53.0	53.5	54.0	54.5	55.5	57.5	58.0	59.0	59.5	60.5	61.5	62.0	62.5	63.5	64.0	65.5	67.5	69.5	71.5	
6.75	7.15	6.00	6.40	1.06	48.4	48.9	49.4	49.9	50.9	52.9	53.4	54.4	54.9	55.9	56.9	57.4	57.9	58.9	59.4	60.9	62.9	64.9	66.9	
6.95	7.35	6.20	6.60	1.06	48.1	48.6	49.1	49.6	50.6	52.6	53.1	54.1	54.6	55.6	56.6	57.1	57.6	58.6	59.1	60.6	62.6	64.6	66.6	
7.35	7.75	6.60	7.00	1.06	47.5	48.0	48.5	49.0	50.0	52.0	52.5	53.5	54.0	55.0	56.0	56.5	57.0	58.0	58.5	60.0	62.0	64.0	66.0	
3.35	3.55	2.60	2.80	1.07																				
3.55	3.75	2.80	3.00	1.07																				
5.95	6.35	5.20	5.60	1.07	49.7	50.2	50.7	51.2	52.2	54.2	54.7	55.7	56.2	57.2	58.2	58.7	59.2	60.2	60.7	62.2	64.2	66.2	68.2	
6.15	6.55	5.40	5.80	1.07	49.4	49.9	50.4	50.9	51.9	53.9	54.4	55.4	55.9	56.9	57.9	58.4	58.9	59.9	60.4	61.9	63.9	65.9	67.9	
6.35	6.75	5.60	6.00	1.07	49.0	49.5	50.0	50.5	51.5	53.5	54.0	55.0	55.5	56.5	57.5	58.0	58.5	59.5	60.0	61.5	63.5	65.5	67.5	
6.55	6.95	5.80	6.20	1.07	48.7	49.2	49.7	50.2	51.2	53.2	53.7	54.7	55.2	56.2	57.2	57.7	58.2	59.2	59.7	61.2	63.2	65.2	67.2	
2.95	3.15	2.20	2.40	1.08																				
3.15	3.35	2.40	2.60	1.08																				
5.35	5.75	4.60	5.00	1.08	50.6	51.1	51.6	52.1	53.1	55.1	55.6	56.6	57.1	58.1	59.1	59.6	60.1	61.1	61.6	63.1	65.1	67.1	69.1	
5.55	5.95	4.80	5.20	1.08	50.3	50.8	51.3	51.8	52.8	54.8	55.3	56.3	56.8	57.8	58.8	59.3	59.8	60.8	61.3	62.8	64.8	66.8	68.8	
5.75	6.15	5.00	5.40	1.08	50.0	50.5	51.0	51.5	52.5	54.5	55.0	56.0	56.5	57.5	58.5	59.0	59.5	60.5	61.0	62.5	64.5	66.5	68.5	
7.75	8.35	7.00	7.60	1.08	46.7	47.2	47.7	48.2	49.2	51.2	51.7	52.7	53.2											

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance							Speed Ratio	Sheave Datum Diameters	
A	A	A AX	A	A	A	A		Small Sheave	Large Sheave
162	167	173	180	187	197	200	1.00	2.20	2.20
		83.7					1.00	2.40	2.40
		83.4					1.00	2.60	2.60
		83.1					1.00	2.80	2.80
		82.8					1.00	2.80	2.80
76.9	79.4	82.4	85.9	89.4	94.4	95.9	1.00	3.00	3.00
76.6	79.1	82.1	85.6	89.1	94.1	95.6	1.00	3.20	3.20
76.3	78.8	81.8	85.3	88.8	93.8	95.3	1.00	3.40	3.40
76.0	78.5	81.5	85.0	88.5	93.5	95.0	1.00	3.60	3.60
75.7	78.2	81.2	84.7	88.2	93.2	94.7	1.00	3.80	3.80
75.4	77.9	80.9	84.4	87.9	92.9	94.4	1.00	4.00	4.00
75.1	77.6	80.6	84.1	87.6	92.6	94.1	1.00	4.20	4.20
74.7	77.2	80.2	83.7	87.2	92.2	93.7	1.00	4.40	4.40
74.4	76.9	79.9	83.4	86.9	91.9	93.4	1.00	4.60	4.60
74.1	76.6	79.6	83.1	86.6	91.6	93.1	1.00	4.80	4.80
73.8	76.3	79.3	82.8	86.3	91.3	92.8	1.00	5.00	5.00
73.5	76.0	79.0	82.5	86.0	91.0	92.5	1.00	5.20	5.20
73.2	75.7	78.7	82.2	85.7	90.7	92.2	1.00	5.40	5.40
72.9	75.4	78.4	81.9	85.4	90.4	91.9	1.00	5.60	5.60
72.5	75.0	78.0	81.5	85.0	90.0	91.5	1.00	5.80	5.80
72.2	74.7	77.7	81.2	84.7	89.7	91.2	1.00	6.00	6.00
71.9	74.4	77.4	80.9	84.4	89.4	90.9	1.00	6.20	6.20
71.6	74.1	77.1	80.6	84.1	89.1	90.6	1.00	6.40	6.40
71.3	73.8	76.8	80.3	83.8	88.8	90.3	1.00	6.60	6.60
70.7	73.2	76.2	79.7	83.2	88.2	89.7	1.00	7.00	7.00
72.7	75.2	78.2	81.7	85.2	90.2	91.7	1.03	5.80	5.80
72.4	74.9	77.9	81.4	84.9	89.9	91.4	1.03	5.80	6.00
72.1	74.6	77.6	81.1	84.6	89.6	91.1	1.03	6.00	6.20
71.8	74.3	77.3	80.8	84.3	89.3	90.8	1.03	6.20	6.40
71.4	73.9	76.9	80.4	83.9	88.9	90.4	1.03	6.40	6.60
74.9	77.4	80.4	83.9	87.4	92.4	93.9	1.04	4.20	4.40
74.6	77.1	80.1	83.6	87.1	92.1	93.6	1.04	4.40	4.60
74.3	76.8	79.8	83.3	86.8	91.8	93.3	1.04	4.60	4.80
74.0	76.5	79.5	83.0	86.5	91.5	93.0	1.04	4.80	5.00
73.6	76.1	79.1	82.6	86.1	91.1	92.6	1.04	5.00	5.20
73.3	75.8	78.8	82.3	85.8	90.8	92.3	1.04	5.20	5.40
73.0	75.5	78.5	82.0	85.5	90.5	92.0	1.04	5.40	5.60
76.2	78.7	81.7	85.2	88.7	93.7	95.2	1.05	3.40	3.60
75.8	78.3	81.3	84.8	88.3	93.3	94.8	1.05	3.60	3.80
75.5	78.0	81.0	84.5	88.0	93.0	94.5	1.05	3.80	4.00
75.2	77.7	80.7	84.2	87.7	92.7	94.2	1.05	4.00	4.20
76.8	79.3	82.3	85.8	89.3	94.3	95.8	1.06	3.00	3.20
76.5	79.0	82.0	85.5	89.0	94.0	95.5	1.06	3.20	3.40
71.9	74.4	77.4	80.9	84.4	89.4	90.9	1.06	6.00	6.40
71.6	74.1	77.1	80.6	84.1	89.1	90.6	1.06	6.20	6.60
71.0	73.5	76.5	80.0	83.5	88.5	90.0	1.06	6.60	7.00
		82.9					1.07	2.60	2.80
		82.6					1.07	2.80	3.00
73.2	75.7	78.7	82.2	85.7	90.7	92.2	1.07	5.20	5.60
72.9	75.4	78.4	81.9	85.4	90.4	91.9	1.07	5.40	5.80
72.5	75.0	78.0	81.5	85.0	90.0	91.5	1.07	5.60	6.00
72.2	74.7	77.7	81.2	84.7	89.7	91.2	1.07	5.80	6.20
		83.5					1.08	2.20	2.40
		83.2					1.08	2.40	2.60
74.1	76.6	79.6	83.1	86.6	91.6	93.1	1.08	4.60	5.00
73.8	76.3	79.3	82.8	86.3	91.3	92.8	1.08	4.80	5.20
73.5	76.0	79.0	82.5	86.0	91.0	92.5	1.08	5.00	5.40
70.2	72.7	75.7	79.2	82.7	87.7	89.2	1.08	7.00	7.60
75.1	77.6	80.6	84.1	87.6	92.6	94.1	1.09	4.00	4.40
74.7	77.2	80.2	83.7	87.2	92.2	93.7	1.09	4.20	4.60
74.4	76.9	79.9	83.4	86.9	91.9	93.4	1.09	4.40	4.80
71.1	73.6	76.6	80.1	83.6	88.6	90.1	1.09	6.40	7.00
75.7	78.2	81.2	84.7	88.2	93.2	94.7	1.10	3.60	4.00
75.4	77.9	80.9	84.4	87.9	92.9	94.4	1.10	3.80	4.20
72.4	74.9	77.9	81.4	84.9	89.9	91.4	1.10	5.60	6.20
72.1	74.6	77.6	81.1	84.6	89.6	91.1	1.10	5.80	6.40
71.8	74.3	77.3	80.8	84.3	89.3	90.8	1.10	6.00	6.60
76.0	78.5	81.5	85.0	88.5	93.5	95.0	1.11	3.40	3.60
73.3	75.8	78.8	82.3	85.8	90.8	92.3	1.11	5.00	5.60
73.0	75.5	78.5	82.0	85.5	90.5	92.0	1.11	5.20	5.80
72.7	75.2	78.2	81.7	85.2	90.2	91.7	1.11	5.40	6.00
76.6	79.1	82.1	85.6	89.1	94.1	95.6	1.12	3.00	3.40
76.3	78.8	81.8	85.3	88.8	93.8	95.3	1.12	3.20	3.60
74.0	76.5	79.5	83.0	86.5	91.5	93.0	1.12	4.60	5.20
73.6	76.1	79.1	82.6	86.1	91.1	92.6	1.12	4.80	5.40

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																										Speed Ratio	Sheave Datum Diameters	
A AX	A AP	A AX	A AP	A AX	A AP	A AX	A AP	A AX	A AP	A AX	A AP	A AX	A AP	A AX	A AP	A AX	A AP	A AX	A AP	A AX	A AP	A AX	A AP	A AX	A AP		Small Sheave	Large Sheave
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	1.12	6.20	7.00	
10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	1.13	2.80	3.20	
18.4	18.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	1.13	4.20	4.80	
14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	1.13	4.40	5.00	
13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	1.13	5.80	6.60	
11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	1.14	2.60	3.00	
16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	1.14	4.00	4.60	
14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	1.14	5.40	6.20	
12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	1.14	6.00	7.00	
11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	1.15	2.40	2.80	
17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	1.15	3.80	4.40	
14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	1.15	5.00	5.80	
12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	1.15	6.20	7.00	
12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	1.15	5.20	6.00	
10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	1.15	6.80	7.60	
17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	1.16	2.80	3.20	
15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	1.16	3.40	4.00	
15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	1.16	3.60	4.20	
13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	1.16	4.60	5.40	
13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	1.16	4.80	5.60	
10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	1.16	6.00	7.00	
15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	1.17	3.20	3.80	
13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	1.17	4.40	5.20	
11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	1.17	5.60	6.60	
9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	1.17	7.00	8.20	
16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	1.18	3.00	3.60	
13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	1.18	4.20	5.00	
12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	1.18	5.20	6.20	
11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	1.18	5.40	6.40	
10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	1.18	6.40	7.60	
14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	1.19	4.00	4.80	
12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	1.19	5.00	6.00	
16.5	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	1.20	2.80	3.40	
14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	1.20	3.80	4.60	
12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	1.20	4.80	5.80	
11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	1.20	5.80	7.00	
16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	1.21	2.60	3.20	
14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	1.21	3.60	4.40	
13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	1.21	4.60	5.60	
11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	1.21	5.40	6.60	
15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	1.21	3.40	4.20	
13.5	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	1.22	4.20	5.20	
13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	1.22	4.40	5.40	
12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	1.22	5.20	6.40	
10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	1.22	6.20	7.60	
16.9	17.4	17.9																										

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																						
Small	Large	Small	Large		A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX			
Sheave	Sheave	Sheave	Sheave		66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	
6.95	7.75	6.20	7.00	1.12	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3		
3.55	3.95	2.80	3.20	1.13	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9		
4.95	5.55	4.20	4.80	1.13	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6		
5.15	5.75	4.40	5.00	1.13	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3		
6.55	7.35	5.80	6.60	1.13	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9		
3.35	3.75	2.60	3.00	1.14	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3		
4.75	5.35	4.00	4.60	1.14	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9		
6.15	6.95	5.40	6.20	1.14	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5		
6.35	7.15	5.60	6.40	1.14	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2		
3.15	3.55	2.40	2.80	1.15	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6		
4.55	5.15	3.80	4.40	1.15	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2		
5.75	6.55	5.00	5.80	1.15	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2		
5.95	6.75	5.20	6.00	1.15	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9		
7.35	8.35	6.60	7.60	1.15	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5		
2.95	3.35	2.20	2.60	1.16	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9		
4.15	4.75	3.40	4.00	1.16	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8		
4.35	4.95	3.60	4.20	1.16	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5		
5.35	6.15	4.60	5.40	1.16	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8		
5.85	6.35	4.80	5.60	1.16	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5		
6.75	7.75	6.00	7.00	1.16	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4		
3.95	4.55	3.20	3.80	1.17	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2		
5.15	5.95	4.40	5.20	1.17	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1		
6.35	7.35	5.60	6.60	1.17	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1		
7.75	8.95	7.00	8.20	1.17	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7		
3.75	4.35	3.00	3.60	1.18	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5		
4.95	5.75	4.20	5.00	1.18	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4		
5.95	6.95	5.20	6.20	1.18	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4		
6.15	7.15	5.40	6.40	1.18	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4		
7.15	8.35	6.40	7.60	1.18	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6		
4.75	5.55	4.00	4.80	1.19	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7		
5.75	6.75	5.00	6.00	1.19	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0		
3.55	4.15	2.80	3.40	1.16	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8		
4.55	5.35	3.80	4.60	1.20	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1		
5.55	6.55	4.80	5.80	1.20	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3		
6.55	7.75	5.80	7.00	1.20	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6		
3.35	3.95	3.20	3.80	1.21	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1		
4.35	5.15	3.60	4.40	1.21	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4		
5.35	6.35	4.60	5.60	1.21	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6		
6.15	7.35	5.40	6.60	1.21	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2		
4.15	4.95	3.40	4.20	1.22	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7		
4.95	5.95	4.20	5.20	1.22	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3		
5.15	6.15	4.40	5.40	1.22	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9		
5.95	7.15	5.20	6.40	1.22	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5		
6.95	8.35	6.20	7.60	1.22	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8										

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters						
A AX	A AX	A AX AP	A AX AP	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX		Small Sheave	Large Sheave					
88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	110	112	113	114	1.12	6.20	7.00
34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	45.3	46.3	46.8	47.3	1.13	2.80	3.20
39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.9	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.9	52.9	53.4	53.9	1.13	4.20	4.80
37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.6	49.6	50.1	50.6	1.13	4.40	5.00
37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	48.3	49.3	49.8	50.3	1.13	4.40	5.00
34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.9	46.9	47.4	47.9	1.13	5.80	6.60
40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	51.3	52.3	52.8	53.3	1.14	2.60	3.00
37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.9	49.9	50.4	50.9	1.14	4.00	4.60
35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.9	47.9	48.4	48.9	1.14	5.40	6.20
35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	46.2	47.2	47.7	48.2	1.14	5.60	6.40
40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.6	47.6	48.6	49.6	50.6	51.6	52.6	53.6	54.6	55.6	56.6	57.6	58.6	59.6	1.15	2.40	2.80
38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	49.2	50.2	50.7	51.2	1.15	3.80	4.40
36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	47.2	48.2	48.7	49.2	1.15	5.00	5.80
35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.9	47.9	48.4	48.9	1.15	5.20	6.00
33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.5	45.5	46.0	46.5	1.15	6.60	7.60
40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.9	47.9	48.9	49.9	50.9	51.9	52.9	53.9	54.9	55.9	56.9	57.9	58.9	59.9	1.16	2.20	2.60
38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.8	50.8	51.3	51.8	1.16	3.40	4.00
38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.5	50.5	51.0	51.5	1.16	3.60	4.20
36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.8	48.8	49.3	49.8	1.16	4.60	5.40
36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.5	48.5	49.0	49.5	1.16	4.80	5.60
34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	45.4	46.4	46.9	47.4	1.16	6.00	7.00
39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	50.2	51.2	51.7	52.2	1.17	3.20	3.80
37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	48.1	49.1	49.6	50.1	1.17	4.40	5.20
35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	46.1	47.1	47.6	48.1	1.17	5.60	6.60
32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.7	44.7	45.2	45.7	1.17	7.00	8.20
39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.5	51.5	52.0	52.5	1.18	3.00	3.60
37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	48.4	49.4	49.9	50.4	1.18	4.20	5.00
35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	46.4	47.4	47.9	48.4	1.18	5.20	6.20
35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	46.4	47.4	47.9	48.4	1.18	5.40	6.40
33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.6	45.6	46.1	46.6	1.18	6.40	7.60
37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.7	49.7	50.2	50.7	1.19	4.00	4.80
36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	47.0	48.0	48.5	49.0	1.19	5.00	6.00
39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	50.3	51.3	52.3	52.8	53.3	1.20	2.80	3.40
38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	49.1	50.1	50.6	51.1	1.20	3.80	4.60
36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	47.3	48.3	48.8	49.3	1.20	4.80	5.80
34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.6	46.6	47.1	47.6	1.20	5.80	7.00
40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	46.1	47.1	48.1	49.1	50.1	51.1	52.1	53.1	54.1	55.1	56.1	57.1	58.1	59.1	1.21	2.60	3.20
38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	49.4	50.4	50.9	51.4	1.21	3.60	4.40
36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.6	48.6	49.1	49.6	1.21	4.60	5.60
35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	46.2	47.2	47.7	48.2	1.21	5.40	6.60
38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.7	50.7	51.2	51.7	1.22	3.40	4.20
37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	48.3	49.3	49.8	50.3	1.22	4.20	5.20
36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.9	48.9	49.4	49.9	1.22	4.40	5.40
35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.5	47.5	48.0	48.5	1.22	5.20	6.40
33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.8	45.8	46.3	46.8	1.23	6.20	7.60
40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.9	51.9	52.4	52.				

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A					
					AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX					
6.95	7.75	6.20	7.00	1.12	47.8	48.3	48.8	49.3	50.3	52.3	52.8	53.8	54.3	55.3	56.3	56.8	57.3	58.3	58.8	60.3	144	148	152	156	157	158
3.55	3.95	2.80	3.20	1.13					55.9				59.9							67.9						
4.95	5.55	4.20	4.80	1.13	51.1	51.6	52.1	52.6	53.6	55.6	56.1	57.1	57.6	58.6	59.6	60.1	60.6	61.6	62.1	63.6	65.6	67.6	69.6	71.6	72.1	72.6
5.15	5.75	4.40	5.00	1.13	50.8	51.3	51.8	52.3	53.3	55.3	55.8	56.8	57.3	58.3	59.3	59.8	60.3	61.3	61.8	63.3	65.3	67.3	69.3	71.3	71.8	72.3
6.55	7.35	5.80	6.60	1.13	48.4	48.9	49.4	49.9	50.9	52.9	53.4	54.4	54.9	55.9	56.9	57.4	57.9	58.9	59.4	60.9	62.9	64.9	66.9	68.9	69.4	69.9
3.35	3.75	2.60	3.00	1.14					56.3				60.3							68.3						
4.75	5.35	4.00	4.60	1.14	51.4	51.9	52.4	52.9	53.9	55.9	56.4	57.4	57.9	58.9	59.9	60.4	60.9	61.9	62.4	63.9	65.9	67.9	69.9	71.9	72.4	72.9
6.15	6.95	5.40	6.20	1.14	49.0	49.5	50.0	50.5	51.5	53.5	54.0	55.0	55.5	56.5	57.5	58.0	58.5	59.5	60.0	61.5	63.5	65.5	67.5	69.5	70.0	70.5
6.35	7.15	5.60	6.40	1.14	48.7	49.2	49.7	50.2	51.2	53.2	53.7	54.7	55.2	56.2	57.2	57.7	58.2	59.2	59.7	61.2	63.2	65.2	67.2	69.2	69.7	70.2
3.15	3.55	2.40	2.80	1.15					56.6				60.6							68.6						
4.55	5.15	3.80	4.40	1.15	51.7	52.2	52.7	53.2	54.2	56.2	56.7	57.7	58.2	59.2	60.2	60.7	61.2	62.2	62.7	64.2	66.2	68.2	70.2	72.2	72.7	73.2
5.75	6.55	5.00	5.80	1.15	49.7	50.2	50.7	51.2	52.2	54.2	54.7	55.7	56.2	57.2	58.2	58.7	59.2	60.2	60.7	62.2	64.2	66.2	68.2	70.2	70.7	71.2
5.95	6.75	5.20	6.00	1.15	49.4	49.9	50.4	50.9	51.9	53.9	54.4	55.4	55.9	56.9	57.9	58.4	58.9	59.9	60.4	61.9	63.9	65.9	67.9	69.9	70.4	70.9
7.35	8.35	6.60	7.60	1.15	47.0	47.5	48.0	48.5	49.5	51.5	52.0	53.0	53.5	54.5	55.5	56.0	56.5	57.5	58.0	59.5	61.5	63.5	65.5	67.5	68.0	68.5
2.95	3.35	2.20	2.60	1.16					56.9				60.9							68.9						
4.15	4.75	3.40	4.00	1.16	52.3	52.8	53.3	53.8	54.8	56.8	57.3	58.3	58.8	59.8	60.8	61.3	61.8	62.8	63.3	64.8	66.8	68.8	70.8	72.8	73.3	73.8
4.35	4.95	3.60	4.20	1.16	52.0	52.5	53.0	53.5	54.5	56.5	57.0	58.0	58.5	59.5	60.5	61.0	61.5	62.5	63.0	64.5	66.5	68.5	70.5	72.5	73.0	73.5
5.35	6.15	4.60	5.40	1.16	50.3	50.8	51.3	51.8	52.8	54.8	55.3	56.3	56.8	57.8	58.8	59.3	59.8	60.8	61.3	62.8	64.8	66.8	68.8	70.8	71.3	71.8
5.55	6.35	4.80	5.60	1.16	50.0	50.5	51.0	51.5	52.5	54.5	55.0	56.0	56.5	57.5	58.5	59.0	59.5	60.5	61.0	62.5	64.5	66.5	68.5	70.5	71.0	71.5
6.75	7.75	6.00	7.00	1.16	47.9	48.4	48.9	49.4	50.4	52.4	52.9	53.9	54.4	55.4	56.4	56.9	57.4	58.4	58.9	60.4	62.4	64.4	66.4	68.4	68.9	69.4
3.95	4.55	3.20	3.80	1.17	52.7	53.2	53.7	54.2	55.2	57.2	57.7	58.7	59.2	60.2	61.2	61.7	62.2	63.2	63.7	65.2	67.2	69.2	71.2	73.2	73.7	74.2
5.15	5.95	4.40	5.20	1.17	50.6	51.1	51.6	52.1	53.1	55.1	55.6	56.6	57.1	58.1	59.1	59.6	60.1	61.1	61.6	63.1	65.1	67.1	69.1	71.1	71.6	72.1
6.35	7.35	5.60	6.60	1.17	48.6	49.1	49.6	50.1	51.1	53.1	53.6	54.6	55.1	56.1	57.1	57.6	58.1	59.1	59.6	61.1	63.1	65.1	67.1	69.1	69.6	70.1
7.75	8.95	7.00	8.20	1.17	46.2	46.7	47.2	47.7	48.7	50.7	51.2	52.2	52.7	53.7	54.7	55.2	55.7	56.7	57.2	58.7	60.7	62.7	64.7	66.7	67.2	67.7
3.75	4.35	3.00	3.60	1.18	53.0	53.5	54.0	54.5	55.5	57.5	58.0	59.0	59.5	60.5	61.5	62.0	62.5	63.5	64.0	65.5	67.5	69.5	71.5	73.5	74.0	74.5
4.95	5.75	4.20	5.00	1.18	50.9	51.4	51.9	52.4	53.4	55.4	55.9	56.9	57.4	58.4	59.4	59.9	60.4	61.4	61.9	63.4	65.4	67.4	69.4	71.4	71.9	72.4
5.95	6.95	5.20	6.20	1.18	49.2	49.7	50.2	50.7	51.7	53.7	54.2	55.2	55.7	56.7	57.7	58.2	58.7	59.2	60.2	61.7	63.7	65.7	67.7	69.7	70.2	70.7
6.15	7.15	5.40	6.40	1.18	48.9	49.4	49.9	50.4	51.4	53.4	53.9	54.9	55.4	56.4	57.4	57.9	58.4	59.4	59.9	61.4	63.4	65.4	67.4	69.4	69.9	70.4
7.15	8.35	6.40	7.60	1.18	47.2	47.7	48.2	48.7	49.7	51.7	52.2	53.2	53.7	54.7	55.7	56.2	56.7	57.7	58.2	59.7	61.7	63.7	65.7	67.7	68.2	68.7
4.75	5.55	4.00	4.80	1.19	51.2	51.7	52.2	52.7	53.7	55.7	56.2	57.2	57.7	58.7	59.7	60.2	60.7	61.7	62.2	63.7	65.7	67.7	69.7	71.7	72.2	72.7
5.75	6.75	5.00	6.00	1.19	49.5	50.0	50.5	51.0	52.0	54.0	54.5	55.5	56.0	57.0	58.0	58.5	59.0	60.0	60.5	62.0	64.0	66.0	68.0	70.0	70.5	71.0
3.55	4.15	2.80	3.40	1.20					55.8				59.8							67.8						
4.55	5.35	3.80	4.60	1.20	51.6	52.1	52.6	53.1	54.1	56.1	56.6	57.6	58.1	59.1	60.1	60.6	61.1	62.1	62.6	64.1	66.1	68.1	70.1	72.1	72.6	73.1
5.55	6.55	4.80	5.80	1.20	49.8	50.3	50.8	51.3	52.3	54.3	54.8	55.8	56.3	57.3	58.3	58.8	59.3	60.3	60.8	62.3	64.3	66.3	68.3	70.3	70.8	71.3
6.55	7.75	5.80	7.00	1.20	48.1	48.6	49.1	49.6	50.6	52.6	53.1	54.1	54.6	55.6	56.6	57.1	57.6	58.6	59.1	60.6	62.6	64.6	66.6	68.6	69.1	69.6
3.35	3.95	2.60	3.20	1.21					56.1				60.1							68.1						
4.35	5.15	3.60	4.40	1.21	51.9	52.4	52.9	53.4	54.4	56.4	56.9	57.9	58.4	59.4	60.4	60.9	61.4	62.4	62.9	64.4	66.4	68.4	70.4	72.4	72.9	73.4
5.35	6.35	4.60	5.60	1.21	50.1	50.6	51.1	51.6	52.6	54.6	55.1	56.1	56.6	57.6	58.6	59.1	59.6	60.6	61.1	62.6	64.6	66.6	68.6	70.6	71.1	71.6
6.15	7.35	5.40	6.60	1.21	48.7	49.2	49.7	50.2	51.2	53.2	53.7	54.7	55.2	56.2	57.2	57.7	58.2	59.2	59.7	61.2	63.2	65.2	67.2	69.2	69.7	70.2
4.15	4.95	3.40	4.20	1.22	52.2	52.7	53.2	53.7	54.7	56.7	57.2	58.2	58.7	59.7	60.7	61.2	61.7	62.7	63.2	64.7	66.7	68.7	70.7	72.7	73.2	73.7
4.95	5.95	4.20	5.20	1.22	50.8	51.3	51.8	52.3	53.3	55.3	55.8	56.8	57.3	58.3	59.3	59.8	60.3	61.3	61.8	63.3	65.3	67.3	69.3	71.3	71.8	72.3
5.15	6.15	4.40	5.40	1.22	50.5	51.0	51.5	52.0	53.0	55.0	55.5	56.5	57.0	58.0	59.0	59.5	60.0	61.0	61.5	63.0	65.0	67.0	69.0	71.0	71.5	72.0
5.95	7.15	5.20	6.40	1.22	49.0	49.5	50.0	50.5	51.5	53.5	54.0	55.0	55.5	56.5	57.5	58.0	58.5	59.0	60.0	61.5	63.5	65.5	67.5	69.5	70.0	70.5
6.95	8.35	6.20	7.60	1.22	47.3	47.8	48.3	48.8	49.8	51.8	52.3	53.3	53.8	54.8	55.8	56.8	57.8	58.8	59.8	61.8	63.8	65.8	67.8	68.8	69.3	69.8
3.15	3.75	2.40	3.00	1.23					56.4				60.4							68.4						
3.95	4.75	3.20	4.00	1.23	52.5	53.0	53.5	54.0	55.0	57.0	57.5	58.5	59.0	60.0	61.0	61.5	62.0	63.0	63.5	65.0	67.0	69.0	71.0	73.0	73.5	74.0
5.75	6.95	5.00	6.20	1.23	49.3	49.8	50.3	50.9	51.9	53.9	54.4	55.4	55.9	56.9	57.9	58.4	58.9	59.9	60.4	61.9	63.9	65.9	67.9	69.9	70.4	70.9
7.35	8.95	6.60	8.20	1.23	46.5	47.0	47.5	48.0	49.0	51.0	51.5	52.5	53.0	54.0	55.0	55.5	56.0	57.0	57.5	59.0	61.0	63.0	65.0	67.0	67.5	68.0
2.95	3.55	2.20	2.80	1.24					56.7				60.7							68.7						
4.75	5.75	4.00	5.00	1.24	51.1	51.6	52.1	52.6	53.6	55.6	56.1	57.1	57.6	58.6	59.6	60.1	60.6	61.6	62.1	63.6	65.6	67.6	69.6	71.6	72.1	72.6
5.55	6.75																									

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance								Speed Ratio	Sheave Datum Diameters	
A	A	A	A	A	A	A	Small Sheave		Large Sheave	
162	167	173	180	187	197	200	1.12	6.20	7.00	
71.3	73.8	76.8	80.3	83.8	88.8	90.3	1.12	2.80	3.20	
		82.4					1.13	4.20	4.80	
74.6	77.1	80.1	83.6	87.1	92.1	93.6	1.13	4.40	5.00	
74.3	76.8	79.8	83.3	86.8	91.8	93.3	1.13	5.80	6.60	
71.9	74.4	77.4	80.9	84.4	89.4	90.9	1.14	2.60	3.00	
		82.8					1.14	4.00	4.60	
74.9	77.4	80.4	83.9	87.4	92.4	93.9	1.14	5.40	6.20	
72.5	75.0	78.0	81.5	85.0	90.0	91.5	1.14	5.60	6.40	
72.2	74.7	77.7	81.2	84.7	89.7	91.2	1.14	2.40	2.80	
		83.1					1.15	3.80	4.40	
75.2	77.7	80.7	84.2	87.7	92.7	94.2	1.15	5.00	5.80	
73.2	75.7	78.7	82.2	85.7	90.7	92.2	1.15	5.20	6.00	
72.9	75.4	78.4	81.9	85.4	90.4	91.9	1.15	6.60	7.60	
70.5	73.0	76.0	79.5	83.0	88.0	89.5	1.16	2.20	2.60	
		83.4					1.16	3.40	4.00	
75.8	78.3	81.3	84.8	88.3	93.3	94.8	1.16	3.60	4.20	
75.5	78.0	81.0	84.5	88.0	93.0	94.5	1.16	4.60	5.40	
73.8	76.3	79.3	82.8	86.3	91.3	92.8	1.16	4.80	5.60	
73.5	76.0	79.0	82.5	86.0	91.0	92.5	1.16	6.00	7.00	
71.4	73.9	76.9	80.4	83.9	88.9	90.4	1.16	3.20	3.80	
78.2	78.7	81.7	85.2	88.7	93.7	95.2	1.17	4.40	5.20	
74.1	76.6	79.6	83.1	86.6	91.6	93.1	1.17	5.60	6.60	
72.1	74.6	77.6	81.1	84.6	89.6	91.1	1.17	7.00	8.20	
69.7	72.2	75.2	78.7	82.2	87.2	88.7	1.17	3.00	3.60	
76.5	79.0	82.0	85.5	89.0	94.0	95.5	1.18	4.20	5.00	
74.4	76.9	79.9	83.4	86.9	91.9	93.4	1.18	5.20	6.20	
72.7	75.2	78.2	81.7	85.2	90.2	91.7	1.18	5.40	6.40	
72.4	74.9	77.9	81.4	84.9	89.9	91.4	1.18	6.40	7.60	
70.7	73.2	76.2	79.7	83.2	88.2	89.7	1.18	4.00	4.80	
74.7	77.2	80.2	83.7	87.2	92.2	93.7	1.19	5.00	6.00	
73.0	75.5	78.5	82.0	85.5	90.5	92.0	1.19	2.80	3.40	
		82.3					1.20	3.80	4.60	
75.1	77.6	80.6	84.1	87.6	92.6	94.1	1.20	4.80	5.80	
73.3	75.8	78.8	82.3	85.8	90.8	92.3	1.20	5.80	7.00	
71.6	74.1	77.1	80.6	84.1	89.1	90.6	1.20	2.60	3.20	
		82.6					1.21	3.60	4.40	
75.4	77.9	80.9	84.4	87.9	92.9	94.4	1.21	4.60	5.60	
73.6	76.1	79.1	82.6	86.1	91.1	92.6	1.21	5.40	6.60	
72.2	74.7	77.7	81.2	84.7	89.7	91.2	1.21	3.40	4.20	
75.7	78.2	81.2	84.7	88.2	93.2	94.7	1.22	4.20	5.20	
74.3	76.8	79.8	83.3	86.8	91.8	93.3	1.22	4.40	5.40	
74.0	76.5	79.5	83.0	86.5	91.5	93.0	1.22	5.20	6.40	
72.5	75.0	78.0	81.5	85.0	90.0	91.5	1.22	6.20	7.60	
70.8	73.3	76.3	79.8	83.3	88.3	89.8	1.22	2.40	3.00	
		82.9					1.23	3.20	4.00	
76.0	78.5	81.5	85.0	88.5	93.5	95.0	1.23	5.00	6.20	
72.9	75.4	78.4	81.9	85.4	90.4	91.9	1.23	6.60	8.20	
70.0	72.5	75.5	79.0	82.5	87.5	89.0	1.23	2.20	2.80	
		83.2					1.24	4.00	5.00	
74.6	77.1	80.1	83.6	87.1	92.1	93.6	1.24	4.80	6.00	
73.2	75.7	78.7	82.2	85.7	90.7	92.2	1.24	5.60	7.00	
71.8	74.3	77.3	80.8	84.3	89.3	90.8	1.24	3.00	3.80	
76.3	78.8	81.8	85.3	88.8	93.8	95.3	1.25	3.80	4.80	
74.9	77.4	80.4	83.9	87.4	92.4	93.9	1.25	4.60	5.80	
73.5	76.0	79.0	82.5	86.0	91.0	92.5	1.25	2.80	3.60	
		82.1					1.26	3.60	4.60	
75.2	77.7	80.7	84.2	87.7	92.7	94.2	1.26	4.40	5.60	
73.8	76.3	79.3	82.8	86.3	91.3	92.8	1.26	5.20	6.60	
72.4	74.9	77.9	81.4	84.9	89.9	91.4	1.26	6.00	7.60	
71.0	73.5	76.5	80.0	83.5	88.5	90.0	1.26	3.40	4.40	
75.5	78.0	81.0	84.5	88.0	93.0	94.5	1.27	4.20	5.40	
74.1	76.6	79.6	83.1	86.6	91.6	93.1	1.27	5.00	6.40	
72.7	75.2	78.2	81.7	85.2	90.2	91.7	1.27	6.40	8.20	
70.2	72.7	75.7	79.2	82.7	87.7	89.2	1.27	2.60	3.40	
		82.4					1.28	4.00	5.20	
74.4	76.9	79.9	83.4	86.9	91.9	93.4	1.28	4.80	6.20	
73.0	75.5	78.5	82.0	85.5	90.5	92.0	1.28	5.40	7.00	
71.9	74.4	77.4	80.9	84.4	89.4	90.9	1.28	7.00	9.00	
69.1	71.6	74.6	78.1	81.6	86.6	88.1	1.28	3.20	4.20	
75.8	78.3	81.3	84.8	88.3	93.3	94.8	1.29	4.60	6.00	
73.3	75.8	78.8	82.3	85.8	90.8	92.3	1.29	2.40	3.20	
		82.8					1.30			

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																						
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A				
					20	21	22	23	24	25	26	27	28	29	29.8	30	31	32	33	34	35	36	37	38	39	40	
4.55	5.75	3.80	5.00	1.30						6.2	6.7	7.2	7.7		8.2	8.6	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7
5.15	6.55	4.40	5.80	1.30									6.6	7.1	7.5	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1
5.75	7.35	5.00	6.60	1.30														7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
6.55	8.35	5.80	7.60	1.30															8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
3.75	4.75	3.00	4.00	1.31	5.1	5.6	6.1	6.6	7.1	7.6	8.1	8.6	9.1	9.6	10.0	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	
4.35	5.55	3.60	4.80	1.31					6.0	6.5	7.0	7.5	8.0	8.5	8.9	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	
4.95	6.35	4.20	5.60	1.31								6.4	6.9	7.4			7.8	7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4
6.95	8.95	6.20	8.20	1.31																							8.8
5.55	7.15	4.80	6.40	1.32														7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8
2.95	3.75	* 2.20	3.00	1.33	7.1	7.6	8.1	8.6	9.1	9.6		10.1	10.6	11.1	11.5	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	
3.55	4.55	* 2.80	3.80	1.33	5.9	6.4	6.9	7.4	8.0	8.5		9.0	9.5	10.0	10.4	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	
4.15	5.35	* 3.40	4.60	1.33					5.8	6.3	6.8	7.3	7.8	8.3	8.8	9.2	9.3	9.8	10.3	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4
4.75	6.15	4.00	5.40	1.33						6.2	6.7	7.2		7.7	8.1	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7
5.35	6.95	4.60	6.20	1.33											7.0	7.1	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6
5.95	7.75	5.20	7.00	1.33														8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5
5.15	6.75	4.40	6.00	1.34											6.9	7.3	7.4	7.9	8.4	8.9	9.4	9.9	10.5	11.0	11.5	12.0	12.5
6.35	8.35	5.60	7.60	1.34																							9.2
3.35	4.35	* 2.60	3.60	1.35	6.3	6.8	7.3	7.8	8.3	8.8		9.3	9.8	10.3	10.7	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	
3.95	5.15	* 3.20	4.40	1.35					5.6	6.2	6.7	7.2	7.7		8.2	8.7	9.2	9.6	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2
4.55	5.95	3.80	5.20	1.35						6.0	6.5	7.0	7.5		8.1	8.5	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6
6.75	8.95	6.00	8.20	1.35																							8.9
7.35	9.75	6.60	9.00	1.35																							9.4
4.35	5.75	3.60	5.00	1.36				5.9	6.4	6.9	7.4	7.9		8.4	8.8	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	
4.95	6.55	4.20	5.80	1.36								6.7	7.3	7.7	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	
5.55	7.35	4.80	6.60	1.36														7.6	8.1	8.6	9.2	9.7	10.2	10.7	11.2	11.7	12.2
3.75	4.95	3.00	4.20	1.37	5.5	6.0	6.5	7.0	7.5	8.0		8.5	9.0		9.5	9.9	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	
5.35	7.15	4.60	6.40	1.37														7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
3.15	4.15	* 2.40	3.40	1.38	6.6	7.1	7.6	8.1	8.6	9.1		9.6	10.1	10.6	11.0	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	
4.15	5.55	3.40	4.80	1.38					5.7	6.2	6.7	7.2	7.7	8.2	8.7	9.1	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2
4.75	6.35	4.00	5.60	1.38									6.6	7.1	7.6	8.0	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	
5.75	7.75	5.00	7.00	1.38														7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2
3.55	4.75	* 2.80	4.00	1.39	5.8	6.3	6.8	7.3	7.8	8.3		8.8	9.3	9.8	10.2	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	
5.15	6.95	4.40	6.20	1.39											6.8	7.2	7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3
6.15	8.35	5.40	7.60	1.39																							8.4
7.15	9.75	6.40	9.00	1.39																							8.9
4.55	6.15	3.80	5.40	1.40					6.4	6.9	7.4	7.9		8.3	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	
4.95	6.75	4.20	6.00	1.40								6.6	7.1		7.5	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	
6.55	8.95	5.80	8.20	1.40																							8.6
2.95	3.95	* 2.20	3.20	1.41	6.9	7.4	7.9	8.4	8.9	9.4		9.9	10.4	10.9	11.3	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	
3.95	5.35	3.20	4.60	1.41					5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.4	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
5.35	7.35	4.60	6.60	1.41														7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8
3.35	4.55	* 2.60	3.80	1.42	6.1	6.6	7.1	7.6	8.1	8.6	9.1	9.6		10.1	10.5	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	
4.35	5.95	3.60	5.20	1.42					6.2	6.7	7.2	7.7		8.2	8.6	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	
4.75	6.35	4.00	5.80	1.42											6.4	6.9	7.4	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3
3.75	5.15	3.00	4.40	1.43	5.3	5.8	6.3	6.8	7.3	7.8	8.3	8.8		9.3	9.7	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	
5.15	7.15	4.40	6.40	1.43																							7.0
6.95	9.75	6.20	9.00	1.43																							7.1
4.15	5.75	3.40	5.00	1.44					6.0	6.5	7.0	7.5	8.0	8.5		8.9	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	
4.55	6.35	3.80	5.60	1.44						6.2	6.7	7.2	7.7		8.1	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	
5.55	7.75	4.80	7.00	1.44														7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3
5.95	8.35	5.20	7.60	1.44																							8.0
6.35	8.95	5.60	8.20	1.44																							8.7
3.15	4.35	* 2.40	3.60	1.45	6.4	6.9	7.4	7.9	8.4	8.9	9.4	9.9		10.4	10.8	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	
4.95	6.95	4.20	6.20	1.45														6.9	7.3	7.4	7.9	8.4	8.9	9.4	9.9	10.4	10.9
3.55	4.95	* 2.80	4.20	1.46	5.6	6.1	6.6	7.1	7.6	8.1	8.6	9.1		9.6	10.0	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	
3.95	5.55	3.20	4.80	1.46					5.8	6.3	6.8	7.3	7.8	8.3		8.8	9.2	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	
4.35	6.15	3.60	5.40	1.47														8.0	8.4	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
4.75	6.75	4.00	6.00	1.47																							8.2
5.15	7.35	4.40	6.60	1.47																							

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																										Speed Ratio	Sheave Datum Diameters	
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		A	Small Sheave
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65				
14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	1.30	3.80	5.00	
13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	1.30	4.40	5.80	
12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	1.30	5.00	6.60	
10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	1.30	5.80	7.60	
15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	1.31	3.00	4.00	
14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	1.31	3.60	4.80	
13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	1.31	4.20	5.60	
9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	1.31	6.20	8.20	
12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	1.32	4.80	6.40	
17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	1.33	2.20	3.00	
16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	1.33	2.80	3.80	
14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	1.33	3.40	4.60	
13.7	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	1.33	4.00	5.40	
12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	1.33	4.60	6.20	
11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	1.33	5.20	7.00	
13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	1.34	4.40	6.00	
10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	1.34	5.60	7.60	
15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	1.35	3.20	4.40	
14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	1.35	3.80	5.20	
9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	1.35	6.00	8.20	
14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	1.36	3.60	5.00	
13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	1.36	4.20	5.80	
12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	1.36	4.80	6.60	
15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	1.37	3.00	4.20	
12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	1.37	4.60	6.40	
16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	1.38	2.40	3.40	
14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	1.38	3.40	4.80	
13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	1.38	4.00	5.60	
11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	1.38	5.00	7.00	
15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	1.39	2.80	4.00	
12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	1.39	4.40	6.20	
10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	1.39	5.40	7.60	
9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	1.39	6.40	9.00		
13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	1.40	3.80	5.40	
13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	1.40	4.20	6.00	
10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	1.40	5.80	8.20	
16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	1.41	2.20	3.20	
15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	1.41	3.20	4.60	
12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	1.41	4.60	6.60	
16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	1.42	2.60	3.80	
14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	1.42	3.60	5.20	
13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	1.42	4.00	5.80	
15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	1.43	3.00	4.40	
12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	1.43	4.40	6.40	
9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	1.43	6.20	9.00	
14.5	15.0	15.5																										

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																						
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP				
66	67	68	69		70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89			
4.55	5.75	3.80	5.00	1.30	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	
5.15	6.55	4.40	5.80	1.30	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	
5.75	7.35	5.00	6.60	1.30	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	
6.55	8.35	5.80	7.60	1.30	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	
3.75	4.75	3.00	4.00	1.31	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	
4.35	5.55	3.60	4.80	1.31	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	
4.95	6.35	4.20	5.60	1.31	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	
6.95	8.95	6.20	8.20	1.31	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	
5.55	7.15	4.80	6.40	1.32	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	
2.95	3.75	2.20	3.00	1.33	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	
3.55	4.55	2.80	3.80	1.33	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	
4.15	5.35	3.40	4.60	1.33	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	
4.75	6.15	4.00	5.40	1.33	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	
5.35	6.95	4.60	6.20	1.33	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	
5.95	7.75	5.20	7.00	1.33	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	
4.15	6.75	4.40	6.00	1.34	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	
6.35	8.35	5.60	7.60	1.34	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	
3.35	4.35	2.60	3.60	1.35	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	
3.95	5.15	3.20	4.40	1.35	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	
4.55	5.95	3.80	5.20	1.35	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	
7.35	8.95	6.00	8.20	1.35	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	
7.35	9.75	6.60	9.00	1.35	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	
4.35	5.75	3.60	5.00	1.36	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	
4.95	6.55	4.20	5.80	1.36	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	
5.55	7.35	4.80	6.60	1.36	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	
3.75	4.95	3.00	4.20	1.37	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	
5.35	7.15	4.60	6.40	1.37	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	
3.15	4.15	2.40	3.40	1.38	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	
4.15	5.55	3.40	4.80	1.38	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	
4.75	6.35	4.00	5.60	1.38	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	
5.75	7.75	5.00	7.00	1.38	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	
3.55	4.75	2.80	4.00	1.39	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	
5.15	6.95	4.40	6.20	1.39	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	
6.15	8.35	5.40	7.60	1.39	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	
7.15	9.75	6.40	9.00	1.39	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	
4.55	6.15	3.80	5.40	1.40	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	
4.95	6.75	4.20	6.00	1.40	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	
6.55	8.95	5.80	8.20	1.40	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	
2.95	3.95	2.20	3.20	1.41	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	
3.95	5.35	3.20	4.60	1.41	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	
5.35	7.35	4.60	6.60	1.41	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	
3.35	4.55	2.60	3.80	1.42	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	
4.35	5.95	3.60	5.20	1.42	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	
4.75	6.55	4.00	5.80	1.42	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	
3.75	5.15	3.00	4.40	1.43	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	
5.15	7.15	4.40	6.40	1.43	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	
6.95	9.75	6.20	9.00	1.43	23.1	23.6	24.1	24.6	25.1	25.6	26.1																

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																								Speed Ratio	Sheave Datum Diameters		
A AX	A AX	A AX AP	A AX AP	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	Small Sheave		Large Sheave		
88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	110	112	113	114	1.30	3.80	5.00
37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.7	49.7	50.2	50.7	1.30	4.40	5.80
36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.6	48.6	49.1	49.6	1.30	5.00	6.60
35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.5	47.5	48.0	48.5	1.30	5.80	7.60
34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	45.1	46.1	46.6	47.1	1.30	3.00	4.00
39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	50.1	51.1	51.6	52.1	1.31	3.60	4.80
38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	49.0	50.0	50.5	51.0	1.31	4.20	5.60
36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.9	48.9	49.4	49.9	1.31	4.60	6.20
33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	44.3	45.3	45.8	46.3	1.31	6.20	8.20
35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.8	47.8	48.3	48.8	1.32	4.80	6.40
40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	51.1	51.6	52.1	52.6	1.32	2.20	3.00	
39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.5	51.5	52.0	1.33	2.80	3.80	
38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	49.4	50.4	50.9	51.4	1.33	3.40	4.60
37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	48.3	49.3	49.8	50.3	1.33	4.00	5.40
36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	47.2	48.2	48.7	49.2	1.33	4.60	6.20
35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	46.1	47.1	47.6	48.1	1.33	5.20	7.00
36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.5	48.5	49.0	49.5	1.34	4.40	6.00
34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	45.3	46.3	46.8	47.3	1.34	5.60	7.60
39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	50.3	51.3	51.8	52.3	52.8	1.35	2.60	3.60
38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.7	50.7	51.2	51.7	1.35	3.20	4.40
37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.6	49.6	50.1	50.6	1.35	3.80	5.20
33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.5	45.5	46.0	46.5	1.35	6.00	8.20
32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	43.4	44.4	44.9	45.4	1.35	6.60	9.00
37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.9	49.4	49.9	50.4	1.36	3.60	5.00
36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.8	48.8	49.3	49.8	1.36	4.20	5.80
35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.7	47.7	48.2	48.7	1.36	4.80	6.60
39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	50.0	51.0	51.5	52.0	1.37	3.00	4.20
36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	47.0	48.0	48.5	49.0	1.37	4.60	6.40
40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.6	51.6	52.1	52.6	53.1	1.38	2.40	3.40
38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	49.2	50.2	50.7	51.2	1.38	3.40	4.80
37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	48.1	49.1	49.6	50.1	1.38	4.00	5.60
35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	46.2	47.2	47.7	48.2	1.38	5.00	7.00
39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.8	50.8	51.3	51.8	52.3	1.39	2.80	4.00
36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	47.3	48.3	48.8	49.3	1.39	4.40	6.20
34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	45.4	46.4	46.9	47.4	1.39	5.40	7.60
32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.5	44.5	45.0	45.5	1.39	6.40	9.00
37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	48.4	49.4	49.9	50.4	1.40	3.80	5.40
36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.6	48.6	49.1	49.6	1.40	4.20	6.00
33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.6	45.6	46.1	46.6	1.40	5.80	8.20
40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	50.4	51.4	52.4	52.9	53.4	53.9	1.41	2.20	3.20
38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.5	50.5	51.0	51.5	1.41	3.20	4.60
35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.8	47.8	48.3	48.8	1.41	4.60	6.60
39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	50.1	51.1	51.6	52.1	52.6	1.42	2.60	3.80
37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.7	49.7	50.2	50.7	1.42	3.60	5.20
36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.9	48.9	49.4	49.9	1.42	4.00	5.80
38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	49.3	50.3	51.3	51.8	1.43	3.00	4.40
36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42															

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A										A											
115	116	117	118		120	124	125	127	128	130	132	133	134	136	137	140	144	A		A		A		A		
4.55	5.75	3.80	5.00	1.30	51.2	51.7	52.2	52.7	53.7	55.7	56.2	57.2	57.7	58.7	59.7	60.2	60.7	61.7	62.2	63.7	65.7	67.7	69.7	71.7	72.2	72.7
5.15	6.55	4.40	5.80	1.30	50.1	50.6	51.1	51.6	52.6	54.6	55.1	56.1	56.6	57.6	58.6	59.1	59.6	60.6	61.1	62.6	64.6	66.6	68.6	70.6	71.1	71.6
5.75	7.35	5.00	6.60	1.30	49.0	49.5	50.0	50.5	51.5	53.5	54.0	55.0	55.5	56.5	57.5	58.0	58.5	59.5	60.0	61.5	63.5	65.5	67.5	69.5	70.0	70.5
6.55	8.35	5.80	7.60	1.30	47.6	48.1	48.6	49.1	50.1	52.1	52.6	53.6	54.1	55.1	56.1	56.6	57.1	58.1	58.6	60.1	62.1	64.1	66.1	68.1	68.6	69.1
3.75	4.75	3.00	4.00	1.31	52.6	53.1	53.6	54.1	55.1	57.2	57.7	58.7	59.2	60.2	61.2	61.7	62.2	63.2	63.7	65.2	67.2	69.2	71.2	72.2	73.2	74.2
4.35	5.55	3.60	4.80	1.31	51.5	52.0	52.5	53.0	54.0	56.0	56.5	57.5	58.0	59.0	60.0	60.5	61.0	62.0	62.5	64.0	66.0	68.0	70.0	71.0	72.0	73.0
4.95	6.35	4.20	5.60	1.31	50.4	50.9	51.4	51.9	52.9	54.9	55.4	56.4	56.9	57.9	58.9	59.4	59.9	60.9	61.4	62.9	64.9	66.9	68.9	70.9	71.4	71.9
6.95	8.95	6.20	8.20	1.31	48.8	49.3	49.8	50.3	51.3	53.3	53.8	54.8	55.3	56.3	57.3	57.8	58.3	59.3	59.8	61.3	63.3	65.3	67.3	69.3	70.3	70.8
5.55	7.15	4.80	6.40	1.32	49.3	49.8	50.3	50.8	51.8	53.8	54.3	55.3	55.8	56.8	57.8	58.3	58.8	59.8	60.3	61.8	63.8	65.8	67.8	69.8	70.3	70.8
2.95	3.75	2.20	3.00	1.33	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6
3.55	4.55	2.80	3.80	1.33	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
4.15	5.35	3.40	4.60	1.33	51.9	52.4	52.9	53.4	54.4	56.4	56.9	57.9	58.4	59.4	60.4	60.9	61.4	62.4	62.9	64.4	66.4	68.4	70.4	72.4	72.9	73.4
4.75	6.15	4.00	5.40	1.33	50.8	51.3	51.8	52.3	53.3	55.3	55.8	56.8	57.3	58.3	59.3	59.8	60.3	61.3	61.8	63.3	65.3	67.3	69.3	71.3	71.8	72.3
5.35	6.95	4.60	6.20	1.33	49.7	50.2	50.7	51.2	52.2	54.2	54.7	55.7	56.2	57.2	58.2	58.7	59.2	60.2	60.7	62.2	64.2	66.2	68.2	70.2	70.7	71.2
5.95	7.75	5.20	7.00	1.33	48.6	49.1	49.6	50.1	51.1	53.1	53.6	54.6	55.1	56.1	57.1	57.6	58.1	59.1	59.6	61.1	63.1	65.1	67.1	69.1	69.6	70.1
5.15	6.75	4.40	6.00	1.34	50.0	50.5	51.0	51.5	52.5	54.5	55.0	56.0	56.5	57.5	58.5	59.0	59.5	60.5	61.5	63.5	65.5	67.5	69.5	71.5	71.5	71.5
6.35	8.35	5.60	7.60	1.34	47.8	48.3	48.8	49.3	50.3	52.3	52.8	53.8	54.3	55.3	56.3	56.8	57.3	58.3	58.8	60.3	62.3	64.3	66.3	68.3	68.8	69.3
3.35	4.35	2.60	3.60	1.35	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8
3.95	5.15	3.20	4.40	1.35	52.2	52.7	53.2	53.7	54.7	56.7	57.2	58.2	58.7	59.7	60.7	61.2	61.7	62.7	63.2	64.7	66.7	68.7	70.7	72.7	73.2	73.7
4.55	5.95	3.80	5.20	1.35	51.1	51.6	52.1	52.6	53.6	55.6	56.1	57.1	57.6	58.6	59.6	60.1	60.6	61.6	62.1	63.6	65.6	67.6	69.6	71.6	72.1	72.6
6.75	8.95	6.00	8.20	1.35	47.0	47.5	48.0	48.5	49.5	51.5	52.0	53.0	53.5	54.5	55.5	56.0	56.5	57.5	58.0	59.5	61.5	63.5	65.5	67.5	68.0	68.5
7.35	9.75	6.60	9.00	1.35	45.9	46.4	46.9	47.4	48.4	50.4	50.9	51.9	52.4	53.4	54.4	54.9	55.4	56.4	56.9	58.4	60.4	62.4	64.4	66.4	66.9	67.4
4.35	5.75	3.60	5.00	1.36	51.4	51.9	52.4	52.9	53.9	55.9	56.4	57.4	57.9	58.9	59.9	60.4	60.9	61.9	62.4	63.9	65.9	67.9	69.9	71.9	72.4	72.9
4.95	6.55	4.20	5.80	1.36	50.3	50.8	51.3	51.8	52.8	54.8	55.3	56.3	56.8	57.8	58.8	59.3	59.8	60.8	61.3	62.8	64.8	66.8	68.8	70.8	71.3	71.8
5.55	7.35	4.80	6.60	1.36	49.2	49.7	50.2	50.7	51.7	53.7	54.2	55.2	55.7	56.7	57.7	58.2	58.7	59.7	60.2	61.7	63.7	65.7	67.7	69.7	70.2	70.7
3.75	4.95	3.00	4.20	1.37	52.5	53.0	53.5	54.0	55.0	57.0	57.5	58.5	59.0	60.0	61.0	61.5	62.0	63.0	63.5	65.0	67.0	69.0	71.0	73.0	73.5	74.0
5.35	7.15	4.60	6.40	1.37	49.5	50.0	50.5	51.0	52.0	54.0	54.5	55.5	56.0	57.0	58.0	58.5	59.0	60.0	60.5	62.0	64.0	66.0	68.0	70.0	70.5	71.0
3.15	4.15	2.40	3.40	1.38	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
4.15	5.55	3.40	4.80	1.38	51.7	52.2	52.7	53.2	54.2	56.2	56.7	57.7	58.2	59.2	60.2	60.7	61.2	62.2	62.7	64.2	66.2	68.2	70.2	72.2	72.7	73.2
4.75	6.35	4.00	5.60	1.38	50.6	51.1	51.6	52.1	53.1	55.1	55.6	56.6	57.1	58.1	59.1	59.6	60.1	61.1	61.6	63.1	65.1	67.1	69.1	71.1	71.6	72.1
5.15	7.75	5.00	7.00	1.38	48.7	49.2	49.7	50.2	51.2	53.2	53.7	54.7	55.2	56.2	57.2	57.7	58.2	59.2	59.7	61.2	63.2	65.2	67.2	69.2	69.7	70.2
3.55	4.75	2.80	4.00	1.39	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
5.15	6.95	4.40	6.20	1.39	49.8	50.3	50.8	51.3	52.3	54.3	54.8	55.8	56.3	57.3	58.3	58.8	59.3	60.3	60.8	62.3	64.3	66.3	68.3	70.3	70.8	71.3
6.15	8.35	5.40	7.60	1.39	47.9	48.4	48.9	49.4	50.4	52.4	52.9	53.9	54.4	55.4	56.4	56.9	57.4	58.4	58.9	60.4	62.4	64.4	66.4	68.4	68.9	69.4
7.15	9.75	6.40	9.00	1.39	46.0	46.5	47.0	47.5	48.5	50.5	51.0	52.0	52.5	53.5	54.5	55.0	55.5	56.5	57.0	58.5	60.5	62.5	64.5	66.5	67.0	67.5
4.55	6.15	3.80	5.40	1.40	50.9	51.4	51.9	52.4	53.4	55.4	55.9	56.9	57.4	58.4	59.4	59.9	60.4	61.4	61.9	63.4	65.4	67.4	69.4	71.4	71.9	72.4
4.95	6.75	4.20	6.00	1.40	50.1	50.6	51.1	51.6	52.6	54.6	55.1	56.1	56.6	57.6	58.6	59.1	59.6	60.6	61.1	62.6	64.6	66.6	68.6	70.6	71.1	71.6
6.55	8.95	5.80	8.20	1.40	47.1	47.6	48.1	48.6	49.6	51.6	52.1	53.1	53.6	54.6	55.6	56.1	56.6	57.6	58.1	59.6	61.6	63.6	65.6	67.6	68.1	68.6
2.95	3.95	2.20	3.20	1.41	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4	56.4
3.95	5.35	3.20	4.60	1.41	52.0	52.5	53.0	53.5	54.5	56.5	57.0	58.0	58.5	59.5	60.5	61.0	61.5	62.5	63.0	64.5	66.5	68.5	70.5	72.5	73.0	73.5
5.35	7.35	4.60	6.60	1.41	49.3	49.8	50.3	50.8	51.8	53.8	54.3	55.3	55.8	56.8	57.8	58.3	58.8	59.8	60.3	61.8	63.8	65.8	67.8	69.8	70.3	70.8
3.35	4.55	2.60	3.80	1.42	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6
4.35	5.95	3.60	5.20	1.42	51.2	51.7	52.2	52.7	53.7	55.7	56.2	57.2	57.7	58.7	59.7	60.2	60.7	61.7	62.2	63.7	65.7	67.7	69.7	71.7	72.2	72.7
4.75	6.55	4.00	5.80	1.42	50.4	50.9	51.4	51.9	52.9	54.9	55.4	56.4	56.9	57.9	58.9	59.4	59.9	60.9	61.4	62.9	64.9	66.9	68.9	70.9	71.4	71.9
3.75	5.15	3.00	4.40	1.43	52.3	52.8	53.3	53.8	54.8	56.8	57.3	58.3	58.8	59.8	60.8	61.3	61.8	62.8	63.3	64.8	66.8	68.8	70.8	72.8	73.3	73.8
5.15	7.15	4.40	6.40	1.43	49.7	50.2	50.7	51.2	52.2	54.2	54.7	55.7	56.2	57.2	58.2	58.7	59.2	60.2	60.7	62.2	64.2	66.2	68.2	70.2	70.7	71.2
6.95	9.75	6.20	9.00	1.43	46.2	46.7	47.2	47.7	48.7	50.7	51.2	52.2	52.7	53.7	54.7	55.2	55.7	56.7	57.2	58.7	60.7	62.7	64.7	66.7	67.2	67.7
4.15																										

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance								Speed Ratio	Sheave Datum Diameters	
A	A	A	A	A	A	A	Small Sheave		Large Sheave	
162	167	173	180	187	197	200	1.30	3.80	5.00	
74.7	77.2	80.2	83.7	87.2	92.2	93.7	1.30	4.40	5.80	
73.6	76.1	79.1	82.6	86.1	91.1	92.6	1.30	5.00	6.60	
72.5	75.0	78.0	81.5	85.0	90.0	91.5	1.30	5.80	7.60	
71.1	73.6	76.6	80.1	83.6	88.6	90.1	1.31	3.00	4.00	
76.2	78.7	81.7	85.2	88.7	93.7	95.2	1.31	3.60	4.80	
75.1	77.6	80.6	84.1	87.6	92.6	94.1	1.31	4.20	5.60	
73.9	76.4	79.5	83.0	86.5	91.5	93.0	1.31	6.20	8.20	
70.3	72.8	75.8	79.3	82.8	87.8	89.3	1.32	4.80	6.40	
72.8	75.3	78.3	81.8	85.3	90.3	91.8	1.33	* 2.20	3.00	
		83.1					1.33	* 2.80	3.80	
75.4	77.9	80.9	84.4	87.9	92.9	94.4	1.33	3.40	4.60	
74.3	76.8	79.8	83.3	86.8	91.8	93.3	1.33	4.00	5.40	
73.2	75.7	78.7	82.2	85.7	90.7	92.2	1.33	4.60	6.20	
72.1	74.6	77.6	81.1	84.6	89.6	91.1	1.33	5.20	7.00	
73.5	76.0	79.0	82.5	86.0	91.0	92.5	1.34	4.40	6.00	
71.3	73.8	76.8	80.3	83.8	88.8	90.3	1.34	5.60	7.60	
		82.3					1.35	* 2.60	3.60	
75.7	78.2	81.2	84.7	88.2	93.2	94.7	1.35	3.20	4.40	
74.6	77.1	80.1	83.6	87.1	92.1	93.6	1.35	3.80	5.20	
70.5	73.0	76.0	79.5	83.0	88.0	89.5	1.35	6.00	8.20	
69.4	71.9	74.9	78.4	81.9	86.9	88.4	1.35	6.80	9.00	
74.9	77.4	80.4	83.9	87.4	92.4	93.9	1.36	3.60	5.00	
73.8	76.3	79.3	82.8	86.3	91.3	92.8	1.36	4.20	5.80	
72.7	75.2	78.2	81.7	85.2	90.2	91.7	1.36	4.80	6.60	
76.0	78.5	81.5	85.0	88.5	93.5	95.0	1.37	3.00	4.20	
73.0	75.5	78.5	82.0	85.5	90.5	92.0	1.37	4.60	6.40	
		82.6					1.38	* 2.40	3.40	
75.2	77.7	80.7	84.2	87.7	92.7	94.2	1.38	3.40	4.80	
74.1	76.6	79.6	83.1	86.6	91.6	93.1	1.38	4.00	5.60	
72.2	74.7	77.7	81.2	84.7	89.7	91.2	1.38	5.00	7.00	
		81.8					1.39	* 2.80	4.00	
73.3	75.8	78.8	82.3	85.8	90.8	92.3	1.39	4.40	6.20	
71.4	73.9	76.9	80.4	83.9	88.9	90.4	1.39	5.40	7.60	
69.5	72.0	75.0	78.5	82.0	87.0	88.5	1.39	6.40	9.00	
74.4	76.9	79.9	83.4	86.9	91.9	93.4	1.40	3.80	5.40	
73.6	76.1	79.1	82.6	86.1	91.1	92.6	1.40	4.20	6.00	
70.6	73.1	76.1	79.6	83.1	88.1	89.6	1.40	5.80	8.20	
		82.9					1.41	* 2.20	3.20	
75.5	78.0	81.0	84.5	88.0	93.0	94.5	1.41	3.20	4.60	
72.8	75.3	78.3	81.8	85.3	90.3	91.8	1.41	4.60	6.60	
		82.1					1.42	* 2.60	3.80	
74.7	77.2	80.2	83.7	87.2	92.2	93.7	1.42	3.60	5.20	
73.9	76.4	79.4	82.9	86.4	91.4	92.9	1.42	4.00	5.80	
75.8	78.3	81.3	84.8	88.3	93.3	94.8	1.43	3.00	4.40	
73.2	75.7	78.7	82.2	85.7	90.7	92.2	1.43	4.40	6.40	
69.7	72.2	75.2	78.7	82.2	87.2	88.7	1.43	6.20	9.00	
75.0	77.5	80.5	84.0	87.5	92.5	94.0	1.44	3.40	5.00	
74.3	76.8	79.8	83.3	86.8	91.8	93.3	1.44	3.80	5.60	
72.4	74.9	77.9	81.4	84.9	89.9	91.4	1.44	4.80	7.00	
71.6	74.1	77.1	80.6	84.1	89.1	90.6	1.44	5.20	7.80	
70.8	73.3	76.3	79.8	83.3	88.3	89.8	1.44	5.60	8.20	
		82.4					1.45	* 2.40	3.60	
73.5	76.0	79.0	82.5	86.0	91.0	92.5	1.45	4.20	6.20	
		81.6					1.46	* 2.80	4.20	
75.4	77.9	80.9	84.4	87.9	92.9	94.4	1.46	3.20	4.80	
74.6	77.1	80.1	83.6	87.1	92.1	93.6	1.47	3.60	5.40	
73.8	76.3	79.3	82.8	86.3	91.3	92.8	1.47	4.00	6.00	
73.0	75.5	78.5	82.0	85.5	90.5	92.0	1.47	4.40	6.60	
69.9	72.4	75.4	78.9	82.4	87.4	88.9	1.48	6.00	9.00	
		82.7					1.49	* 2.20	3.40	
		82.0					1.49	* 2.60	4.00	
75.7	78.2	81.2	84.7	88.2	93.2	94.7	1.49	3.00	4.60	
74.9	77.4	80.4	83.9	87.4	92.4	93.9	1.49	3.40	5.20	
74.1	76.6	79.6	83.1	86.6	91.6	93.1	1.49	3.80	5.80	
73.3	75.8	78.8	82.3	85.8	90.8	92.3	1.49	4.20	6.40	
72.5	75.0	78.0	81.5	85.0	90.0	91.5	1.49	4.60	7.00	
71.7	74.2	77.2	80.7	84.2	89.2	90.7	1.50	5.00	7.60	
71.0	73.5	76.5	80.0	83.5	88.5	90.0	1.50	5.40	8.20	
67.8	70.3	73.3	76.8	80.3	85.3	86.8	1.50	7.00	10.60	
		81.5					1.52	* 2.80	4.40	
75.2	77.7	80.7	84.2	87.7	92.7	94.2	1.52	3.20	5.00	
74.4	76.9	79.9	83.4	86.9	91.9	93.4	1.52	3.60	5.60	
73.6	76.1	79.1	82.6	86.1	91.1	92.6	1.52	4.00	6.20	
		82.3					1.53	* 2.40	3.80	
70.0	72.5	75.5	79.0	82.5	87.5	89.0	1.53	5.80	9.00	

Key to Horsepower Correction Factor

- 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																			
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
					AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX		
4.55	6.75	3.80	6.00	1.54																				
4.95	7.35	4.20	6.60	1.54																				
3.75	5.55	3.00	4.80	1.55																				
4.15	6.15	3.40	5.40	1.55																				
5.55	8.35	4.80	7.60	1.55																				
5.95	8.95	5.20	8.20	1.55																				
3.35	4.95	2.60	4.20	1.56																				
4.75	7.15	4.00	6.40	1.56																				
5.15	7.75	4.40	7.00	1.56																				
2.95	4.35	2.20	3.60	1.57																				
4.35	6.55	3.60	5.80	1.57																				
3.95	5.95	3.20	5.20	1.58																				
6.35	9.75	5.60	9.00	1.58																				
7.35	11.35	6.60	10.60	1.58																				
3.55	5.35	2.80	4.60	1.59																				
4.55	6.95	3.80	6.20	1.59																				
3.15	4.75	2.40	4.00	1.60																				
4.15	6.35	3.40	5.60	1.60																				
4.75	7.35	4.00	6.60	1.61																				
4.75	8.95	5.00	8.20	1.61																				
3.75	5.75	3.00	5.00	1.62																				
4.35	6.75	3.60	6.00	1.62																				
5.35	8.35	4.60	7.60	1.62																				
3.35	5.15	2.60	4.40	1.63																				
4.95	7.75	4.20	7.00	1.63																				
7.15	11.35	6.40	10.60	1.63																				
3.95	6.15	3.20	5.40	1.64																				
4.55	7.15	3.80	6.40	1.64																				
6.15	9.75	5.40	9.00	1.64																				
2.95	4.55	2.20	3.80	1.65																				
3.55	5.55	2.80	4.80	1.66																				
4.15	6.55	3.40	5.80	1.66																				
5.55	8.95	4.80	8.20	1.67																				
3.15	4.95	2.40	4.20	1.68																				
3.75	5.95	3.00	5.20	1.68																				
4.35	6.95	3.60	6.20	1.68																				
6.95	11.35	6.20	10.60	1.68																				
4.55	7.35	3.80	6.60	1.69																				
5.15	8.35	4.40	7.60	1.69																				
7.75	12.75	7.00	12.00	1.69																				
3.35	5.35	2.60	4.60	1.70																				
3.95	6.35	3.20	5.60	1.70																				
5.95	9.75	5.20	9.00	1.70																				
4.15	6.75	3.40	6.00	1.71																				
4.75	7.75	4.00	7.00	1.71																				
3.55	5.75	2.80	5.00	1.72																				
2.95	4.75	2.20	4.00	1.73																				
4.35	7.15	3.60	6.40	1.73																				
3.75	6.15	3.00	5.40	1.74																				
5.35	8.95	4.60	8.20	1.74																				
6.75	11.35	6.00	10.60	1.74																				
3.15	5.15	2.40	4.40	1.75																				
3.95	6.55	3.20	5.80	1.75																				
4.95	8.35	4.20	7.60	1.76																				
5.75	9.75	5.00	9.00	1.76																				
3.35	5.55	2.60	4.80	1.77																				
4.15	6.95	3.40	6.20	1.77																				
4.35	7.35	3.60	6.60	1.78																				
3.55	5.95	2.80	5.20	1.79																				
4.55	7.75	3.80	7.00	1.79																				
6.55	11.35	5.80	10.60	1.79																				
7.35	12.75	6.60	12.00	1.79																				
3.75	6.35	3.00	5.60	1.80																				
3.95	6.75	3.20	6.00	1.81																				
2.95	4.95	2.20	4.20	1.82																				
4.15	7.15	3.40	6.40	1.82																				
5.15	8.95	4.40	8.20	1.82																				
3.15	5.35	2.40	4.60	1.83																				
5.55	9.75	4.80	9.00	1.83																				
3.35	5.75	2.60	5.00	1.84																				
7.15	12.75	6.40	12.00	1.84																				
3.55	6.15	2.80	5.40	1.85																				
4.75	8.35	4.00	7.60	1.85																				
6.35	11.35	5.60	10.60	1.85																				
3.75	6.55	3.00	5.80	1.86																				
7.75	13.95	7.00	13.20	1.86																				

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																										Speed Ratio	Sheave Datum Diameters	
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		Small Sheave	Large Sheave
AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	1.54	3.80	6.00	
13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	1.54	4.20	6.60	
12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	1.55	3.00	4.80	
15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	1.55	3.40	5.40	
14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	1.55	4.80	7.60	
11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	1.55	5.20	8.20	
10.6	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	1.55	2.60	4.20	
15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	1.56	4.00	6.40	
12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	1.56	4.00	6.40	
12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	1.56	4.40	7.00	
16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	1.57	2.20	3.60	
13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	1.57	3.60	5.80	
14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	1.58	3.20	5.20	
9.5	10.0	10.5	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	1.58	5.60	9.00	
10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	1.58	6.60	10.00	
15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	1.59	2.80	4.60	
13.2	13.7	14.2	14.7	15.2	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	1.59	3.80	6.20	
16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	1.60	2.40	4.00	
14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	1.60	3.40	5.60	
12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	1.61	4.00	6.60	
10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	1.61	5.00	8.20	
14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	1.62	3.00	5.00	
13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	1.62	3.60	6.00	
11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	1.62	4.60	7.60	
15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	1.63	2.60	4.40	
12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	1.63	4.20	7.00	
14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	1.64	3.20	5.40	
13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	1.64	3.80	6.40	
9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	1.64	5.40	9.00	
16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	1.65	2.20	3.80	
15.1	15.6	16.2	16.7	17.2	17.7	18.2	18.7	19.2	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	1.65	2.80	4.80	
13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	1.66	3.40	5.80	
10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	1.67	4.80	8.20	
15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	1.68	2.40	4.00	
14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	1.68	3.00	5.20	
13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	1.68	3.60	6.20	
12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	1.68	6.20	10.60	
11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	1.69	4.40	7.60	
15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	1.70	2.60	4.60	
14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	1.70	3.20	5.60	
9.8	10.3	10.8	11.3	11.8	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	1.70	5.20	9.00	
13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	1.71	3.40	6.00	
12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	1.71	4.00	7.00	
15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	1.72	2.80	5.00	
16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	1.73	2.20	4.00	
13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2</				

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																							
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
					AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX
4.55	6.75	3.80	6.00	1.54	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4		
4.95	7.35	4.20	6.60	1.54	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6		
3.75	5.55	3.00	4.80	1.55	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0		
4.15	6.15	3.40	5.40	1.55	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2		
5.55	8.35	4.80	7.60	1.55	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4		
5.95	8.95	5.20	8.20	1.55	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6		
3.35	4.95	2.60	4.20	1.56	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8		
4.75	7.15	4.00	6.40	1.56	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0		
5.15	7.75	4.40	7.00	1.56	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2		
2.95	4.35	2.20	3.60	1.57	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6		
4.35	6.55	3.60	5.80	1.57	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7		
3.95	5.95	3.20	5.20	1.58	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5		
6.35	9.75	5.60	9.00	1.58	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6		
7.35	11.35	6.60	10.60	1.58	20.0	20.5	21.0	21.5	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6		
3.55	5.35	2.80	4.60	1.59	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3		
4.55	6.95	3.80	6.20	1.59	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3		
3.15	4.75	2.40	4.00	1.60	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1		
4.15	6.35	3.40	5.60	1.60	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1		
4.75	7.35	4.00	6.60	1.61	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8		
5.75	8.95	5.00	8.20	1.61	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7		
3.75	5.75	3.00	5.00	1.62	27.3	27.8	28.3	28.8	29.3	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9		
4.35	6.75	3.60	6.00	1.62	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6		
5.35	8.35	4.60	7.60	1.62	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5		
3.35	5.15	2.60	4.40	1.63	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6		
4.95	7.75	4.20	7.00	1.63	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3		
5.15	11.35	6.40	10.60	1.63	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7		
3.95	6.15	3.20	5.40	1.64	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4		
4.55	7.15	3.80	6.40	1.64	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1		
6.15	9.75	5.40	9.00	1.64	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8		
2.95	4.55	2.20	3.80	1.65	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4		
3.55	5.55	2.80	4.80	1.66	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2		
4.15	6.55	3.40	5.80	1.66	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9		
5.55	8.95	4.80	8.20	1.67	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9		
3.15	4.95	2.40	4.20	1.68	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0		
3.75	5.95	3.00	5.20	1.68	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7		
4.35	6.95	3.60	6.20	1.68	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4		
6.95	11.35	6.20	10.60	1.68	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8		
4.55	7.35	3.80	6.60	1.69	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0		
5.15	8.35	4.40	7.60	1.69	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7		
7.75	12.75	7.00	12.00	1.69	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1		
3.35	5.35	2.60	4.60	1.70	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5		
3.95	6.35	3.20	5.60	1.70	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2		
5.95	9.75	5.20	9.00	1.70	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9		
4.15	6.75	3.40	6.00	1.71	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7		
4.75	7.75	4.00	7.00	1.71	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5		
3.55	5.75	2.80	5.00	1.72	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0		
2.95	4.75	2.20	4.00	1.73	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3										

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																								Speed Ratio	Sheave Datum Diameters		
A AX	A AX	A AX AP	A AX AP	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	Small Sheave		Large Sheave		
88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	110	112	113	114	1.54	3.80	6.00
36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.0	48.9	49.4	49.9	1.54	4.20	6.80
36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	47.2	48.2	48.7	49.2	1.54	3.00	4.60
38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.5	50.5	51.0	51.5	1.55	3.00	4.80
37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.7	49.7	50.2	50.7	1.55	3.40	5.40
34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.9	46.9	47.4	47.9	1.55	4.80	7.60
34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	45.1	46.1	46.6	47.1	1.55	5.20	8.20
39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	50.3	51.3	51.8	52.3	1.56	2.60	4.20
36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.5	48.5	49.0	49.5	1.56	4.00	6.40
35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.7	47.7	48.2	48.7	1.56	4.40	7.00
40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	51.1	52.1	52.6	53.1	1.57	2.20	3.60
37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	48.3	49.3	49.8	50.3	1.57	3.60	5.80
38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	49.0	50.0	50.5	51.0	1.58	3.20	5.20
33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	44.2	45.2	45.7	46.2	1.58	5.60	9.00
31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	42.1	43.1	43.6	44.1	1.58	6.60	10.60
36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.8	48.8	49.3	49.8	1.59	2.80	4.60
36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.8	48.8	49.3	49.8	1.59	3.80	6.20
39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	50.6	51.6	52.6	53.1	53.6	1.60	2.40	4.00
37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.6	49.6	50.1	50.6	1.60	3.40	5.60
36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	47.3	48.3	48.8	49.3	1.61	4.00	6.60
34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	45.3	46.3	46.8	47.3	1.61	5.00	8.20
38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	49.4	50.4	50.9	51.4	1.62	3.00	5.00
37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	48.1	49.1	49.6	50.1	1.62	3.60	6.00
35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	46.0	47.0	47.5	48.0	1.62	4.60	7.60
34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	45.1	46.1	46.6	47.1	1.63	2.60	4.40
35.9	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.8	47.8	48.3	48.8	1.63	4.20	7.00
31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	42.2	43.2	43.7	44.2	1.63	6.40	10.60
37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.9	49.9	50.4	50.9	1.64	3.20	5.40
36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.6	48.6	49.1	49.6	1.64	3.80	6.40
33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	44.3	45.3	45.8	46.3	1.64	5.40	9.00
39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	50.4	51.4	51.9	52.4	52.9	1.65	2.20	3.80
38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.7	50.7	51.2	51.7	1.65	3.20	4.80
37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	48.4	49.4	49.9	50.4	1.66	2.80	4.80
34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	45.4	46.4	46.9	47.4	1.67	3.40	5.80
39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	50.0	51.0	51.5	52.0	52.5	1.68	2.40	4.20
38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	49.2	50.2	50.7	51.2	1.68	3.00	5.20
36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.9	48.9	49.4	49.9	1.68	3.60	6.20
31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	42.4	43.4	43.9	44.4	1.68	6.20	10.60
36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.5	48.5	49.0	49.5	1.69	3.80	6.60
35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	46.2	47.2	47.7	48.2	1.69	4.40	7.60
29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.7	41.7	42.7	43.2	1.69	7.00	12.00
39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	50.0	51.0	51.5	52.0	1.70	2.60	4.60
37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.7	49.7	50.2	50.7	1.70	3.20	5.60
33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.5	45.5	46.0	46.5	1.70	5.20	9.00
37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	48.2	49.2	49.7	50.2	1.71	3.40	6.00
36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	47.0	48.0	48.5	49.0	1.71	4.00	7.00
38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.															

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A AX																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
4.55	6.75	3.80	6.00	1.54	50.4	50.9	51.4	51.9	52.9	54.9	55.4	56.4	56.9	57.9	58.9	59.4	59.9	60.9	61.4	62.9	64.9	66.9	68.9	70.9	71.4	71.9
4.95	7.35	4.20	6.60	1.54	49.7	50.2	50.7	51.2	52.2	54.2	54.7	55.7	56.2	57.2	58.2	58.7	59.2	60.2	60.7	62.2	64.2	66.2	68.2	70.2	70.7	71.2
3.75	5.55	3.00	4.80	1.55	52.0	52.5	53.0	53.5	54.5	56.5	57.0	58.0	58.5	59.5	60.5	61.0	61.5	62.5	63.0	64.5	66.5	68.5	70.5	72.5	73.0	73.5
4.15	6.15	3.40	5.40	1.55	51.2	51.7	52.2	52.7	53.7	55.7	56.2	57.2	57.7	58.7	59.7	60.2	60.7	61.7	62.2	63.7	65.7	67.7	69.7	71.7	72.2	72.7
5.55	8.35	4.80	7.60	1.55	48.4	48.9	49.4	49.9	50.9	52.9	53.4	54.4	54.9	55.9	56.9	57.4	57.9	58.9	59.4	60.9	62.9	64.9	66.9	68.9	69.4	69.9
5.95	8.95	5.20	8.20	1.55	47.6	48.1	48.6	49.1	50.1	52.1	52.6	53.6	54.1	55.1	56.1	56.6	57.1	58.1	58.6	60.1	62.1	64.1	66.1	68.1	68.6	69.1
3.35	4.95	2.60	4.20	1.56	50.0	50.5	51.0	51.5	52.5	54.5	55.0	56.0	56.5	57.5	58.5	59.0	59.5	60.5	61.0	62.5	64.5	66.5	68.5	70.5	71.0	71.5
4.75	7.15	4.00	6.40	1.56	49.2	49.7	50.2	50.7	51.7	53.7	54.2	55.2	55.7	56.7	57.7	58.2	58.7	59.7	60.2	61.7	63.7	65.7	67.7	69.7	70.2	70.7
2.95	4.35	2.20	3.60	1.57	50.8	51.3	51.8	52.3	53.3	55.3	55.8	56.8	57.3	58.3	59.3	59.8	60.3	61.3	61.8	63.3	65.3	67.3	69.3	71.3	71.8	72.3
4.35	6.55	3.60	5.80	1.57	46.6	47.2	47.7	48.2	49.2	51.2	51.7	52.7	53.2	54.2	55.2	55.7	56.2	57.2	57.7	59.2	61.2	63.2	65.2	67.2	67.7	68.2
3.95	5.95	3.20	5.20	1.58	44.7	45.1	45.6	46.1	47.1	49.1	49.6	50.6	51.1	52.1	53.1	53.6	54.1	55.1	55.6	57.1	59.1	61.1	63.1	65.1	65.6	66.1
6.35	9.75	5.60	9.00	1.58	46.7	47.2	47.7	48.2	49.2	51.2	51.7	52.7	53.2	54.2	55.2	55.7	56.2	57.2	57.7	59.2	61.2	63.2	65.2	67.2	67.7	68.2
7.35	11.35	6.60	10.60	1.58	44.6	45.1	45.6	46.1	47.1	49.1	49.6	50.6	51.1	52.1	53.1	53.6	54.1	55.1	55.6	57.1	59.1	61.1	63.1	65.1	65.6	66.1
3.55	5.35	2.80	4.60	1.59	50.3	50.8	51.3	51.8	52.8	54.8	55.3	56.3	56.8	57.8	58.8	59.3	59.8	60.8	61.3	62.8	64.8	66.8	68.8	70.8	71.3	71.8
4.55	6.95	3.80	6.20	1.59	50.3	50.8	51.3	51.8	52.8	54.8	55.3	56.3	56.8	57.8	58.8	59.3	59.8	60.8	61.3	62.8	64.8	66.8	68.8	70.8	71.3	71.8
3.15	4.75	2.40	4.00	1.60	51.1	51.6	52.1	52.6	53.6	55.6	56.1	57.1	57.6	58.6	59.6	60.1	60.6	61.6	62.1	63.6	65.6	67.6	69.6	71.6	72.1	72.6
4.15	6.35	3.40	5.60	1.60	49.8	50.3	50.8	51.3	52.3	54.3	54.8	55.8	56.3	57.3	58.3	58.8	59.3	60.3	60.8	62.3	64.3	66.3	68.3	70.3	70.8	71.3
4.75	7.35	4.00	6.60	1.61	47.8	48.3	48.8	49.3	50.3	52.3	52.8	53.8	54.3	55.3	56.3	56.8	57.3	58.3	58.8	60.3	62.3	64.3	66.3	68.3	68.8	69.3
5.75	8.95	5.00	8.20	1.61	51.9	52.4	52.9	53.4	54.4	56.4	56.9	57.9	58.4	59.4	60.4	60.9	61.4	62.4	62.9	64.4	66.4	68.4	70.4	72.4	72.9	73.4
3.75	5.75	3.00	5.00	1.62	50.6	51.1	51.6	52.1	53.1	55.1	55.6	56.6	57.1	58.1	59.1	59.6	60.1	61.1	61.6	63.1	65.1	67.1	69.1	71.1	71.6	72.1
4.35	6.75	3.60	6.00	1.62	48.5	49.0	49.5	50.0	51.0	53.0	53.5	54.5	55.0	56.0	57.0	57.5	58.0	59.0	59.5	61.0	63.0	65.0	67.0	69.0	70.1	70.6
5.35	8.35	4.60	7.60	1.62	48.5	49.0	49.5	50.0	51.0	53.0	53.5	54.5	55.0	56.0	57.0	57.5	58.0	59.0	59.5	61.0	63.0	65.0	67.0	69.0	70.1	70.6
3.35	5.15	2.40	4.40	1.63	49.3	49.8	50.3	50.8	51.8	53.8	54.3	55.3	55.8	56.8	57.8	58.3	58.8	59.8	60.3	61.8	63.8	65.8	67.8	69.8	70.3	70.8
4.95	7.75	4.20	7.00	1.63	44.7	45.2	45.7	46.2	47.2	49.2	49.7	50.7	51.2	52.2	53.2	53.7	54.2	55.2	55.7	57.2	59.2	61.2	63.2	65.2	65.7	66.2
7.15	11.35	6.40	10.60	1.63	44.7	45.2	45.7	46.2	47.2	49.2	49.7	50.7	51.2	52.2	53.2	53.7	54.2	55.2	55.7	57.2	59.2	61.2	63.2	65.2	65.7	66.2
3.95	6.15	3.20	5.40	1.64	51.4	51.9	52.4	52.9	53.9	55.9	56.4	57.4	57.9	58.9	59.9	60.4	60.9	61.9	62.4	63.9	65.9	67.9	69.9	71.9	72.4	72.9
4.55	7.15	3.80	6.40	1.64	50.1	50.6	51.1	51.6	52.6	54.6	55.1	56.1	56.6	57.6	58.6	59.1	59.6	60.6	61.1	62.6	64.6	66.6	68.6	70.6	71.1	71.6
6.15	9.75	5.40	9.00	1.64	46.8	47.3	47.8	48.3	49.3	51.3	51.8	52.8	53.3	54.3	55.3	55.8	56.3	57.3	57.8	59.3	61.3	63.3	65.3	67.3	67.8	68.3
2.95	4.55	2.20	3.80	1.65	50.9	51.4	51.9	52.4	53.4	55.4	55.9	56.9	57.4	58.4	59.4	59.9	60.4	61.4	61.9	63.4	65.4	67.4	69.4	71.4	71.9	72.4
3.55	5.55	2.80	4.80	1.66	47.9	48.4	48.9	49.4	50.4	52.4	52.9	53.9	54.4	55.4	56.4	56.9	57.4	58.4	58.9	60.4	62.4	64.4	66.4	68.4	68.9	69.4
4.15	6.55	3.40	5.80	1.66	51.7	52.2	52.7	53.2	54.2	56.2	56.7	57.7	58.2	59.2	60.2	60.7	61.2	62.2	62.7	64.2	66.2	68.2	70.2	72.2	72.7	73.2
3.15	4.95	2.40	4.20	1.68	50.4	50.9	51.4	51.9	52.9	54.9	55.4	56.4	56.9	57.9	58.9	59.4	59.9	60.9	61.4	62.9	64.9	66.9	68.9	70.9	71.4	71.9
4.35	6.95	3.60	6.20	1.68	44.9	45.4	45.9	46.4	47.4	49.4	49.9	50.9	51.4	52.4	53.4	53.9	54.4	55.4	55.9	57.4	59.4	61.4	63.4	65.4	65.9	66.4
8.95	11.35	6.20	10.60	1.68	44.9	45.4	45.9	46.4	47.4	49.4	49.9	50.9	51.4	52.4	53.4	53.9	54.4	55.4	55.9	57.4	59.4	61.4	63.4	65.4	65.9	66.4
4.55	7.35	3.80	6.60	1.69	50.0	50.5	51.0	51.5	52.5	54.5	55.0	56.0	56.5	57.5	58.5	59.0	59.5	60.5	61.0	62.5	64.5	66.5	68.5	70.5	71.0	71.5
5.15	8.35	4.40	7.60	1.69	48.7	49.2	49.7	50.2	51.2	53.2	53.7	54.7	55.2	56.2	57.2	57.7	58.2	59.2	59.7	61.2	63.2	65.2	67.2	69.2	69.7	70.2
7.75	12.75	7.00	12.00	1.69	43.2	43.7	44.2	44.7	45.7	47.7	48.2	49.2	49.7	50.7	51.7	52.2	52.7	53.7	54.2	55.7	57.7	59.7	61.7	63.7	64.2	64.7
3.35	5.35	2.60	4.60	1.70	51.2	51.7	52.2	52.7	53.7	55.7	56.2	57.2	57.7	58.7	59.7	60.2	60.7	61.7	62.2	63.7	65.7	67.7	69.7	71.7	72.2	72.7
3.95	6.35	3.20	5.60	1.70	47.0	47.5	48.0	48.5	49.5	51.5	52.0	53.0	53.5	54.5	55.5	56.0	56.5	57.5	58.0	59.5	61.5	63.5	65.5	67.5	68.0	68.5
5.95	9.75	5.20	9.00	1.70	50.8	51.3	51.8	52.3	53.3	55.3	55.8	56.8	57.3	58.3	59.3	59.8	60.3	61.3	61.8	63.3	65.3	67.3	69.3	71.3	71.8	72.3
4.15	6.75	3.40	6.00	1.71	49.5	50.0	50.5	51.0	52.0	54.0	54.5	55.5	56.0	57.0	58.0	58.5	59.0	60.0	60.5	62.0	64.0	66.0	68.0	70.0	70.5	71.0
4.75	7.75	4.00	7.00	1.71	51.5	52.0	52.5	53.0	54.0	56.0	56.5	57.5	58.0	59.0	60.0	60.5	61.0	62.0	62.5	64.0	66.0	68.0	70.0	72.0	72.5	73.0
3.55	5.75	2.80	5.00	1.72	50.4	50.9	51.4	51.9	52.9	54.9	55.4	56.4	56.9	57.9	58.9	59.4	59.9	60.9	61.4	62.9	64.9	66.9	68.9	70.9	71.4	71.9
2.95	4.75	2.20	4.00	1.73	44.9	45.4	45.9	46.4	47.4	49.4	49.9	50.9	51.4	52.4	53.4	53.9	54.4	55.4	55.9	57.4	59.4	61.4	63.4	65.4	65.9	66.4
4.35	7.15	3.60	6.40	1.73	50.0	50.5	51.0	51.5	52.5	54.5	55.0	56.0	56.5	57.5	58.5	59.0	59.5	60.5	61.0	62.5	64.5	66.5	68.5	70.5	71.0	71.5
5.15	8.35	4.40	7.60	1.73	48.7	49.2	49.7	50.2	51.2	53.2	53.7	54.7	55.2	56.2	57.2	57.7	58.2	59.2	59.7	61.2	63.2	65.2	67.2	69.2	69.7	70.2
7.75	12.75	7.00	12.00	1.73	43.2	43.7	44.2	44.7	45.7	47.7	48.2	49.2	49.7	50.7	51.7	52.2	52.7	53.7	54.2	55.7	57.7	59.7	61.7	63.7	64.2	64.7
3.35	5.35	2.60	4.60	1.74	51.2</																					

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance								Speed Ratio	Sheave Datum Diameters	
A	A	A	A	A	A	A	Small Sheave		Large Sheave	
AX										
162	167	173	180	187	197	200				
73.9	76.4	79.4	82.9	86.4	91.4	92.9	1.54	3.80	6.00	
73.2	75.7	78.7	82.2	85.7	90.7	92.2	1.54	4.20	6.60	
75.5	78.0	81.0	84.5	88.0	93.0	94.5	1.55	3.00	4.80	
74.7	77.2	80.2	83.7	87.2	92.2	93.7	1.55	3.40	5.40	
71.9	74.4	77.4	80.9	84.4	89.4	90.9	1.55	4.80	7.60	
71.1	73.6	76.6	80.1	83.6	88.6	90.1	1.55	5.20	8.20	
		81.8					1.56	2.60	4.20	
73.5	76.0	79.0	82.5	86.0	91.0	92.5	1.56	4.00	6.40	
72.7	75.2	78.2	81.7	85.2	90.2	91.7	1.56	4.40	7.00	
		82.6					1.57	2.20	3.60	
74.3	76.8	79.8	83.3	86.8	91.8	93.3	1.57	3.60	5.80	
75.0	77.5	80.5	84.0	87.5	92.5	94.0	1.58	3.20	5.20	
70.2	72.7	75.7	79.2	82.7	87.7	89.2	1.58	5.60	9.00	
68.1	70.6	73.6	77.1	80.6	85.6	87.1	1.58	6.60	10.60	
		81.3					1.59	2.80	4.60	
73.8	76.3	79.3	82.8	86.3	91.3	92.8	1.59	3.80	6.20	
		82.1					1.60	2.40	4.00	
74.6	77.1	80.1	83.6	87.1	92.1	93.6	1.60	3.40	5.60	
73.3	75.8	78.8	82.3	85.8	90.8	92.3	1.61	4.00	6.60	
71.3	73.8	76.8	80.3	83.8	88.8	90.3	1.61	5.00	8.20	
75.4	77.9	80.9	84.4	87.9	92.9	94.4	1.62	3.00	5.00	
74.1	76.6	79.6	83.1	86.6	91.6	93.1	1.62	3.60	6.00	
72.1	74.6	77.6	81.1	84.6	89.6	91.1	1.62	4.60	7.60	
		81.6					1.63	2.60	4.40	
72.8	75.3	78.3	81.8	85.3	90.3	91.8	1.63	4.20	7.00	
68.3	70.8	73.8	77.3	80.8	85.8	87.3	1.63	6.40	10.60	
74.9	77.4	80.4	83.9	87.4	92.4	93.9	1.64	3.20	5.40	
73.6	76.1	79.1	82.6	86.1	91.1	92.6	1.64	3.80	6.40	
70.3	72.8	75.8	79.3	82.8	87.8	89.3	1.64	5.40	9.00	
		82.4					1.65	2.20	3.80	
74.4	76.9	79.9	83.4	86.9	91.9	93.4	1.66	2.80	4.80	
		81.2					1.66	3.40	5.80	
71.4	73.9	76.9	80.4	83.9	88.9	90.4	1.67	4.80	8.20	
		82.0					1.68	2.40	4.20	
75.2	77.7	80.7	84.2	87.7	92.7	94.2	1.68	3.00	5.20	
73.9	76.4	79.4	82.9	86.4	91.4	92.9	1.68	3.60	6.20	
68.4	70.9	73.9	77.4	80.9	85.9	87.4	1.68	6.20	10.60	
73.5	76.0	79.0	82.5	86.0	91.0	92.5	1.69	3.80	6.60	
72.2	74.7	77.7	81.2	84.7	89.7	91.2	1.69	4.40	7.60	
66.7	69.2	72.2	75.7	79.2	84.2	85.7	1.69	7.00	12.00	
		81.5					1.70	2.60	4.60	
74.7	77.2	80.2	83.7	87.2	92.2	93.7	1.70	3.20	5.60	
70.5	73.0	76.0	79.5	83.0	88.0	89.5	1.70	5.20	9.00	
74.3	76.8	79.8	83.3	86.8	91.8	93.3	1.71	3.40	6.00	
73.0	75.5	78.5	82.0	85.5	90.5	92.0	1.71	4.00	7.00	
		81.0					1.72	2.80	5.00	
		82.3					1.73	2.20	4.00	
73.8	76.3	79.3	82.8	86.3	91.3	92.8	1.73	3.80	6.40	
75.0	77.5	80.5	84.0	87.5	92.5	94.0	1.74	3.00	5.40	
71.6	74.1	77.1	80.6	84.1	89.1	90.6	1.74	4.60	8.20	
68.6	71.1	74.1	77.6	81.1	86.1	87.6	1.74	6.00	10.60	
		81.8					1.75	2.40	4.40	
74.6	77.1	80.1	83.6	87.1	92.1	93.6	1.75	3.20	5.80	
72.4	74.9	77.9	81.4	84.9	89.9	91.4	1.76	4.20	7.60	
70.6	73.1	76.1	79.6	83.1	88.1	89.6	1.76	5.00	9.00	
		81.3					1.77	2.60	4.80	
74.1	76.6	79.6	83.1	86.6	91.6	93.1	1.77	3.40	6.20	
73.6	76.1	79.1	82.6	86.1	91.1	92.6	1.78	3.60	6.60	
		80.9					1.79	2.80	5.20	
73.2	75.7	78.7	82.2	85.7	90.7	92.2	1.79	3.80	7.00	
68.7	71.2	74.2	77.7	81.2	86.2	87.7	1.79	5.80	10.60	
67.0	69.5	72.5	76.0	79.5	84.5	86.0	1.79	6.80	12.00	
74.9	77.4	80.4	83.9	87.4	92.4	93.9	1.80	3.00	5.60	
74.4	76.9	79.9	83.4	86.9	91.9	93.4	1.81	3.20	6.00	
		82.1					1.82	2.20	4.20	
73.9	76.4	79.4	82.9	86.4	91.4	92.9	1.82	3.40	6.40	
71.7	74.2	77.2	80.7	84.2	89.2	90.7	1.82	4.40	8.20	
		81.6					1.83	2.40	4.60	
70.8	73.3	76.3	79.8	83.3	88.3	89.8	1.83	4.80	9.00	
		81.2					1.84	2.60	5.00	
67.1	69.6	72.6	76.1	79.6	84.6	86.1	1.84	6.40	12.00	
		80.7					1.85	2.80	5.40	
72.5	75.0	78.0	81.5	85.0	90.0	91.5	1.85	4.00	7.60	
68.9	71.4	74.4	77.9	81.4	86.4	87.9	1.85	5.60	10.60	
74.7	77.2	80.2	83.7	87.2	92.2	93.7	1.86	3.00	5.80	
65.7	68.2	71.2	74.7	78.2	83.2	84.7	1.86	7.00	13.20	

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																			
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
Small Sheave	Large Sheave	Small Sheave	Large Sheave		AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX		
3.95	6.95	3.20	6.20	1.87																				
4.15	7.35	3.40	6.60	1.88																				
4.35	7.75	3.60	7.00	1.88																				
2.95	5.15	2.20	4.40	1.90	5.9	6.4	6.9	7.4	7.9	8.4	8.9	9.4	9.9	10.3	10.4	10.9	11.4	11.9	12.4	12.9	13.4			
4.95	8.95	4.20	8.20	1.90																				
6.95	12.75	6.20	12.00	1.90																				
3.15	5.55	2.40	4.80	1.91	5.4	5.9	6.4	6.9	7.4	7.9	8.4	8.9	9.4	9.8	9.9	10.4	10.9	11.4	11.9	12.4	12.9			
3.35	5.95	2.60	5.20	1.91																				
5.35	9.75	4.60	9.00	1.91																				
3.55	6.35	2.80	5.60	1.92																				
3.75	6.75	3.00	6.00	1.92																				
6.15	11.35	5.40	10.60	1.92																				
3.95	7.15	3.20	6.40	1.93																				
4.55	8.35	3.80	7.60	1.94																				
6.75	12.75	6.00	12.00	1.96																				
7.35	13.95	6.60	13.20	1.96																				
2.95	5.35	2.20	4.60	1.98	5.7	6.2	6.7	7.2	7.7	8.2	8.7	9.2	9.7	10.1	10.2	10.7	11.2	11.7	12.3	12.8	13.3			
3.15	5.75	2.40	5.00	1.98	5.2	5.7	6.2	6.7	7.2	7.7	8.2	8.7	9.2	9.7	9.8	10.3	10.8	11.3	11.8	12.3	12.8			
3.35	6.15	2.60	5.40	1.98																				
3.55	6.55	2.80	5.80	1.98																				
3.75	6.95	3.00	6.20	1.98																				
3.95	7.35	3.20	6.60	1.99																				
4.15	7.75	3.40	7.00	1.99																				
4.75	8.95	4.00	8.20	1.99																				
5.15	9.75	4.40	9.00	1.99																				
5.95	11.35	5.20	10.60	1.99																				
6.55	12.75	5.80	12.00	2.02																				
7.15	13.95	6.40	13.20	2.02																				
4.35	8.35	3.60	7.60	2.04																				
3.35	6.35	2.60	5.60	2.05																				
3.55	6.75	2.80	6.00	2.05																				
3.75	7.15	3.00	6.40	2.05																				
2.95	5.55	2.20	4.80	2.06	5.5	6.0	6.5	7.0	7.5	8.0	8.6	9.1	9.6	10.0	10.1	10.5	11.1	11.6	12.1	12.6	13.1			
3.15	5.95	2.40	5.20	2.06																				
5.75	11.35	5.00	10.60	2.07																				
4.95	9.75	4.20	9.00	2.08																				
4.55	8.95	3.80	8.20	2.09																				
6.35	12.75	5.60	12.00	2.09																				
6.95	13.95	6.20	13.20	2.09																				
3.95	7.75	3.20	7.00	2.10																				
7.75	15.75	7.00	15.00	2.10																				
3.55	6.95	2.80	6.20	2.11																				
3.75	7.35	3.00	6.60	2.11																				
3.35	6.55	2.60	5.80	2.12																				
3.15	6.15	2.40	5.40	2.13																				
2.95	5.75	2.20	5.00	2.14	5.3	5.8	6.3	6.9	7.4	7.9	8.4	8.9	9.4	9.8	9.9	10.4	10.9	11.4	11.9	12.4	12.9			
4.15	8.35	3.40	7.60	2.15																				
5.55	11.35	4.80	10.60	2.15																				
6.75	13.95	6.00	13.20	2.15																				
6.15	12.75	5.40	12.00	2.17																				
3.55	7.15	2.80	6.40	2.18																				
4.75	9.75	4.00	9.00	2.18																				
3.35	6.75	2.60	6.00	2.19																				
4.35	8.95	3.60	8.20	2.19																				
7.75	16.35	7.00	15.60	2.19																				
3.15	6.35	2.40	5.60	2.21																				
2.95	5.95	2.20	5.20	2.22	5.6	6.2	6.7	7.2	7.7	8.2	8.7	9.2	9.6	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.3			
6.55	13.95	5.80	13.20	2.22																				
3.75	7.75	3.00	7.00	2.23																				
7.35	15.75	6.60	15.00	2.23																				
5.35	11.35	4.60	10.60	2.24																				
3.55	7.35	2.80	6.60	2.25																				
5.95	12.75	5.20	12.00	2.25																				
3.35	6.95	2.60	6.20	2.26																				
3.15	6.55	2.40	5.80	2.28																				
3.95	8.35	3.20	7.60	2.28																				
4.55	9.75	3.80	9.00	2.28																				
7.15	15.75	6.40	15.00	2.29																				
6.35	13.95	5.60	13.20	2.30																				
2.95	6.15	2.20	5.40	2.31	5.4	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.4	9.5	10.1	10.6	11.1	11.6	12.1	12.6	13.1			
7.35	16.35	6.60	15.60	2.31																				
4.15	8.95	3.40	8.20	2.32																				
3.35	7.15	2.60	6.40	2.33																				

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.



Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																										Speed Ratio	Sheave Datum Diameters	
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		Small Sheave	Large Sheave
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	1.87	3.20	6.20	
13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	1.87	3.40	6.60	
13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	1.88	3.60	7.00	
12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	1.88	3.80	7.40	
15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	1.90	4.20	8.20	
11.2	11.7	12.2	12.6	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	1.90	4.40	8.40	
15.4	15.9	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	1.91	4.60	8.60	
15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	1.91	4.80	8.80	
10.2	10.7	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.9	21.4	21.9	22.4	1.91	5.00	9.00	
14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	1.92	5.20	9.20	
14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	1.92	5.40	9.40	
13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	1.93	5.60	9.60	
12.0	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	1.94	5.80	9.80	
15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	1.96	6.00	10.00	
15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	1.96	6.20	10.20	
14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	1.98	6.40	10.40	
14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	1.98	6.60	10.60	
13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	1.98	6.80	10.80	
13.3	13.8	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	1.99	7.00	11.00	
12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	1.99	7.20	11.20	
11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	1.99	7.40	11.40	
10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	1.99	7.60	11.60	
12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	2.02	7.80	11.80	
14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	2.05	8.00	12.00	
14.1	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	2.05	8.20	12.20	
13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	2.05	8.40	12.40	
15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	2.06	8.60	12.60	
15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	2.06	8.80	12.80	
10.5	11.0	11.5	12.0	12.6	13.1	13.6	14.1	14.6	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.2	22.7	23.2	2.07	9.00	13.00	
11.5	12.0	12.5	13.0	13.5	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	2.09	9.20	13.20	
13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	2.10	9.40	13.40	
14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	2.11	9.60	13.60	
13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	2.11	9.80	13.80	
14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	2.12	10.00	14.00	
14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	2.13	10.20	14.20	
15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	20.4	20.9	21.4	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	2.14	10.40	14.40	
12.3	12.8	13.3	13.8	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	2.15	10.60	14.60	
11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	2.15	10.80	14.80	
13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	2.19	11.00	15.00	
10.6	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	2.18	11.20	15.20	
14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	2.19	11.40	15.40	
11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	2.21	11.60	15.60	
14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	2.22	11.80	15.80	
15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	2.22	12.00	16.00	
13.1	13.6	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	2.23	12.20	16.20	
12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25				

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX					
66	67	68	69		70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87				
3.95	6.95	3.20	6.20	1.87	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7
4.15	7.35	3.40	6.60	1.88	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3
4.35	7.75	3.60	7.00	1.88	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8
2.95	5.15	2.20	4.40	1.90	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.5	38.0	38.5	39.0
4.95	8.95	4.20	8.20	1.90	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.4
6.95	12.75	6.20	12.00	1.90	19.1	19.6	20.1	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7
3.15	5.55	2.40	4.80	1.91	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5
3.35	5.95	2.60	5.20	1.91	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0
5.35	9.75	4.60	9.00	1.91	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4
3.55	6.35	2.80	5.60	1.92	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5
3.75	6.75	3.00	6.00	1.92	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.1
6.15	11.35	5.40	10.60	1.92	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5
3.95	7.15	3.20	6.40	1.93	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6
4.55	8.35	3.80	7.60	1.94	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1
6.75	12.75	6.00	12.00	1.96	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8
7.35	13.95	6.60	13.20	1.96	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.4
2.95	5.35	2.20	4.60	1.98	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8
3.15	5.75	2.40	5.00	1.98	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3
3.35	6.15	2.60	5.40	1.98	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8
3.55	6.55	2.80	5.80	1.98	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4
3.75	6.95	3.00	6.20	1.98	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9
3.95	7.35	3.20	6.60	1.99	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4
4.15	7.75	3.40	7.00	1.99	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9
4.35	8.15	3.60	7.40	1.99	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4
5.15	9.75	4.40	9.00	1.99	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5
5.95	11.35	5.20	10.60	1.99	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6
6.55	12.75	5.80	12.00	2.02	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9
7.15	13.95	6.40	13.20	2.02	17.9	18.4	18.9	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.6
4.35	8.35	3.60	7.60	2.04	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3
3.35	6.35	2.80	5.60	2.05	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7
3.55	6.75	3.00	6.00	2.05	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2
3.75	7.15	3.20	6.40	2.05	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7
2.95	5.55	2.20	4.80	2.06	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6
3.15	5.95	2.40	5.20	2.06	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.2
5.75	11.35	5.00	10.60	2.07	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.8
4.95	9.75	4.20	9.00	2.08	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7
4.55	8.95	3.80	8.20	2.09	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.7
6.35	12.75	5.60	12.00	2.09	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.2
6.95	13.95	6.20	13.20	2.09	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.2	28.7
3.95	7.75	3.20	7.00	2.10	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1
3.95	7.75	3.20	7.00	2.10	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1
3.55	6.95	2.80	6.20	2.11	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0
3.75	7.35	3.00	6.60	2.11	26.																					

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																								Speed Ratio	Sheave Datum Diameters		
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		Small Sheave	Large Sheave	
88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	110	112	113	114	1.87	3.20	6.20
37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	48.2	49.2	49.7	50.2	1.87	3.20	6.20
36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.8	48.8	49.3	49.8	1.88	3.40	6.60
36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	47.3	48.3	48.8	49.3	1.88	3.60	7.00
39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.5	51.5	52.0	52.5	1.90	2.20	4.40
34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.9	46.9	47.4	47.9	1.90	4.20	8.20
30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.3	41.3	42.3	42.8	43.3	1.91	6.20	12.00
39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	50.0	51.0	52.0	52.5	1.91	2.40	4.80
38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	49.0	49.5	50.5	51.5	52.0	1.91	2.60	5.20
33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.9	45.9	46.4	46.9	1.91	4.60	9.00
38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	49.0	50.0	51.0	52.0	1.92	2.80	5.60
37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.6	49.6	50.1	50.6	1.92	3.00	6.00
32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	43.0	44.0	44.5	45.0	1.92	5.40	10.60
37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	48.1	49.1	49.6	50.1	1.93	3.20	6.40
35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.7	47.7	48.2	48.7	1.94	3.80	7.60
30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	41.4	42.4	42.9	43.4	1.96	6.00	12.00
28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	37.0	37.5	38.0	38.5	39.0	40.0	41.0	41.5	42.0	1.96	6.60	13.20
39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	50.3	51.3	52.3	52.8	1.98	2.20	4.60
38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	49.3	50.3	51.3	52.3	1.98	2.40	5.00
37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	48.3	49.3	50.3	51.3	1.98	2.60	5.40
38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.9	50.9	51.9	52.9	1.98	2.80	5.80
37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	48.4	49.4	49.9	50.4	1.98	3.00	6.20
36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.9	48.9	49.4	49.9	1.99	3.20	6.60
36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	47.4	48.4	48.9	49.4	1.99	3.40	7.00
35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	46.0	47.0	47.5	48.0	1.99	4.00	8.20
34.0	34.5	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	45.1	46.1	46.6	47.1	1.99	4.40	9.00
32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	43.2	44.2	44.7	45.2	1.99	5.20	10.60
30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.6	41.6	42.6	43.1	43.6	2.02	5.80	12.00
29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	40.1	41.1	41.6	42.1	2.02	6.40	13.20
35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.8	47.8	48.3	48.8	2.04	3.60	7.60
38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	49.2	50.2	51.2	52.2	2.05	2.60	5.60
37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.7	49.7	50.7	51.7	2.05	2.80	6.00
37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	48.2	49.2	49.7	50.2	2.05	3.00	6.40
39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	50.1	51.1	52.1	52.6	2.06	2.20	4.80
38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.7	50.7	51.7	52.7	2.06	2.40	5.20
32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	43.3	44.3	44.8	45.3	2.07	5.00	10.60
34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	45.2	46.2	46.7	47.2	2.08	4.20	8.60
35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	46.2	47.2	47.7	48.2	2.09	3.80	8.20
30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.7	42.7	43.2	43.7	2.09	5.60	12.00
29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.3	40.3	41.3	41.8	42.3	2.09	6.20	13.20
36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.6	48.6	49.1	49.6	2.10	3.20	7.00
27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.7	37.2	38.2	39.2	39.7	40.2	2.11	7.00	15.00
37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.5	49.5	50.5	51.0	2.11	2.80	6.20
37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	48.1	49.1	49.6	50.1	2.11	3.00	6.60
38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.5	49.5	50.5	51.0	51.5	2.12	2.60	5.80
38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.5	50.5	51.0	51.5	2.13	2.40	5.40
39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5														

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance								Speed Ratio	Sheave Datum Diameters	
A	A	A AX	A	A	A	A	Small Sheave		Large Sheave	
162	167	173	180	187	197	200	1.87	3.20	6.20	
74.3	76.8	79.8	83.3	86.8	91.8	93.3	1.88	3.40	6.60	
73.8	76.3	79.3	82.8	86.3	91.3	92.8	1.88	3.60	7.00	
73.3	75.8	78.8	82.3	85.8	90.8	92.3	1.90	* 2.20	4.40	
		82.0								
71.9	74.4	77.4	80.9	84.4	89.4	90.9	1.90	4.20	8.20	
67.3	69.8	72.8	76.3	79.8	84.8	86.3	1.90	6.20	12.00	
		81.5					1.91	* 2.40	4.80	
		81.0					1.91	* 2.60	5.20	
70.9	73.4	76.4	79.9	83.4	88.4	89.9	1.91	4.60	9.00	
		80.5					1.92	* 2.80	5.60	
74.6	77.1	80.1	83.6	87.1	92.1	93.6	1.92	3.00	6.00	
69.0	71.5	74.5	78.0	81.5	86.5	88.0	1.92	5.40	10.60	
74.1	76.6	79.6	83.1	86.6	91.6	93.1	1.93	3.20	6.40	
72.7	75.2	78.2	81.7	85.2	90.2	91.7	1.94	3.80	7.60	
67.4	69.9	73.0	76.5	80.0	85.0	86.5	1.96	6.00	12.00	
66.0	68.5	71.5	75.0	78.5	83.5	85.0	1.96	6.60	13.20	
		81.8					1.98	* 2.20	4.60	
		81.3					1.98	* 2.40	5.00	
		80.9					1.98	* 2.60	5.40	
		80.4					1.98	* 2.80	5.80	
74.4	76.9	79.9	83.4	86.9	91.9	93.4	1.98	3.00	6.20	
73.9	76.4	79.4	82.9	86.4	91.4	92.9	1.99	3.20	6.60	
73.5	76.0	79.0	82.5	86.0	91.0	92.5	1.99	3.40	7.00	
72.0	74.5	77.5	81.0	84.5	89.5	91.0	1.99	4.00	8.20	
71.1	73.6	76.6	80.1	83.6	88.6	90.1	1.99	4.40	9.00	
69.2	71.7	74.7	78.2	81.7	86.7	88.2	1.99	5.20	10.60	
67.6	70.1	73.1	76.6	80.1	85.1	86.6	2.02	5.80	12.00	
66.2	68.7	71.7	75.2	78.7	83.7	85.2	2.02	6.40	13.20	
72.8	75.3	78.3	81.8	85.3	90.3	91.8	2.04	3.60	7.60	
		80.7					2.05	* 2.60	5.60	
		80.2					2.05	* 2.80	6.00	
74.2	76.7	79.7	83.2	86.7	91.7	93.2	2.05	3.00	6.40	
		81.6					2.06	* 2.20	4.80	
		81.2					2.06	* 2.40	5.20	
69.3	71.8	74.8	78.3	81.8	86.8	88.4	2.07	5.00	10.60	
71.2	73.7	76.7	80.2	83.7	88.7	90.3	2.08	4.20	9.00	
72.2	74.7	77.7	81.2	84.7	89.7	91.2	2.09	3.80	8.20	
67.8	70.3	73.3	76.8	80.3	85.3	86.8	2.09	5.60	12.00	
66.3	68.8	71.8	75.3	78.8	83.8	85.3	2.09	6.20	13.20	
73.6	76.1	79.1	82.6	86.1	91.1	92.6	2.10	3.20	7.00	
64.2	66.8	69.8	73.3	76.8	81.8	83.3	2.10	7.00	15.00	
		80.1					2.11	* 2.80	6.20	
74.1	76.6	79.6	83.1	86.6	91.6	93.1	2.11	3.00	6.60	
		80.5					2.12	* 2.60	5.80	
		81.0					2.13	* 2.40	5.40	
		81.5					2.14	* 2.20	5.00	
73.0	75.5	78.5	82.0	85.5	90.5	92.0	2.15	3.40	7.60	
69.5	72.0	75.0	78.5	82.0	87.0	88.5	2.15	4.80	10.60	
66.5	69.0	72.0	75.5	79.0	84.0	85.5	2.15	6.00	13.20	
67.9	70.4	73.4	76.9	80.4	85.4	86.9	2.17	5.40	12.00	
		79.9					2.18	* 2.80	6.40	
71.4	73.9	76.9	80.4	83.9	88.9	90.4	2.18	4.00	9.00	
		80.4					2.19	* 2.60	6.00	
72.3	74.8	77.8	81.3	84.8	89.8	91.4	2.19	3.60	8.20	
63.8	66.3	69.3	72.8	76.3	81.3	82.8	2.19	7.00	15.60	
		80.9					2.21	* 2.40	5.60	
		81.3					2.22	* 2.20	5.20	
66.6	69.1	72.1	75.6	79.1	84.1	85.6	2.22	5.80	13.20	
73.8	76.3	79.3	82.8	86.3	91.3	92.8	2.23	3.00	7.00	
64.5	67.1	70.1	73.6	77.1	82.1	83.6	2.23	6.60	15.00	
69.6	72.1	75.2	78.7	82.2	87.2	88.7	2.24	4.60	10.60	
		79.7					2.25	* 2.80	6.60	
68.1	70.6	73.6	77.1	80.6	85.6	87.1	2.25	5.20	12.00	
		80.2					2.26	* 2.60	6.20	
		80.7					2.28	* 2.40	5.80	
73.1	75.6	78.6	82.1	85.6	90.6	92.1	2.28	3.20	7.60	
71.5	74.1	77.1	80.6	84.1	89.1	90.6	2.28	3.80	9.00	
64.7	67.2	70.2	73.7	77.2	82.2	83.7	2.29	6.40	15.00	
66.8	69.3	72.3	75.8	79.3	84.3	85.8	2.30	5.60	13.20	
		81.2					2.31	* 2.20	5.40	
64.1	66.6	69.6	73.1	76.6	81.6	83.1	2.31	6.60	15.60	
72.5	75.0	78.0	81.5	85.0	90.0	91.5	2.32	3.40	8.20	
		80.1					2.33	* 2.60	6.40	

Key to Horsepower Correction Factor

0.7

0.8

0.9

1.0

1.1

1.2

1.3

1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																			
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	
5.15	11.35	4.40	10.60	2.33																				
5.75	12.75	5.00	12.00	2.33																				
3.15	6.75	2.40	6.00	2.36																				
6.95	15.75	6.20	15.00	2.36																				
3.55	7.75	2.80	7.00	2.38																				
6.15	13.95	5.40	13.20	2.38																				
7.15	16.35	6.40	15.60	2.38																				
2.95	6.35	2.20	5.60	2.39																				
3.35	7.35	2.60	6.60	2.40																				
4.35	9.75	3.60	9.00	2.40																				
3.75	8.35	3.00	7.60	2.42																				
3.15	6.95	2.40	6.20	2.43																				
5.55	12.75	4.80	12.00	2.43																				
4.95	11.35	4.20	10.60	2.44																				
6.75	15.75	6.00	15.00	2.44																				
3.95	8.95	3.20	8.20	2.45																				
6.95	16.35	6.20	15.60	2.46																				
2.95	6.55	2.20	5.80	2.47																				
5.95	13.95	5.20	13.20	2.47																				
3.15	7.15	2.40	6.40	2.51																				
6.55	15.75	5.80	15.00	2.52																				
7.75	18.75	7.00	18.00	2.52																				
4.15	9.75	3.40	9.00	2.53																				
5.35	12.75	4.60	12.00	2.53																				
3.35	7.75	2.60	7.00	2.54																				
6.75	16.35	6.00	15.60	2.54																				
2.95	6.75	2.20	6.00	2.55																				
4.75	11.35	4.00	10.60	2.55																				
5.75	13.95	5.00	13.20	2.56																				
3.55	8.35	2.80	7.60	2.57																				
3.15	7.35	2.40	6.60	2.58																				
3.75	8.95	3.00	8.20	2.60																				
6.35	15.75	5.60	15.00	2.61																				
6.55	16.35	5.80	15.60	2.62																				
2.95	6.95	2.20	6.20	2.63																				
5.15	12.75	4.40	12.00	2.63																				
5.55	13.95	4.80	13.20	2.66																				
7.35	18.75	6.60	18.00	2.66																				
3.95	9.75	3.20	9.00	2.68																				
4.55	11.35	3.80	10.60	2.68																				
6.15	15.75	5.40	15.00	2.70																				
2.95	7.15	2.20	6.40	2.71																				
6.35	16.35	5.60	15.60	2.71																				
3.15	7.75	2.40	7.00	2.74																				
7.15	18.75	6.40	18.00	2.74																				
7.75	20.35	7.00	19.60	2.74																				
3.35	8.35	2.60	7.60	2.75																				
4.95	12.75	4.20	12.00	2.75																				
3.55	8.95	2.80	8.20	2.77																				
5.35	13.95	4.60	13.20	2.77																				
2.95	7.35	2.20	6.60	2.80																				
5.95	15.75	5.20	15.00	2.80																				
6.15	16.35	5.40	15.60	2.81																				
4.35	11.35	3.60	10.60	2.82																				
6.95	18.75	6.20	18.00	2.83																				
3.75	9.75	3.00	9.00	2.85																				
4.75	12.75	4.00	12.00	2.88																				
5.15	13.95	4.40	13.20	2.89																				
5.75	15.75	5.00	15.00	2.90																				
7.35	20.35	6.60	19.60	2.90																				
5.95	16.35	5.20	15.60	2.91																				
6.75	18.75	6.00	18.00	2.92																				
2.95	7.75	2.20	7.00	2.96																				
3.15	8.35	2.40	7.60	2.96																				
3.35	8.95	2.60	8.20	2.96																				
4.15	11.35	3.40	10.60	2.97																				
7.15	20.35	6.40	19.60	2.98																				
4.55	12.75	3.80	12.00	3.02																				
4.95	13.95	4.20	13.20	3.02																				
5.55	15.75	4.80	15.00	3.02																				
5.75	16.35	5.00	15.60	3.02																				
6.55	18.75	5.80	18.00	3.02																				
3.55	9.75	2.80	9.00	3.03																				
6.95	20.35	6.20	19.60	3.08																				
6.35	18.75	5.60	18.00	3.12																				
3.95	11.35	3.20	10.60	3.14																				

Key to Horsepower Correction Factor



* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



A AX		V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters				
		A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX		A AX	A AX	A AX	A AX	Small Sheave
41	9.4	9.9	10.4	10.9	11.4	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	2.33	4.40	10.60
14.4	14.9	15.4	16.0	16.5	17.0	17.5	18.0	18.5	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	2.36	5.00	12.00	
13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	2.38	5.40	13.20	
14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	2.39	6.40	15.60	
13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	2.40	6.40	15.60	
10.9	11.4	11.9	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	2.40	3.00	9.00
12.6	13.1	13.6	14.1	14.6	15.1	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	2.42	3.00	7.60
14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	2.43	4.00	6.20	
8.9	9.5	10.0	10.5	11.1	11.6	12.1	12.6	13.1	13.6	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.3	19.8	20.3	20.8	21.3	2.44	4.80	12.00
11.9	12.4	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.6	22.1	22.6	23.1	23.6	2.44	4.20	10.60	
14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	2.47	5.20	13.80	
14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	2.51	4.40	6.40	
11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	2.52	5.80	15.00	
13.4	13.9	14.4	14.9	15.5	16.0	16.5	17.0	17.5	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	2.53	3.40	9.00	
14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	2.54	4.00	12.00	
9.1	9.6	10.1	10.7	11.2	11.7	12.2	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	2.55	4.80	10.60
12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.4	22.9	23.4	23.9	24.4	24.9	2.56	5.00	13.20	
13.9	14.4	14.9	15.4	15.9	16.4	17.0	17.5	18.0	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	2.58	2.40	6.60	
12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	2.60	3.00	8.20	
14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	19.4	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	2.63	4.40	12.00	
11.2	11.7	12.2	12.7	13.2	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	2.66	4.80	13.20	
9.2	9.7	10.3	10.8	11.3	11.8	12.4	12.9	13.4	13.9	14.4	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.1	20.6	21.1	2.68	6.60	18.00	
14.2	14.7	15.3	15.8	16.3	16.8	17.3	17.8	18.3	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	2.70	3.40	9.00	
13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.7	23.2	23.7	24.2	24.7	25.2	25.7	2.71	4.80	12.00	
12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	17.0	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	2.74	6.40	18.00	
12.2	12.7	13.2	13.7	14.3	14.8	15.3	15.8	16.3	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.9	23.4	23.9	24.4	2.75	2.20	6.20	
14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	2.77	4.60	13.20	
9.3	9.9	10.4	10.9	11.5	12.0	12.5	13.0	13.5	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.2	18.7	19.2	19.7	20.2	20.7	21.2	2.80	2.20	6.60	
11.3	11.8	12.4	12.9	13.4	13.9	14.4	14.9	15.4	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	2.82	5.40	15.80	
12.2	12.7	13.2	13.7	14.3	14.8	15.3	15.8	16.3	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	2.85	3.60	10.60	
14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	2.88	4.40	13.20	
9.3	9.9	10.4	10.9	11.5	12.0	12.5	13.0	13.5	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.2	18.7	19.2	19.7	20.2	20.7	21.2	2.90	5.00	15.00	
11.3	11.8	12.4	12.9	13.4	13.9	14.4	14.9	15.4	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	2.92	6.00	18.00	
12.2	12.7	13.2	13.7	14.3	14.8	15.3	15.8	16.3	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	2.96	2.20	7.00	
13.7	14.2	14.7	15.2	15.7	16.2	16.8	17.3	17.8	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	2.96	3.40	9.00	
13.0	13.5	14.1	14.6	15.1	15.6	16.1	16.6	17.1	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.7	24.2	24.7	25.2	2.98	4.00	12.00	
12.3	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	2.99	4.40	13.20	
9.5	10.0	10.5	11.1	11.6	12.1	12.6	13.2	13.7	14.7	15.2	15.7	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.4	21.9	3.02	4.20	13.20	
12.3	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	3.02	4.80	15.00	
13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	3.02	5.00	15.00	
11.5	12.0	12.5	13.0	13.5	14.0	14.6	15.1	15.6	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.2	21.7	22.2	22.7	23.2	23.7	3.03	2.80	9.00	
9.6	10.1	10.7	11.2	11.7	12.2	12.8	13.3	13.8	14.8	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.5	20.0	20.5	21.0	21.5	22.0	3.08	6.20	19.60	
																								3.12	5.60	18.00	
																								3.14	3.20	10.60	

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters						
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		Small Sheave	Large Sheave					
88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	110	112	113	114			
32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.8	41.3	41.8	42.3	42.8	43.8	44.8	45.3	45.8	2.33	4.40	10.60
31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	42.2	43.2	43.7	44.2	2.33	5.00	12.00
38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0											49.0	50.0			2.36	* 2.40	6.00
27.6	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.7	39.8	40.3	40.8	2.36	6.20	15.00
36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.9										44.4	45.4			2.38	* 2.50	7.00
29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.9	40.9	41.9	42.4	42.9	2.38	5.40	13.20
27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	38.1	39.1	39.6	40.1	2.39	6.40	15.60
38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5											49.5	50.5			2.39	* 2.20	5.60
37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4											48.4	49.4			2.40	* 2.60	6.60
34.6	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.7	46.7	47.2	47.7	2.40	3.60	9.00
36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	47.3	48.3	48.8	49.3	2.42	3.00	7.60
37.8	38.3	38.8	39.3	39.9	40.4	40.9	41.4	41.9	42.4	42.9											48.9	49.9			2.43	* 2.40	6.20
31.2	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	42.3	43.3	43.8	44.3	2.43	4.80	12.00
32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.9	44.9	45.4	45.9	2.44	4.20	10.60
27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.9	39.9	40.4	40.9	2.44	6.00	15.00
35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.6	47.6	48.1	48.6	2.45	3.20	8.20
27.1	27.6	28.1	28.6	29.1	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	38.2	39.2	39.8	40.3	2.46	6.20	15.60
38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3											49.3	50.3			2.47	* 2.20	5.80
29.9	30.4	30.9	31.4	31.9	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	41.0	42.0	42.5	43.0	2.47	5.20	13.20
37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7											49.7	50.7			2.51	* 2.40	6.40
27.9	28.4	28.9	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	39.0	40.0	40.6	41.1	2.52	5.80	15.00
24.4	24.9	25.4	25.9	26.4	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.1	33.6	34.1	34.6	35.6	36.6	37.1	37.6	2.52	7.00	18.00
34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.8	46.8	47.3	47.8	2.53	3.40	9.00
31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	42.5	43.5	44.0	44.5	2.53	4.60	12.00
37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.6	41.1	41.6	42.1											48.1	49.1			2.54	* 2.60	7.00
27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.9	35.4	35.9	36.4	36.9	37.4	38.4	39.4	39.9	40.4	2.54	6.00	15.60
38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2											49.2	50.2			2.55	* 2.20	6.00
33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.1	41.6	42.1	42.6	43.1	44.1	45.1	45.6	46.1	2.55	4.00	10.60
30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	41.2	42.2	42.7	43.2	2.56	5.00	13.20
36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4											47.4	48.4			2.57	* 2.80	7.60
37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5											48.5	49.5			2.58	* 2.40	6.60
35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.8	47.8	48.3	48.8	2.60	3.00	8.20
28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	39.2	40.2	40.7	41.2	2.61	5.60	15.00
27.4	27.9	28.4	28.9	29.4	29.9	30.4	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.5	39.5	40.0	40.5	2.62	5.80	15.60
38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0											49.0	50.0			2.63	* 2.20	6.20
31.5	32.0	32.5	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.6	43.6	44.1	44.6	2.63	4.40	12.00
30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	41.3	42.3	42.8	43.3	2.66	4.80	13.20
27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	38.4	39.4	39.9	40.4	2.66	6.60	18.00
34.9	35.4	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	46.0	47.0	47.5	48.0	2.68	3.20	9.00
33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	44.2	45.2	45.7	46.2	2.68	3.80	10.60
28.2	28.7	29.2	29.7	30.2	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	39.3	40.3	40.8	41.3	2.71	5.40	15.00
37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8											48.9	49.9			2.70	* 2.20	6.40
27.5	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.2	36.7	37.2	37.7	38.7	39.7	40.2	40.7	2.71	5.60	15.60
37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2									48.2	49.2			2.74	* 2.40	7.00
24.8	25.3	25.8	26.3	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	32.0	32.5	33.0	33.5	34.0	34.5	35.0	36.0	37.0	37.5	38.0	2.74	6.40	18.00
22.9	23.4	23.9	24.4	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.2	34.2	35.2	35.7	36.2	2.74	7.00	19.60
36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6											47.6	48.6			2.75	* 2.60	7.60
31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.7	43.8	44.3	44.8	2.75	4.20	12.00
35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9											46.9	47.9			2.77	* 2.80	8.20
30.4	30.9	31.4	31.9	3																							

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																			
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A A																			
115	116	117	118		120	124	125	127	128	130	132	133	134	136	137	140	144	148	152	156	157	158		
5.15	11.35	4.40	10.60	2.33	46.3	46.8	47.3	47.8	48.8	50.8	51.3	52.3	52.8	53.8	54.8	55.3	55.8	56.8	57.3	58.8	60.8	62.8		
5.75	12.75	5.00	12.00	2.33	44.7	45.2	45.7	46.2	47.2	49.2	49.7	50.7	51.2	52.2	53.2	53.7	54.2	55.2	55.7	57.2	59.2	61.2		
3.15	6.75	2.40	6.00	2.36																				
6.95	15.75	6.20	15.00	2.36	41.3	41.8	42.3	42.8	43.8	45.8	46.3	47.3	47.8	48.8	49.8	50.3	50.8	51.8	52.3	53.8	55.8	57.8		
3.55	7.75	2.80	7.00	2.38																				
6.15	13.95	5.40	13.20	2.38	43.4	43.9	44.4	44.9	45.9	47.9	48.4	49.4	49.9	50.9	51.9	52.4	52.9	53.9	54.4	55.9	57.9	59.9		
7.15	16.35	6.40	15.60	2.38	40.6	41.1	41.6	42.1	43.1	45.1	45.6	46.6	47.1	48.2	49.2	49.7	50.2	51.2	51.7	53.2	55.2	57.2		
2.95	6.35	2.20	5.60	2.39																				
3.35	7.35	2.60	6.60	2.40																				
4.35	9.75	3.60	9.00	2.40	48.2	48.7	49.2	49.7	50.7	52.7	53.2	54.2	54.7	55.7	56.7	57.2	57.7	58.7	59.2	60.7	62.7	64.7		
3.75	8.35	3.00	7.60	2.42	49.8	50.3	50.8	51.3	52.3	54.3	54.8	55.8	56.3	57.3	58.3	58.8	59.3	60.3	60.8	62.3	64.3	66.3		
3.15	6.95	2.40	6.20	2.43																				
5.55	12.75	4.80	12.00	2.43	44.8	45.3	45.8	46.3	47.3	49.3	49.8	50.8	51.3	52.3	53.3	53.8	54.3	55.3	55.8	57.3	59.3	61.3		
4.95	11.35	4.20	10.60	2.44	46.4	46.9	47.4	47.9	48.9	50.9	51.4	52.4	52.9	53.9	54.9	55.4	55.9	56.9	57.4	58.9	60.9	62.9		
6.75	15.75	6.00	15.00	2.44	41.4	41.9	42.4	42.9	43.9	45.9	46.4	47.4	47.9	48.9	50.0	50.5	51.0	52.0	52.5	54.0	56.0	58.0		
3.95	8.95	3.20	8.20	2.45	49.1	49.6	50.1	50.6	51.6	53.6	54.1	55.1	55.6	56.6	57.6	58.1	58.6	59.6	60.1	61.6	63.6	65.6		
6.95	16.35	6.20	15.60	2.46	40.8	41.3	41.8	42.3	43.3	45.3	45.8	46.8	47.3	48.3	49.3	49.8	50.3	51.3	51.8	53.3	55.3	57.3		
2.95	6.55	2.20	5.90	2.47																				
6.95	13.95	6.00	13.20	2.47	43.5	44.0	44.5	45.0	46.0	48.0	48.5	49.5	50.0	51.0	52.0	52.5	53.0	54.1	54.6	56.1	58.1	60.1		
3.15	7.15	2.40	6.40	2.51																				
6.55	15.75	5.80	15.00	2.52	41.6	42.1	42.6	43.1	44.1	46.1	46.6	47.6	48.1	49.1	50.1	50.6	51.1	52.1	52.6	54.1	56.1	58.1		
7.75	18.75	7.00	18.00	2.52	38.1	38.6	39.1	39.6	40.6	42.7	43.2	44.2	44.7	45.7	46.7	47.2	47.7	48.7	49.2	50.7	52.7	54.7		
4.15	9.75	3.40	9.00	2.53	48.8	48.8	49.3	49.8	50.8	52.8	53.3	54.3	54.8	55.8	56.8	57.3	57.8	58.8	59.3	60.8	62.8	64.8		
5.35	12.75	4.60	12.00	2.53	45.0	45.5	46.0	46.5	47.5	49.5	50.0	51.0	51.5	52.5	53.5	54.0	54.5	55.5	56.0	57.5	59.5	61.5		
3.35	7.75	2.60	7.00	2.54																				
6.75	16.35	6.00	15.60	2.54	40.9	41.4	41.9	42.4	43.4	45.4	45.9	46.9	47.4	48.4	49.5	50.0	50.5	51.5	52.0	53.5	55.5	57.5		
2.95	6.75	2.20	6.00	2.55																				
4.75	11.35	4.00	10.60	2.55	46.6	47.1	47.6	48.1	49.1	51.1	51.6	52.6	53.1	54.1	55.1	55.6	56.1	57.1	57.6	59.1	61.1	63.1		
5.75	13.95	5.00	13.20	2.56	43.7	44.2	44.7	45.2	46.2	48.2	48.7	49.7	50.2	51.2	52.2	52.7	53.2	54.2	54.7	56.2	58.2	60.2		
3.55	8.35	2.80	7.60	2.57																				
3.15	7.35	2.40	6.60	2.58																				
3.75	8.95	3.00	8.20	2.60	49.3	49.8	50.3	50.8	51.8	53.8	54.3	55.3	55.8	56.8	57.8	58.3	58.8	59.8	60.3	61.8	63.8	65.8		
6.35	15.75	5.60	15.00	2.61	41.7	42.2	42.7	43.2	44.2	46.2	46.7	47.7	48.2	49.2	50.3	50.8	51.3	52.3	52.8	54.3	56.3	58.3		
6.55	16.35	5.80	15.60	2.62	41.0	41.6	42.1	42.6	43.6	45.6	46.1	47.1	47.6	48.6	49.6	50.1	50.6	51.6	52.1	53.6	55.6	57.6		
2.95	6.95	2.20	6.20	2.63																				
5.15	12.75	4.40	12.00	2.63	45.1	45.6	46.1	46.6	47.6	49.6	50.1	51.1	51.6	52.6	53.6	54.1	54.6	55.6	56.1	57.6	59.6	61.6		
5.55	13.95	4.80	13.20	2.66	43.8	44.3	44.8	45.3	46.3	48.3	48.8	49.8	50.3	51.3	52.3	52.8	53.3	54.4	54.9	56.4	58.4	60.4		
7.35	18.75	6.60	18.00	2.66	38.4	38.9	39.4	39.9	40.9	43.0	43.5	44.5	45.0	46.0	47.0	47.5	48.0	49.0	49.5	51.0	53.0	55.0		
3.95	9.75	3.20	9.00	2.68	48.5	49.0	49.5	50.0	51.0	53.0	53.5	54.5	55.0	56.0	57.0	57.5	58.0	59.0	59.5	61.0	63.0	65.0		
4.55	11.35	3.80	10.60	2.68	46.7	47.2	47.7	48.2	49.2	51.2	51.7	52.7	53.2	54.2	55.2	55.7	56.2	57.2	57.7	59.2	61.2	63.2		
6.15	15.75	5.40	15.00	2.70	41.9	42.4	42.9	43.4	44.4	46.4	46.9	47.9	48.4	49.4	50.4	50.9	51.4	52.4	52.9	54.4	56.4	58.4		
2.95	7.15	2.20	6.40	2.71																				
6.35	16.35	5.60	15.60	2.71	41.2	41.7	42.2	42.7	43.7	45.7	46.2	47.2	47.7	48.7	49.7	50.3	50.8	51.8	52.3	53.8	55.8	57.8		
3.15	7.75	2.40	7.00	2.74																				
7.15	18.75	6.40	18.00	2.74	38.5	39.1	39.6	40.1	41.1	43.1	43.6	44.6	45.1	46.1	47.1	47.6	48.1	49.1	49.6	51.2	53.2	55.2		
7.75	20.35	7.00	19.60	2.74	36.7	37.2	37.7	38.2	39.3	41.3	41.8	42.8	43.3	44.3	45.3	45.8	46.3	47.3	47.8	49.4	51.4	53.4		
3.35	8.35	2.60	7.60	2.75																				
4.95	12.75	4.20	12.00	2.75	45.3	45.8	46.3	46.8	47.8	49.8	50.3	51.3	51.8	52.8	53.8	54.3	54.8	55.8	56.3	57.8	59.8	61.8		
3.55	8.95	2.80	8.20	2.77																				
5.35	13.95	4.60	13.20	2.77	44.0	44.5	45.0	45.5	46.5	48.5	49.0	50.0	50.5	51.5	52.5	53.0	53.5	54.5	55.0	56.5	58.5	60.5		
2.95	7.35	2.20	6.60	2.80																				
5.95	15.75	5.20	15.00	2.80	42.0	42.5	43.0	43.5	44.5	46.5	47.0	48.0	48.5	49.5	50.5	51.0	51.6	52.6	53.1	54.6	56.6	58.6		
6.15	16.35	5.40	15.60	2.81	41.3	41.8	42.3	42.9	43.9	45.9	46.4	47.4	47.9	48.9	49.9	50.4	50.9	51.9	52.4	53.9	55.9	57.9		
4.35	11.35	3.60	10.60	2.82	46.9	47.4	47.9	48.4	49.4	51.4	51.9	52.9	53.4	54.4	55.4	55.9	56.4	57.4	57.9	59.4	61.4	63.4		
6.95	18.75	6.20	18.00	2.83	38.7	39.2	39.7	40.2	41.2	43.2	43.7	44.8	45.3	46.3	47.3	47.8	48.3	49.3	49.8	51.3	53.3	55.3		
3.75	9.75	3.00	9.00	2.85	48.6	49.1	49.6	50.1	51.1	53.1	53.6	54.6	55.1	56.1	57.1	57.6	58.1	59.1	59.6	61.2	63.2	65.2		
4.75	12.75	4.00	12.00	2.88	45.4	45.9	46.4	46.9	47.9	49.9	50.4	51.4	51.9	52.9	53.9	54.4	54.9	55.9	56.4	57.9	60.0	62.0		
5.15	13.95	4.40	13.20	2.89	44.1	44.6	45.1	45.6	46.6	48.6	49.1	50.1	50.6	51.6	52.6	53.1	53.6	54.6	55.2	56.7	58.7	60.7		
5.75	15.75	5.00	15.00	2.90	42.1	42.6	43.2	43.7	44.7	46.7	47.2	48.2	48.7	49.7	50.7	51.2	51.7	52.7	53.2	54.7	56.7	58.7		
7.35	20.35	6.80	19.60	2.90	37.0	37.5	38.0	38.5	39.5	41.6	42.1	43.1	43.6	44.6	45.6	46.1	46.6	47.6	48.1	49.6	51.7	53.7		
5.95	16.35	5.20	15.60	2.91	41.5	42.0	42.5	43.0	44.0	46.0	46.5	47.5	48.0	49.0	50.0	50.5	51.0	52.1	52.6	54.1	56.1	58.1		
6.75	18.75	6.00	18.00	2.92	38.8	39.3	39.8	40.4	41.4	43.4	43.9	44.9	45.4	46.										

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance								Speed Ratio	Sheave Datum Diameters	
A	A	A	A	A	A	A	Small Sheave		Large Sheave	
AX										
162	167	173	180	187	197	200				
69.8	72.3	75.3	78.8	82.3	87.3	88.8	2.33	4.40	10.60	
68.2	70.7	73.7	77.2	80.7	85.7	87.2	2.33	5.00	12.00	
		80.5					2.36	2.40	6.00	
64.9	67.4	70.4	73.9	77.4	82.4	83.9	2.36	6.20	15.00	
		79.4					2.38	2.80	7.00	
66.9	69.4	72.4	75.9	79.4	84.5	86.0	2.38	5.40	13.20	
64.2	66.7	69.7	73.2	76.7	81.7	83.2	2.38	6.40	15.60	
		81.0					2.39	2.20	5.60	
		79.9					2.40	2.60	6.60	
71.7	74.2	77.2	80.7	84.2	89.2	90.7	2.40	3.60	9.00	
73.3	75.8	78.8	82.3	85.8	90.8	92.3	2.42	3.00	7.60	
		80.4					2.43	2.40	6.20	
68.4	70.9	73.9	77.4	80.9	85.9	87.4	2.43	4.80	12.00	
70.0	72.5	75.5	79.0	82.5	87.5	89.0	2.44	4.20	10.60	
65.0	67.5	70.5	74.0	77.5	82.5	84.0	2.44	6.00	15.00	
72.7	75.2	78.2	81.7	85.2	90.2	91.7	2.45	3.20	8.20	
64.4	66.9	69.9	73.4	76.9	81.9	83.4	2.46	6.20	15.60	
		80.8					2.47	2.20	5.80	
67.1	69.6	72.6	76.1	79.6	84.6	86.1	2.47	5.20	13.20	
		80.2					2.51	2.40	6.40	
65.2	67.7	70.7	74.2	77.7	82.7	84.2	2.52	5.80	15.00	
61.8	64.3	67.3	70.8	74.3	79.3	80.8	2.52	7.00	18.00	
71.9	74.4	77.4	80.9	84.4	89.4	90.9	2.53	3.40	9.00	
68.5	71.0	74.0	77.5	81.0	86.0	87.5	2.53	4.60	12.00	
		79.6					2.54	2.60	7.00	
64.5	67.0	70.0	73.5	77.0	82.0	83.5	2.54	6.00	15.60	
		80.7					2.55	2.20	6.00	
70.1	72.6	75.6	79.1	82.6	87.6	89.1	2.55	4.00	10.60	
67.2	69.7	72.7	76.2	79.7	84.7	86.2	2.56	5.00	13.20	
		78.9					2.57	2.80	7.60	
		80.1					2.58	2.40	6.80	
72.8	75.3	78.3	81.8	85.3	90.3	91.8	2.60	3.00	8.20	
65.3	67.8	70.8	74.3	77.8	82.8	84.3	2.61	5.80	15.00	
64.7	67.2	70.2	73.7	77.2	82.2	83.7	2.62	5.80	15.60	
		80.5					2.63	2.20	6.20	
68.7	71.2	74.2	77.7	81.2	86.2	87.7	2.63	4.40	12.00	
67.4	69.9	72.9	76.4	79.9	84.9	86.4	2.66	4.80	13.20	
62.1	64.6	67.6	71.1	74.6	79.6	81.1	2.66	6.60	18.00	
72.0	74.5	77.5	81.0	84.5	89.5	91.0	2.68	3.20	9.00	
70.3	72.8	75.8	79.3	82.8	87.8	89.3	2.68	3.80	10.60	
65.5	68.0	71.0	74.5	78.0	83.0	84.5	2.70	5.40	15.00	
		80.4					2.71	2.20	6.40	
64.8	67.3	70.3	73.8	77.3	82.3	83.8	2.71	5.60	15.60	
		79.7					2.74	2.40	7.00	
62.2	64.7	67.7	71.2	74.7	79.7	81.2	2.74	6.40	18.00	
60.4	62.9	65.9	69.4	72.9	77.9	79.4	2.74	7.00	19.80	
		79.1					2.75	2.60	7.60	
68.8	71.3	74.3	77.8	81.3	86.3	87.8	2.75	4.20	12.00	
		78.5					2.77	2.80	8.20	
67.5	70.0	73.0	76.5	80.0	85.0	86.5	2.77	4.60	13.20	
		80.2					2.80	2.20	6.60	
65.6	68.1	71.1	74.6	78.1	83.1	84.6	2.80	5.20	15.00	
65.0	67.5	70.5	74.0	77.5	82.5	84.0	2.81	5.40	15.60	
70.4	72.9	75.9	79.4	82.9	87.9	89.4	2.82	3.60	10.60	
62.4	64.9	67.9	71.4	74.9	79.9	81.4	2.83	6.20	18.00	
72.2	74.7	77.7	81.2	84.7	89.7	91.2	2.85	3.00	9.00	
69.0	71.5	74.5	78.0	81.5	86.5	88.0	2.88	4.00	12.00	
67.7	70.2	73.2	76.7	80.2	85.2	86.7	2.89	4.40	13.20	
65.8	68.3	71.3	74.8	78.3	83.3	84.8	2.90	5.00	15.00	
60.7	63.2	66.3	69.8	73.3	78.3	79.8	2.90	6.80	19.80	
65.1	67.6	70.6	74.1	77.6	82.6	84.1	2.91	5.20	15.60	
62.5	65.0	68.0	71.5	75.0	80.0	81.5	2.92	6.00	18.00	
		79.9					2.96	2.20	7.00	
		79.3					2.96	2.40	7.60	
		78.6					2.96	2.60	8.20	
70.6	73.1	76.1	79.6	83.1	88.1	89.6	2.97	3.40	10.60	
60.9	63.4	66.4	69.9	73.4	78.4	80.0	2.98	6.40	19.60	
69.1	71.6	74.6	78.1	81.6	86.6	88.1	3.02	3.80	12.00	
67.8	70.3	73.3	76.8	80.3	85.3	86.8	3.02	4.20	13.20	
65.9	68.4	71.4	74.9	78.4	83.4	84.9	3.02	4.80	15.00	
65.3	67.8	70.8	74.3	77.8	82.8	84.3	3.02	5.00	15.60	
62.7	65.2	68.2	71.7	75.2	80.2	81.7	3.02	5.80	18.00	
		77.8					3.05	2.80	9.00	
61.0	63.5	66.5	70.0	73.5	78.5	80.0	3.08	6.20	19.60	
62.8	65.3	68.3	71.8	75.3	80.3	81.8	3.12	5.60	18.00	
70.7	73.2	76.2	79.7	83.2	88.2	89.7	3.14	3.20	10.60	

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
					20	21	22	23	24	25	26	27	28	29	29.8	30	31	32	33	34	35	36	37	38	39	40
5.35	15.75	4.60	15.00	3.14																						
5.55	16.35	4.80	15.60	3.14																						
4.75	13.95	4.00	13.20	3.16																						
4.35	12.75	3.60	12.00	3.18																						
6.75	20.35	6.00	19.60	3.18																						
3.15	8.95	2.40	8.20	3.19																						
2.95	8.35	2.20	7.60	3.20																						
6.15	18.75	5.40	18.00	3.23																						
3.35	9.75	2.60	9.00	3.25																						
5.35	16.35	4.60	15.60	3.27																						
5.15	15.75	4.40	15.00	3.28																						
6.55	20.35	5.80	19.60	3.28																						
4.55	13.95	3.80	13.20	3.32																						
3.75	11.35	3.00	10.60	3.34																						
5.95	18.75	5.20	18.00	3.35																						
4.15	12.75	3.40	12.00	3.36																						
6.35	20.35	5.60	19.60	3.39																						
5.15	16.35	4.40	15.60	3.41																						
4.95	15.75	4.20	15.00	3.43																						
7.75	25.35	7.00	24.60	3.43																						
2.95	8.95	2.20	8.20	3.45																						
5.75	18.75	5.00	18.00	3.48																						
3.15	9.75	2.40	9.00	3.49																						
4.35	13.95	3.60	13.20	3.49																						
6.15	20.35	5.40	19.60	3.51																						
3.95	12.75	3.20	12.00	3.55																						
3.55	11.35	2.80	10.60	3.56																						
4.95	16.35	4.20	15.60	3.56																						
4.75	15.75	4.00	15.00	3.59																						
5.55	18.75	4.80	18.00	3.61																						
7.35	25.35	6.60	24.60	3.63																						
5.95	20.35	5.20	19.60	3.64																						
4.15	13.95	3.40	13.20	3.68																						
4.75	18.35	4.00	15.60	3.73																						
7.15	25.35	6.40	24.60	3.74																						
5.35	18.75	4.60	18.00	3.76																						
3.75	12.75	3.00	12.00	3.77																						
4.55	15.75	3.80	15.00	3.77																						
2.95	9.75	2.20	9.00	3.78																						
5.75	20.35	5.00	19.60	3.78																						
3.35	11.35	2.60	10.60	3.81																						
6.95	25.35	6.20	24.60	3.85																						
3.95	13.95	3.20	13.20	3.90																						
4.55	16.35	3.80	15.60	3.91																						
5.15	18.75	4.40	18.00	3.92																						
5.55	20.35	4.80	19.60	3.93																						
4.35	15.75	3.60	15.00	3.96																						
6.75	25.35	6.00	24.60	3.98																						
3.55	12.75	2.80	12.00	4.02																						
3.15	11.35	2.40	10.60	4.09																						
5.35	20.35	4.60	19.60	4.09																						
4.95	18.75	4.20	18.00	4.10																						
6.55	25.35	5.80	24.60	4.11																						
4.35	16.35	3.60	15.60	4.12																						
7.75	30.35	7.00	29.60	4.12																						
3.75	13.95	3.00	13.20	4.14																						
4.15	15.75	3.40	15.00	4.18																						
6.35	25.35	5.60	24.60	4.25																						
5.15	20.35	4.40	19.60	4.27																						
4.75	18.75	4.00	18.00	4.29																						
3.35	12.75	2.60	12.00	4.30																						
4.15	16.35	3.40	15.60	4.34																						
7.35	30.35	6.60	29.60	4.36																						
6.15	25.35	5.40	24.60	4.40																						
3.55	13.95	2.80	13.20	4.41																						
3.95	15.75	3.20	15.00	4.42																						
2.95	11.35	2.20	10.60	4.43																						
4.95	20.35	4.20	19.60	4.46																						
7.15	30.35	6.40	29.60	4.49																						
4.55	18.75	3.80	18.00	4.51																						
5.95	25.35	5.20	24.60	4.56																						
3.95	16.35	3.20	15.60	4.59																						
3.15	12.75	2.40	12.00	4.62																						

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.



Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																									Speed Ratio	Sheave Datum Diameters	
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		Small Sheave	Large Sheave
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	3.14	4.60	15.00
																									3.14	4.80	15.60
																									3.16	4.00	13.20
																									3.18	3.60	12.00
																									3.18	6.00	19.60
																									3.19	2.40	8.20
																									3.20	2.20	7.60
																									3.23	5.40	18.00
																									3.25	2.60	9.00
																									3.27	4.60	15.60
																									3.28	4.40	15.00
																									3.28	5.80	19.60
																									3.32	3.80	13.20
																									3.34	3.00	10.60
																									3.35	5.20	18.00
																									3.36	3.40	12.00
																									3.39	5.60	19.60
																									3.41	4.40	15.60
																									3.43	4.20	15.00
																									3.43	7.00	24.60
																									3.45	2.20	8.20
																									3.48	5.00	18.00
																									3.49	2.40	9.00
																									3.49	3.60	13.20
																									3.51	5.40	19.60
																									3.55	3.20	12.00
																									3.56	2.80	10.60
																									3.56	4.20	15.60
																									3.59	4.00	15.00
																									3.59	5.00	18.00
																									3.61	4.80	18.00
																									3.63	6.60	24.60
																									3.64	5.20	19.60
																									3.68	3.40	13.20
																									3.73	4.00	15.60
																									3.74	6.40	24.60
																									3.76	4.60	18.00
																									3.77	3.00	12.00
																									3.77	3.80	15.00
																									3.78	2.20	9.00
																									3.78	5.00	19.60
																									3.81	2.60	10.60
																									3.85	6.20	24.60
																									3.90	3.20	13.20
																									3.91	3.80	15.60
																									3.92	4.40	18.00
																									3.93	4.80	19.60
																									3.96	3.60	15.00
																									3.98	6.00	24.60
																									4.02	2.80	12.00
																									4.09	2.40	10.60
																									4.09	4.60	19.60
																									4.10	4.20	18.00
																									4.11	5.80	24.60
																									4.12	3.60	15.60
																									4.12	7.00	29.60
																									4.14	3.00	13.20
																									4.18	3.40	15.00
																									4.25	5.60	24.60
																									4.27	4.40	19.60
																									4.29	4.00	18.00
																									4.30	2.60	12.00
																									4.34	3.40	15.60
																									4.36	6.60	24.60
																									4.40	5.40	24.60
																									4.41	2.80	13.20
																									4.42	3.20	15.00
																									4.43	2.20	10.60
																									4.46	4.20	19.60
																									4.49	6.40	29.60
																									4.51	3.80	18.00
																									4.56	5.20	24.60
																									4.59	3.20	15.60
																									4.62	2.40	12.00

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																						
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX			
66	67	68	69		70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90		
5.35	15.75	4.60	15.00	3.14	17.5	18.0	18.5	19.0	19.6	20.1	20.6	21.1	21.6	22.1	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.3	27.8	28.3	
5.55	16.35	4.80	15.60	3.14	16.7	17.3	17.8	18.3	18.8	19.4	19.9	20.4	20.9	21.4	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.6	26.1	26.6	27.1	27.6	
4.75	13.95	4.00	13.20	3.16	19.6	20.1	20.6	21.1	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.3	27.8	28.3	28.8	29.3	29.8	30.3	
4.35	12.75	3.60	12.00	3.18	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	
6.75	20.35	6.00	19.60	3.18	17.5	18.0	18.5	19.0	19.6	20.1	20.6	21.1	21.6	22.1	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.3	27.8	28.3	
3.15	8.95	2.40	8.20	3.19	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	
2.95	8.35	2.20	7.60	3.20	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.4	
6.15	18.75	5.40	18.00	3.23	13.8	14.4	14.9	15.5	16.0	16.6	17.1	17.6	18.2	18.7	19.2	19.8	20.3	20.8	21.3	21.9	22.4	22.9	23.4	23.9	24.5	25.0	
3.35	9.75	2.60	9.00	3.25	24.3	24.8	25.3	25.8	26.3	26.8	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	
5.35	16.35	4.60	15.60	3.27	16.9	17.4	17.9	18.5	19.0	19.5	20.0	20.5	21.1	21.6	22.1	22.6	23.1	23.6	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	
5.15	15.75	4.40	15.00	3.28	17.6	18.1	18.7	19.2	19.7	20.2	20.7	21.2	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.4	25.9	26.4	26.9	27.4	27.9	28.4	
6.55	20.35	5.80	19.60	3.28	14.5	15.1	15.7	16.2	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	
4.55	13.95	3.80	13.20	3.32	19.7	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	
3.75	11.35	3.00	10.60	3.34	22.6	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.3	
5.95	18.75	5.20	18.00	3.35	13.3	14.5	15.0	15.6	16.1	16.7	17.2	17.8	18.3	18.8	19.4	19.9	20.4	20.9	21.5	22.0	22.5	23.0	23.6	24.1	24.6	25.1	
4.15	12.75	3.40	12.00	3.36	21.1	21.6	22.1	22.6	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.8	31.3	31.8	
6.35	20.35	5.60	19.60	3.39	17.0	17.5	18.1	18.6	19.1	19.6	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	
5.15	16.35	4.40	15.60	3.41	17.0	17.5	18.1	18.6	19.1	19.6	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	
4.95	15.75	4.20	15.00	3.43	17.7	18.3	18.8	19.3	19.8	20.3	20.9	21.4	21.9	22.4	22.9	23.4	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.6	
7.75	25.35	7.00	24.60	3.43	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.4	34.9	35.4	35.9	
2.95	8.95	2.20	8.20	3.45	14.1	14.6	15.2	15.7	16.3	16.8	17.4	17.9	18.4	19.0	19.5	20.0	20.5	21.1	21.6	22.1	22.6	23.2	23.7	24.2	24.7	25.2	
5.75	18.75	5.00	18.00	3.48	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	
3.15	9.75	2.40	9.00	3.49	19.9	20.4	20.9	21.4	21.9	22.4	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.6	29.1	29.6	30.1	30.6	
4.35	13.95	3.60	13.20	3.49	19.9	20.4	20.9	21.4	21.9	22.4	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.6	29.1	29.6	30.1	30.6	
6.15	20.35	5.40	19.60	3.51	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	
3.95	12.75	3.20	12.00	3.52	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	
3.55	11.35	2.80	10.60	3.56	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	
4.95	16.35	4.20	15.60	3.56	17.1	17.7	18.2	18.7	19.2	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.4	24.9	25.5	26.0	26.5	27.0	27.5	28.0	
4.75	15.75	4.00	15.00	3.59	17.9	18.4	18.9	19.4	20.0	20.5	21.0	21.5	22.0	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	
5.55	18.75	4.80	18.00	3.61	14.2	14.7	15.3	15.8	16.4	16.9	17.5	18.0	18.6	19.1	19.6	20.2	20.7	21.2	21.7	22.3	22.8	23.3	23.8	24.3	24.9	25.4	
7.35	25.35	6.60	24.60	3.63	20.0	20.5	21.0	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	
5.95	20.35	5.20	19.60	3.64	17.3	17.8	18.3	18.9	19.4	19.9	20.4	20.9	21.5	22.0	22.5	23.0	23.5	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.2	
4.15	13.95	3.40	13.20	3.68	20.0	20.5	21.0	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	
4.75	16.35	4.00	15.60	3.73	17.3	17.8	18.3	18.9	19.4	19.9	20.4	20.9	21.5	22.0	22.5	23.0	23.5	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.2	
7.15	25.35	6.40	24.60	3.74	14.3	14.9	15.4	16.0	16.5	17.1	17.6	18.1	18.7	19.2	19.8	20.3	20.8	21.3	21.9	22.4	22.9	23.4	24.0	24.5	25.0	25.5	
5.35	18.75	4.60	18.00	3.76	21.4	21.9	22.4	22.9	23.4	23.9	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.1	
3.75	12.75	3.00	12.00	3.77	18.0	18.5	19.1	19.6	20.1	20.6	21.1	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	
4.55	15.75	3.80	15.00	3.77	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	
2.95	9.75	2.20	9.00	3.78	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	
5.75	20.35	5.00	19.60	3.78	22.9	23.4	23.9	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	
3.35	11.35	2.60	10.60	3.81	20.1	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.4	30.9	
6.95	25.35	6.20	24.60	3.85	17.4	17.9	18.5	19.0	19.5	20.0	20.6	21.1	21.6	22.1	22.6	23.2	23.7	24.2	24.7	25.2	25.7	26.2					

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																								Speed Ratio	Sheave Datum Diameters		
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		Small Sheave	Large Sheave	
88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	110	112	113	114	3.14	4.60	15.00
28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.9	40.9	41.4	41.9	3.14	4.80	15.60
28.1	28.6	29.1	29.6	30.1	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	39.3	40.3	40.8	41.3	3.14	4.80	13.20
30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.9	37.4	37.9	38.4	38.9	39.4	40.0	40.9	41.9	42.9	43.4	43.9	3.16	4.00	12.00	
32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	43.2	44.2	44.7	45.2	3.18	3.60	12.00
26.6	24.1	24.6	25.1	25.6	26.2	27.2	27.7	28.2	28.7	29.2	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.9	34.9	35.9	36.4	36.9	3.18	6.00	19.60	
36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	42.2	43.2	44.2	45.2	46.2	47.2	48.2	49.2	50.2	51.2	52.2	53.2	54.2	3.19	2.40	8.20	
36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.9	43.9	44.9	45.9	46.9	47.9	48.9	49.9	50.9	51.9	52.9	53.9	54.9	3.20	2.20	7.60	
25.5	26.0	26.5	27.0	27.5	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.7	37.7	38.3	38.8	3.23	5.40	18.00
35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	41.4	42.4	43.4	44.4	45.4	46.4	47.4	48.4	49.4	50.4	51.4	52.4	53.4	3.25	2.60	9.00	
28.2	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	39.4	40.4	40.9	41.4	3.27	4.60	15.60
28.9	29.4	29.9	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.1	40.1	41.1	41.6	42.1	3.28	4.40	15.00
23.7	24.2	24.7	25.3	25.8	26.3	26.8	27.3	27.8	28.4	28.9	29.4	29.9	30.4	30.9	31.4	32.0	32.5	33.0	33.5	34.0	35.0	36.0	36.5	37.1	3.28	5.80	19.60
30.9	31.4	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	42.0	43.0	44.0	3.32	3.80	13.20	
33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.8	45.8	46.3	46.8	3.34	3.00	10.60
25.6	26.1	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.9	36.9	37.9	38.4	38.9	3.35	5.20	18.00
32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	43.3	44.3	44.8	45.4	3.36	3.40	12.00
23.8	24.3	24.9	25.4	25.9	26.4	26.9	27.5	28.0	28.5	29.0	29.5	30.0	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	35.2	36.2	36.7	37.2	3.39	5.60	19.60
28.4	28.9	29.4	29.9	30.4	30.9	31.4	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.5	40.6	41.1	41.6	3.41	4.40	15.60
29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	40.2	41.2	41.7	42.2	3.43	4.20	15.00
17.6	18.2	18.7	19.3	19.8	20.4	21.0	21.5	22.1	22.6	23.1	23.7	24.2	24.7	25.3	25.8	26.3	26.9	27.4	27.9	28.5	29.5	30.6	31.1	31.6	3.43	7.00	24.60
36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	42.4	43.4	44.4	45.4	46.4	47.4	48.4	49.4	50.4	51.4	52.4	53.4	54.4	3.45	2.20	8.20	
25.8	26.3	26.8	27.3	27.8	28.3	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.5	34.0	34.5	35.0	35.5	36.0	37.0	38.0	38.5	39.0	3.48	5.00	18.00
35.5	36.0	36.5	37.0	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.6	42.6	43.6	44.6	45.6	46.6	47.6	48.6	49.6	50.6	51.6	52.6	53.6	3.49	2.40	9.00	
31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.2	38.7	39.2	39.7	40.2	40.7	41.2	42.2	43.2	43.7	44.2	3.49	3.60	13.20
24.0	24.5	25.0	25.5	26.0	26.6	27.1	27.6	28.1	28.6	29.1	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.3	33.8	34.3	35.3	36.3	36.8	37.3	3.51	5.40	18.00
32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.5	44.5	45.0	45.5	3.55	3.20	12.00
33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.9	40.9	41.9	42.9	43.9	44.9	45.9	46.9	47.9	48.9	49.9	50.9	51.9	3.56	2.80	10.60	
28.5	29.0	29.5	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.7	37.2	37.7	38.2	38.7	39.7	40.7	41.2	41.7	3.56	4.20	15.60
29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	40.4	41.4	41.9	42.4	3.59	4.00	15.00
25.9	26.4	26.9	27.4	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	37.2	38.2	38.7	39.2	3.61	4.80	18.00
17.8	18.4	19.0	19.5	20.1	20.7	21.2	21.8	22.3	22.8	23.4	23.9	24.5	25.0	25.5	26.1	26.6	27.1	27.7	28.2	28.7	29.8	30.8	31.3	31.9	3.63	6.60	24.60
24.1	24.6	25.1	25.7	26.2	26.7	27.2	27.7	28.2	28.8	29.3	29.8	30.3	30.8	31.3	31.9	32.4	32.9	33.4	33.9	34.4	35.4	36.5	37.0	37.5	3.64	5.20	19.60
31.2	31.7	32.2	32.7	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	42.3	43.3	43.8	44.3	3.68	3.40	13.20
28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.8	40.8	41.3	41.9	3.73	4.00	15.60
17.9	18.5	19.1	19.7	20.2	20.8	21.3	21.9	22.4	23.0	23.5	24.1	24.6	25.1	25.7	26.2	26.7	27.3	27.8	28.3	28.9	29.9	31.0	31.5	32.0	3.74	6.40	24.60
26.0	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.8	35.3	35.8	36.3	37.3	38.3	38.8	39.3	3.76	4.60	18.00
32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.6	44.6	45.1	45.6	3.77	3.60	12.00
29.3	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.5	41.5	42.0	42.5	3.77	3.80	15.00
35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.7	42.7	43.7	44.7	45.7	46.7	47.7	48.7	49.7	50.7	51.7	52.7	53.7	3.78	2.20	9.00	
24.2	24.7	25.3	25.8	26.3	26.8	27.3	27.9	28.4	28.9	29.4	29.9	30.4	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.6	35.6	36.6	37.1	37.6	3.78	5.00	19.60
34.0	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	40.1	41.1	42.1	43.1	44.1	45.1	46.1	47.1	48.1	49.1	50.1	51.1	52.1	3.81	2.60	10.60	
18.1	18.6	19.2	19.8	20.3	20.9	21.5	22.0	22.6	23.1	23.6	24.2	24.7	25.3	25.8	26.3	26.9	27.4	27.9	28.5	29.0	30.0	31.1	31.6	32.1	3.85	6.20	24.60
31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.5	40.0	40.5	41.0	41.5	42.5	43.5	44.0	44.5	3.90	3.20	13.20
28.8	29.3	29.8	30.3	30.8	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	38.0	38.5	39.0	40.0	41.0	41.5	42.0	3.91	3.80	15.00
26.2	26.7	27.2	27.7	28.2	28.7	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	37.4	38.5	39.0	39.5	3.92	4.40	18.00
24.4	24.9	25.4	25.9	26.4	27.0	27.5	28.0	28.5	29.0	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.2	33.7	34.2	34.7	35.7						

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																						
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A										A X												
115	116	117	118		120	124	125	127	128	130	132	133	134	136	137	140	144	148	152	156	157	158					
5.35	15.75	4.60	15.00	3.14	42.4	42.9	43.4	43.9	45.0	47.0	47.5	48.5	49.0	50.0	51.0	51.5	52.0	53.0	53.5	55.0	57.0	59.0	61.0	63.0	63.5	64.0	
5.55	16.35	4.80	15.60	3.14	41.8	42.3	42.8	43.3	44.3	46.3	46.8	47.8	48.3	49.3	50.3	50.8	51.3	52.3	52.9	54.4	56.4	58.4	60.4	62.4	62.9	63.4	
4.75	13.95	4.00	13.20	3.16	44.4	44.9	45.4	45.9	46.9	48.9	49.4	50.4	50.9	51.9	52.9	53.4	53.9	54.9	55.5	57.0	59.0	61.0	63.0	65.0	65.5	66.0	
4.35	12.75	3.60	12.00	3.18	45.7	46.2	46.7	47.2	48.2	50.2	50.7	51.7	52.2	53.2	54.2	54.7	55.2	56.2	56.7	58.2	60.3	62.3	64.3	66.3	66.8	67.3	
6.75	20.35	6.00	19.60	3.18	37.4	37.9	38.4	38.9	40.0	42.0	42.5	43.5	44.0	45.0	46.0	46.5	47.1	48.1	48.6	50.1	52.1	54.1	56.1	58.1	58.6	59.2	
3.15	8.95	2.40	8.20	3.19					52.2												64.3						
2.95	8.35	2.20	7.60	3.20					52.9												64.9						
6.15	18.75	5.40	18.00	3.23	39.3	39.8	40.3	40.8	41.8	43.8	44.3	45.3	45.8	46.8	47.9	48.4	48.9	49.9	50.4	51.9	53.9	55.9	57.9	59.9	60.4	60.9	
3.35	9.75	2.60	9.00	3.25					51.4												63.5						
5.15	16.35	4.60	15.60	3.27	41.9	42.4	42.9	43.4	44.4	46.5	47.0	48.0	48.5	49.5	50.5	51.0	51.5	52.5	53.0	54.5	56.5	58.5	60.5	62.5	63.0	63.5	
5.15	15.75	4.40	15.00	3.28	42.6	43.1	43.6	44.1	45.1	47.1	47.6	48.6	49.1	50.1	51.1	51.6	52.1	53.1	53.7	55.2	57.2	59.2	61.2	63.2	63.7	64.2	
6.55	20.35	5.80	19.60	3.28	37.6	38.1	38.6	39.1	40.1	42.1	42.6	43.7	44.2	45.2	46.2	46.7	47.2	48.2	48.7	50.2	52.2	54.3	56.3	58.3	58.8	59.3	
4.55	13.95	3.80	13.20	3.32	44.6	45.1	45.6	46.1	47.1	49.1	49.6	50.6	51.1	52.1	53.1	53.6	54.1	55.1	55.6	57.1	59.1	61.1	63.1	65.1	65.6	66.1	
3.75	11.35	3.00	10.60	3.34	47.3	47.8	48.3	48.8	49.8	51.8	52.3	53.3	53.8	54.8	55.8	56.3	56.8	57.8	58.3	59.8	61.9	63.9	65.9	67.9	68.4	68.9	
5.95	18.75	5.20	18.00	3.35	39.4	39.9	40.4	40.9	41.9	44.0	44.5	45.5	46.0	47.0	48.0	48.5	49.0	50.0	50.5	52.0	54.0	56.1	58.1	60.1	60.6	61.1	
4.15	12.75	3.40	12.00	3.36	45.9	46.4	46.9	47.4	48.4	50.4	50.9	51.9	52.4	53.4	54.4	54.9	55.4	56.4	56.9	58.4	60.4	62.4	64.4	66.4	66.9	67.4	
6.35	20.35	5.60	19.60	3.39	37.7	38.2	38.7	39.2	40.2	42.3	42.8	43.8	44.3	45.3	46.3	46.8	47.3	48.4	48.9	50.4	52.4	54.4	56.4	58.4	58.9	59.4	
5.15	16.35	4.40	15.60	3.41	42.1	42.6	43.1	43.6	44.6	46.6	47.1	48.1	48.6	49.6	50.6	51.1	51.6	52.6	53.1	54.7	56.7	58.7	60.7	62.7	63.2	63.7	
4.95	15.75	4.20	15.00	3.43	42.7	43.2	43.7	44.2	45.2	47.2	47.7	48.7	49.2	50.2	51.2	51.7	52.2	53.2	53.7	55.3	57.3	59.3	61.3	63.3	63.8	64.3	
7.15	25.35	7.00	24.60	3.43	32.1	32.6	33.2	33.7	34.7	36.8	37.3	38.3	38.8	39.9	40.9	41.4	41.9	42.9	43.4	45.0	47.0	49.0	51.1	53.1	53.6	54.1	
2.95	8.95	2.20	8.20	3.45					52.4												64.4						
5.75	18.75	5.00	18.00	3.48	39.6	40.1	40.6	41.1	42.1	44.1	44.6	45.6	46.1	47.1	48.1	48.7	49.2	50.2	50.7	52.2	54.2	56.2	58.2	60.2	60.7	61.2	
3.15	9.75	2.40	9.00	3.49					51.6												63.6						
4.35	13.95	3.60	13.20	3.49	44.7	45.2	45.7	46.2	47.2	49.2	49.7	50.7	51.2	52.2	53.2	53.7	54.2	55.2	55.7	57.3	59.3	61.3	63.3	65.3	65.8	66.3	
6.15	20.35	5.40	19.60	3.51	37.8	38.4	38.9	39.4	40.4	42.4	42.9	43.9	44.4	45.5	46.5	47.0	47.5	48.5	49.0	50.5	52.5	54.6	56.6	58.6	59.1	59.6	
3.95	12.75	3.20	12.00	3.55	46.0	46.5	47.0	47.5	48.5	50.5	51.0	52.0	52.5	53.5	54.5	55.0	55.5	56.5	57.0	58.5	60.6	62.6	64.6	66.6	67.1	67.6	
3.55	11.35	2.80	10.60	3.56					50.0												62.0						
4.95	16.35	4.20	15.60	3.56	42.2	42.7	43.2	43.7	44.7	46.8	47.3	48.3	48.8	49.8	50.8	51.3	51.8	52.8	53.3	54.8	56.8	58.8	60.8	62.8	63.3	63.8	
4.75	15.75	4.00	15.00	3.59	42.9	43.4	43.9	44.4	45.4	47.4	47.9	48.9	49.4	50.4	51.4	51.9	52.4	53.4	53.9	55.5	57.5	59.5	61.5	63.5	64.0	64.5	
5.55	18.75	4.80	18.00	3.61	39.7	40.2	40.7	41.2	42.2	44.2	44.7	45.8	46.3	47.3	48.3	48.8	49.3	50.3	50.8	52.3	54.3	56.4	58.4	60.4	60.9	61.4	
7.35	25.35	6.60	24.60	3.63	32.4	32.9	33.4	33.9	35.0	37.0	37.6	38.6	39.1	40.1	41.2	41.7	42.2	43.2	43.7	45.2	47.3	49.3	51.4	53.4	53.9	54.4	
4.95	20.35	5.20	19.60	3.64	38.0	38.5	39.0	39.5	40.5	42.6	43.1	44.1	44.6	45.6	46.6	47.1	47.6	48.6	49.1	50.7	52.7	54.7	56.7	58.7	59.2	59.7	
5.15	13.95	3.40	13.20	3.68	44.8	45.3	45.9	46.4	47.4	49.4	49.9	50.9	51.4	52.4	53.4	53.9	54.4	55.4	55.9	57.4	59.4	61.4	63.4	65.4	65.9	66.4	
4.75	16.35	4.00	15.60	3.75	42.4	42.9	43.4	43.9	44.9	46.9	47.4	48.4	48.9	49.9	50.9	51.4	51.9	52.9	53.4	54.9	57.0	59.0	61.0	63.0	63.5	64.0	
5.15	25.35	6.40	24.60	3.74	32.5	33.0	33.6	34.1	35.1	37.2	37.7	38.7	39.2	40.3	41.3	41.8	42.3	43.3	43.9	45.4	47.4	49.5	51.5	53.5	54.0	54.5	
5.35	18.75	4.60	18.00	3.76	39.8	40.3	40.8	41.4	42.4	44.4	44.9	45.9	46.4	47.4	48.4	48.9	49.4	50.5	51.0	52.5	54.5	56.5	58.5	60.5	61.0	61.5	
3.75	12.75	3.00	12.00	3.77	46.1	46.7	47.2	47.7	48.7	50.7	51.2	52.2	52.7	53.7	54.7	55.2	55.7	56.7	57.2	58.7	60.7	62.7	64.7	66.7	67.2	67.7	
4.55	15.75	3.80	15.00	3.77	43.0	43.5	44.0	44.5	45.5	47.6	48.1	49.1	49.6	50.6	51.6	52.1	52.6	53.6	54.1	55.6	57.6	59.6	61.6	63.6	64.1	64.6	
2.95	9.75	2.20	9.00	3.78					51.7												63.8						
5.75	20.35	5.00	19.60	3.78	38.1	38.6	39.1	39.7	40.7	42.7	43.2	44.2	44.7	45.7	46.8	47.3	47.8	48.8	49.3	50.8	52.8	54.8	56.9	58.9	59.4	59.9	
3.35	11.35	2.60	10.60	3.81					50.1												62.2						
6.95	25.35	6.20	24.60	3.85	32.7	33.2	33.7	34.2	35.3	37.3	37.8	38.9	39.4	40.4	41.4	41.9	42.5	43.5	44.0	45.5	47.6	49.6	51.6	53.7	54.2	54.7	
3.95	13.95	3.20	13.20	3.90	45.0	45.5	46.0	46.5	47.5	49.5	50.0	51.0	51.5	52.5	53.5	54.0	54.5	55.5	56.0	57.6	59.6	61.6	63.6	65.6	66.1	66.6	
4.55	16.35	3.80	15.60	3.91	42.5	43.0	43.5	44.0	45.0	47.0	47.5	48.6	49.1	50.1	51.1	51.6	52.1	53.1	53.6	55.1	57.1	59.1	61.1	63.1	63.6	64.1	
5.15	18.75	4.40	18.00	3.92	40.0	40.5	41.0	41.5	42.5	44.5	45.0	46.1	46.6	47.6	48.6	49.1	49.6	50.6	51.1	52.6	54.6	56.6	58.7	60.7	61.2	61.7	
5.55	20.35	4.80	19.60	3.93	38.3	38.8	39.3	39.8	40.8	42.8	43.4	44.4	44.9	45.9	46.9	47.4	47.9	48.9	49.4	50.9	53.0	55.0	57.0	59.0	59.5	60.0	
4.35	15.75	3.60	15.00	3.96	43.2	43.7	44.2	44.7	45.7	47.7	48.2	49.2	49.7	50.7	51.7	52.2	52.7	53.7	54.2	55.7	57.8	59.8	61.8	63.8	64.3	64.8	
6.75	25.35	6.00	24.60	3.98	32.8	33.3	33.8	34.4	35.4	37.5	38.0	39.0	39.5	40.5	41.6	42.1	42.6	43.6	44.1	45.7	47.7	49.7	51.8	53.8	54.3	54.8	
3.55	12.75	2.80	12.00	4.02					48.8												60.9						
3.15	11.35	2.40	10.60	4.09					50.3												62.3						
5.35	20.35	4.60	19.60	4.09	38.4	38.9	39.4	39.9	41.0	43.0	43.5	44.5	45.0	4													

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance								Speed Ratio	Sheave Datum Diameters	
A	A	A AX	A	A	A	A	Small Sheave		Large Sheave	
162	167	173	180	187	197	200	3.14	4.60	15.00	
66.1	68.6	71.6	75.1	78.6	83.6	85.1	3.14	4.80	15.60	
65.4	67.9	70.9	74.4	77.9	83.0	84.5	3.16	4.00	13.20	
68.0	70.5	73.5	77.0	80.5	85.5	87.0	3.18	3.60	12.00	
69.3	71.8	74.8	78.3	81.8	86.8	88.3	3.18	3.60	12.00	
61.2	63.7	66.7	70.2	73.7	78.8	80.3	3.18	6.00	19.60	
		78.8					3.19	* 2.40	8.20	
		79.4					3.20	* 2.20	7.60	
63.0	65.5	68.5	72.0	75.5	80.5	82.0	3.23	5.40	18.00	
		78.0					3.25	* 2.60	9.00	
65.6	68.1	71.1	74.6	78.1	83.1	84.6	3.27	4.60	15.60	
66.2	68.7	71.7	75.2	78.7	83.7	85.2	3.28	4.40	15.00	
61.3	63.8	66.8	70.4	73.9	78.9	80.4	3.28	5.80	19.60	
68.1	70.6	73.6	77.2	80.7	85.7	87.2	3.32	3.80	13.20	
70.9	73.4	76.4	79.9	83.4	88.4	89.9	3.34	3.00	10.60	
63.1	65.6	68.6	72.1	75.7	80.7	82.2	3.35	5.20	18.00	
69.4	71.9	74.9	78.4	81.9	86.9	88.5	3.36	3.40	12.00	
61.5	64.0	67.0	70.5	74.0	79.0	80.6	3.39	5.60	19.60	
65.7	68.2	71.2	74.7	78.2	83.3	84.8	3.41	4.40	15.60	
66.4	68.9	71.9	75.4	78.9	83.9	85.4	3.43	4.20	15.00	
56.1	58.7	61.7	65.2	68.8	73.8	75.3	3.43	7.00	24.60	
		78.9					3.45	* 2.20	8.20	
63.3	65.8	68.8	72.3	75.8	80.8	82.3	3.46	5.00	16.00	
		78.1					3.49	* 2.40	9.00	
68.3	70.8	73.8	77.3	80.8	85.8	87.3	3.49	3.60	13.20	
61.6	64.1	67.1	70.7	74.2	79.2	80.7	3.51	5.40	19.60	
69.6	72.1	75.1	78.6	82.1	87.1	88.6	3.55	3.20	12.00	
		76.5					3.56	* 2.80	10.60	
65.9	68.4	71.4	74.9	78.4	83.4	84.9	3.56	4.20	15.60	
66.5	69.0	72.0	75.5	79.0	84.0	85.6	3.59	4.00	15.00	
63.4	65.9	68.9	72.4	76.0	81.0	82.5	3.61	4.80	18.00	
56.4	59.0	62.0	65.5	69.1	74.1	75.6	3.63	6.60	24.60	
61.8	64.3	67.3	70.8	74.3	79.3	80.9	3.64	5.20	19.60	
68.4	70.9	73.9	77.5	81.0	86.0	87.5	3.68	3.40	13.20	
66.0	68.5	71.5	75.0	78.5	83.6	85.1	3.73	4.00	15.60	
56.6	59.1	62.1	65.7	69.2	74.2	75.8	3.74	6.40	24.60	
63.5	66.1	69.1	72.6	76.1	81.1	82.6	3.76	4.60	18.00	
69.7	72.2	75.2	78.7	82.2	87.3	88.8	3.77	3.00	12.00	
66.6	69.2	72.2	75.7	79.2	84.2	85.7	3.77	3.80	15.00	
		78.3					3.78	* 2.20	9.00	
61.9	64.4	67.4	71.0	74.5	79.5	81.0	3.78	5.00	19.60	
		76.7					3.81	* 2.60	10.60	
56.7	59.2	62.3	65.8	69.3	74.4	75.9	3.85	6.20	24.60	
68.6	71.1	74.1	77.6	81.1	86.1	87.6	3.90	3.20	13.20	
66.1	68.7	71.7	75.2	78.7	83.7	85.2	3.91	3.80	15.60	
63.7	66.2	69.2	72.7	76.3	81.3	82.8	3.92	4.40	18.00	
62.0	64.6	67.6	71.1	74.6	79.6	81.1	3.93	4.80	19.60	
66.8	69.3	72.3	75.8	79.3	84.3	85.9	3.96	3.60	15.00	
56.9	59.4	62.4	66.0	69.5	74.5	76.0	3.98	6.00	24.60	
		75.4					4.02	* 2.80	12.00	
		76.8					4.09	* 2.40	10.60	
62.2	64.7	67.7	71.2	74.8	79.8	81.3	4.09	4.60	19.60	
63.8	66.4	69.4	72.9	76.4	81.4	82.9	4.10	4.20	18.00	
57.0	59.5	62.6	66.1	69.6	74.7	76.2	4.11	5.80	24.60	
66.3	68.8	71.8	75.3	78.8	83.9	85.4	4.12	3.60	15.60	
51.7	54.2	57.3	60.9	64.4	69.5	71.0	4.12	7.00	29.60	
68.7	71.2	74.3	77.8	81.3	86.3	87.8	4.14	3.00	13.20	
66.9	69.5	72.5	76.0	79.5	84.5	86.0	4.18	3.40	15.00	
57.1	59.7	62.7	66.2	69.8	74.8	76.3	4.25	5.60	24.60	
62.3	64.9	67.9	71.4	74.9	79.9	81.4	4.27	4.40	19.60	
64.0	66.5	69.5	73.0	76.6	81.6	83.1	4.29	4.00	18.00	
		75.5					4.30	* 2.60	12.00	
66.4	69.0	72.0	75.5	79.0	84.0	85.5	4.34	3.40	15.60	
51.9	54.5	57.6	61.1	64.7	69.8	71.3	4.36	6.60	29.60	
57.3	59.8	62.9	66.4	69.9	75.0	76.5	4.40	5.40	24.60	
		74.4					4.41	* 2.80	13.20	
67.1	69.6	72.6	76.1	79.6	84.7	86.2	4.42	3.20	15.00	
		77.0					4.43	* 2.20	10.60	
62.5	65.0	68.0	71.5	75.1	80.1	81.6	4.46	4.20	19.60	
52.1	54.6	57.7	61.3	64.8	69.9	71.4	4.49	6.40	29.60	
64.1	66.6	69.7	73.2	76.7	81.7	83.2	4.51	3.80	18.00	
57.4	60.0	63.0	66.5	70.1	75.1	76.6	4.56	5.20	24.60	
66.6	69.1	72.1	75.6	79.1	84.2	85.7	4.59	3.20	15.60	
		75.7					4.62	* 2.40	12.00	

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																			
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
					AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	
6.95	30.35	6.20	29.60	4.63																				
4.75	20.35	4.00	19.60	4.67																				
3.75	15.75	3.00	15.00	4.69																				
3.35	13.95	* 2.60	13.20	4.72																				
5.75	25.35	5.00	24.60	4.73																				
4.35	18.75	3.60	18.00	4.74																				
6.75	30.35	6.00	29.60	4.78																				
3.75	16.35	3.00	15.60	4.88																				
4.55	20.35	3.80	19.60	4.90																				
5.55	25.35	4.80	24.60	4.92																				
6.55	30.35	5.80	29.60	4.93																				
2.95	12.75	* 2.20	12.00	5.00																				
3.55	15.75	* 2.80	15.00	5.00																				
4.15	18.75	3.40	18.00	5.00																				
3.15	13.95	* 2.40	13.20	5.08																				
6.35	30.35	5.60	29.60	5.10																				
5.35	25.35	4.60	24.60	5.12																				
4.35	20.35	3.60	19.60	5.16																				
3.55	16.35	* 2.80	15.60	5.20																				
7.75	38.35	7.00	37.60	5.22																				
6.15	30.35	5.40	29.60	5.28																				
3.95	18.75	3.20	18.00	5.29																				
5.15	25.35	4.40	24.60	5.34																				
3.35	15.75	* 2.60	15.00	5.35																				
4.15	20.35	3.40	19.60	5.44																				
5.95	30.35	5.20	29.60	5.48																				
2.95	13.95	* 2.20	13.20	5.49																				
7.35	38.35	6.60	37.60	5.53																				
3.35	16.35	* 2.60	15.60	5.56																				
4.95	25.35	4.20	24.60	5.58																				
3.75	18.75	3.00	18.00	5.62																				
5.75	30.35	5.00	29.60	5.69																				
7.15	38.35	6.40	37.60	5.69																				
3.15	15.75	* 2.40	15.00	5.75																				
3.95	20.35	3.20	19.60	5.75																				
4.75	25.35	4.00	24.60	5.85																				
6.95	38.35	6.20	37.60	5.87																				
5.55	30.35	4.80	29.60	5.91																				
3.15	16.35	* 2.40	15.60	5.98																				
3.55	18.75	* 2.80	18.00	5.98																				
6.75	38.35	6.00	37.60	6.06																				
3.75	20.35	3.00	19.60	6.11																				
4.55	25.35	3.80	24.60	6.14																				
5.35	30.35	4.60	29.60	6.15																				
2.95	15.75	* 2.20	15.00	6.22																				
6.55	38.35	5.80	37.60	6.26																				
3.35	18.75	* 2.60	18.00	6.40																				
5.15	30.35	4.40	29.60	6.42																				
4.35	25.35	3.60	24.60	6.45																				
2.95	16.35	* 2.20	15.60	6.47																				
6.35	38.35	5.60	37.60	6.47																				
3.55	20.35	* 2.80	19.60	6.51																				
6.15	38.35	5.40	37.60	6.70																				
4.95	30.35	4.20	29.60	6.71																				
4.15	25.35	3.40	24.60	6.81																				
3.15	18.75	* 2.40	18.00	6.89																				
5.95	38.35	5.20	37.60	6.94																				
3.35	20.35	* 2.60	19.60	6.96																				
4.75	30.35	4.00	29.60	7.02																				
3.95	25.35	3.20	24.60	7.20																				
5.75	38.35	5.00	37.60	7.21																				
4.55	30.35	3.80	29.60	7.37																				
2.95	18.75	* 2.20	18.00	7.45																				
3.15	20.35	* 2.40	19.60	7.49																				
5.55	38.35	4.80	37.60	7.50																				
3.75	25.35	3.00	24.60	7.65																				
4.35	30.35	3.60	29.60	7.75																				
5.35	38.35	4.60	37.60	7.80																				
2.95	20.35	* 2.20	19.60	8.10																				
5.15	38.35	4.40	37.60	8.14																				
3.55	25.35	* 2.80	24.60	8.15																				
4.15	30.35	3.40	29.60	8.18																				

Key to Horsepower Correction Factor



* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																									Speed Ratio	Sheave Datum Diameters		
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		Small Sheave	Large Sheave	
AX	AX	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP	AP				
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	4.63	6.20	29.60	
											10.8	11.4	12.0	12.5	13.1	13.7	14.2	14.8	15.3	15.9	16.4	16.9	17.5	18.0	4.67	4.00	19.60	
				9.8	10.4						12.6	13.2	13.7	14.2	14.8	15.3	15.8	16.4	16.9	17.4	18.0	18.5	19.0	19.5	20.0	4.69	3.00	15.00
																						12.6	13.2	13.8	14.3	4.72*	2.60	13.20
																						4.73	5.00	24.60				
																						4.74	3.60	18.00				
																						4.78	6.00	29.60				
																						4.88	3.00	15.60				
																						4.90	3.80	19.60				
																						4.92	4.80	24.60				
																						4.93	5.80	29.60				
8.6	9.2	9.7	10.3	10.9	11.4	12.0	12.5	13.1	13.7	14.2	14.8	15.3	15.9	16.4	16.9	17.4	18.0	18.5	19.0	19.5	20.0	20.6	21.1	21.6	22.1	5.00*	2.20	12.00
																						5.00	3.40	18.00				
																						5.08*	2.40	13.20				
																						5.10	5.60	29.60				
																						5.12	4.60	24.60				
																						5.16	3.60	19.60				
																						5.20*	2.80	15.60				
																						5.22	7.00	37.60				
																						5.28	5.40	29.60				
																						5.29	3.20	18.00				
																						5.34	4.40	24.60				
																						5.35	2.60	15.00				
																						5.44	3.40	19.60				
																						5.48	5.20	29.60				
																						5.49*	2.20	13.20				
																						5.53	6.60	37.60				
																						5.56*	2.60	15.80				
																						5.58	4.20	24.60				
																						5.62	3.00	18.00				
																						5.69	5.00	29.60				
																						5.69	6.40	37.60				
																						5.75*	2.40	15.00				
																						5.75	3.20	19.60				
																						5.85	4.00	24.60				
																						5.87	6.20	37.60				
																						5.91	4.80	29.60				
																						5.98*	2.40	15.60				
																						5.98*	2.80	18.00				
																						6.06	6.00	37.60				
																						6.11	3.00	19.60				
																						6.14	3.80	24.60				
																						6.15	4.60	29.60				
																						6.22*	2.20	15.00				
																						6.26	5.80	37.60				
																						6.40*	2.60	18.00				
																						6.42	4.40	29.60				
																						6.45	3.60	24.60				
																						6.47*	2.20	15.60				
																						6.47*	5.60	37.60				
																						6.51*	2.80	19.60				
																						6.70	5.40	37.60				
																						6.71	4.20	29.60				
																						6.81	3.40	24.60				
																						6.89*	2.40	18.00				
																						6.94	5.20	37.60				
																						6.96*	2.60	19.60				
																						7.02	4.00	29.60				
																						7.20	3.20	24.60				
																						7.21	5.00	37.60				
																						7.37	3.80	29.60				
																						7.45*	2.20	18.00				
																						7.49*	2.40	19.60				
																						7.50	4.80	37.60				
																						7.65	3.00	24.60				
																						7.75	3.60	29.60				
																						7.80	4.60	37.60				
																						8.10*	2.20	19.60				
																						8.14	4.40	37.60				
																						8.15	2.80	24.60				
																						8.18	3.40	29.60				

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.



Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																								Speed Ratio	Sheave Datum Diameters		
A AX	A AX	A AX AP	A AX AP	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX	A AX		Small Sheave	Large Sheave	
88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	110	112	113	114	4.63	6.20	29.60
24.9	25.4	25.9	26.5	27.0	27.5	28.0	28.5	29.1	29.6	30.1	30.6	31.1	31.6	32.2	32.7	33.2	33.7	34.2	34.7	35.2	36.3	37.3	37.8	38.3	4.67	4.00	19.60
29.9	30.4	30.9	31.4	31.9	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.1	39.6	40.1	41.1	42.1	42.6	43.1	4.69	3.00	15.00
31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.4	36.9	37.9	38.9	39.4	40.4	41.4	42.4	43.4	44.4	45.4	46.4	47.4	48.4	49.4	50.4	4.72	2.60	13.20
18.8	19.4	19.9	20.5	21.1	21.6	22.2	22.8	23.3	23.9	24.4	25.0	25.5	26.0	26.6	27.1	27.6	28.2	28.7	29.2	29.8	30.8	31.9	32.4	32.9	4.73	5.00	24.60
26.7	27.2	27.7	28.3	28.8	29.3	29.8	30.3	30.8	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.5	36.0	36.5	37.0	38.0	39.0	39.5	40.0	4.74	3.60	18.00
29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.6	41.6	42.1	42.6	4.78	6.00	29.60
29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.6	41.6	42.1	42.6	4.88	3.00	15.60
25.0	25.5	26.1	26.6	27.1	27.6	28.2	28.7	29.2	29.7	30.2	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.4	34.9	35.4	36.4	37.4	37.9	38.5	4.90	4.80	19.60
18.9	19.5	20.1	20.6	21.2	21.8	22.3	22.9	23.4	24.0	24.5	25.1	25.6	26.2	26.7	27.2	27.8	28.3	28.8	29.4	29.9	31.0	32.0	32.5	33.1	4.92	4.80	24.60
33.1	33.6	34.1	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	39.2	40.2	41.2	42.2	43.2	44.2	45.2	46.2	47.2	48.2	49.2	50.2	51.2	52.2	5.00	2.20	12.00
30.0	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	36.2	37.2	38.2	39.2	40.2	41.2	42.2	43.2	44.2	45.2	46.2	47.2	48.2	49.2	5.00	2.80	15.00
26.8	27.4	27.9	28.4	28.9	29.4	29.9	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.1	34.6	35.1	35.6	36.1	36.6	37.1	38.1	39.2	39.7	40.2	5.08	3.40	18.00
31.9	32.4	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	5.08	2.40	13.20
19.0	19.6	20.2	20.8	21.3	21.9	22.4	23.0	23.6	24.1	24.7	25.2	25.7	26.3	26.8	27.4	27.9	28.4	29.0	29.5	30.0	31.1	32.1	32.7	33.2	5.12	4.60	24.60
25.1	25.7	26.2	26.7	27.2	27.8	28.3	28.8	29.3	29.9	30.4	30.9	31.4	31.9	32.4	33.0	33.5	34.0	34.5	35.0	35.5	36.5	37.6	38.1	38.6	5.16	3.60	19.60
29.5	30.0	30.5	31.0	31.5	32.1	32.6	33.1	33.6	34.1	34.6	35.6	36.6	37.6	38.6	39.6	40.6	41.6	42.6	43.6	44.6	45.6	46.6	47.6	48.6	5.20	2.80	15.60
27.0	27.5	28.0	28.5	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.8	37.3	38.3	39.3	39.8	40.3	5.28	5.40	29.60
19.1	19.7	20.3	20.9	21.4	22.0	22.6	23.1	23.7	24.2	24.8	25.3	25.9	26.4	27.0	27.5	28.0	28.6	29.1	29.6	30.2	31.2	32.3	32.8	33.3	5.29	3.20	18.00
30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.8	34.3	34.8	35.3	36.3	37.3	38.3	39.3	40.3	41.3	42.3	43.3	44.3	45.3	46.3	47.3	48.3	49.3	5.34	4.40	24.60
25.3	25.8	26.3	26.9	27.4	27.9	28.4	28.9	29.5	30.0	30.5	31.0	31.5	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.7	36.7	37.7	38.2	38.7	5.35	2.60	15.00
32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	38.2	39.2	40.2	41.2	42.2	43.2	44.2	45.2	46.2	47.2	48.2	49.2	50.2	51.2	5.44	3.40	19.60
29.6	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.8	36.8	37.8	38.8	39.8	40.8	41.8	42.8	43.8	44.8	45.8	46.8	47.8	48.8	5.48	5.20	29.60
19.3	19.8	20.4	21.0	21.6	22.1	22.7	23.3	23.8	24.4	24.9	25.5	26.0	26.5	27.1	27.6	28.2	28.7	29.2	29.8	30.3	31.4	32.4	32.9	33.5	5.48	4.20	24.60
27.1	27.6	28.2	28.7	29.2	29.7	30.2	30.7	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.4	35.9	36.4	36.9	37.4	38.4	39.4	40.0	40.5	5.62	3.00	18.00
30.3	30.8	31.3	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	36.4	37.4	38.4	39.4	40.4	41.4	42.4	43.4	44.4	45.4	46.4	47.4	48.4	49.4	5.69	5.00	29.60
25.4	25.9	26.5	27.0	27.5	28.0	28.6	29.1	29.6	30.1	30.6	31.2	31.7	32.2	32.7	33.2	33.7	34.3	34.8	35.3	35.8	36.8	37.9	38.4	38.9	5.69	6.40	37.60
19.4	20.0	20.5	21.1	21.7	22.3	22.8	23.4	23.9	24.5	25.0	25.6	26.1	26.7	27.2	27.8	28.3	28.8	29.4	29.9	30.4	31.5	32.5	33.1	33.6	5.75	4.00	24.60
29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.4	33.9	34.4	34.9	35.9	36.9	37.9	38.9	39.9	40.9	41.9	42.9	43.9	44.9	45.9	46.9	47.9	48.9	5.87	6.20	37.60
27.2	27.8	28.3	28.8	29.3	29.8	30.4	30.9	31.4	31.9	32.4	33.4	34.4	35.4	36.4	37.4	38.4	39.4	40.4	41.4	42.4	43.4	44.4	45.4	46.4	5.91	4.80	29.60
25.5	26.1	26.6	27.1	27.6	28.2	28.7	29.2	29.7	30.3	30.8	31.3	31.8	32.3	32.8	33.4	33.9	34.4	34.9	35.4	35.9	37.0	38.0	38.5	39.0	5.98	2.40	15.60
19.5	20.1	20.7	21.2	21.8	22.4	22.9	23.5	24.1	24.6	25.2	25.7	26.3	26.8	27.3	27.9	28.4	29.0	29.5	30.0	30.6	31.6	32.7	33.2	33.7	5.98	3.80	24.60
30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.1	35.6	36.6	37.6	38.6	39.6	40.6	41.6	42.6	43.6	44.6	45.6	46.6	47.6	48.6	49.6	6.06	6.00	37.60
27.4	27.9	28.4	28.9	29.5	30.0	30.5	31.0	31.5	32.0	32.6	33.6	34.6	35.6	36.6	37.6	38.6	39.6	40.6	41.6	42.6	43.6	44.6	45.6	46.6	6.22	2.20	15.00
19.6	20.2	20.8	21.4	21.9	22.5	23.1	23.6	24.2	24.7	25.3	25.8	26.4	26.9	27.5	28.0	28.5	29.1	29.6	30.2	30.7	31.7	32.8	33.3	33.9	6.26	5.80	37.60
29.9	30.4	30.9	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0	6.42	2.60	18.00
25.7	26.2	26.7	27.3	27.8	28.3	28.8	29.3	29.9	30.4	30.9	31.9	32.9	33.9	34.9	35.9	36.9	37.9	38.9	39.9	40.9	41.9	42.9	43.9	44.9	6.47	4.40	29.60
19.7	20.3	20.9	21.5	22.1	22.6	23.2	23.8	24.3	24.9	25.4	26.0	26.5	27.1	27.6	28.1	28.7	29.2	29.7	30.3	30.8	31.9	32.9	33.5	34.0	6.47	2.20	15.60
27.5	28.0	28.6	29.1	29.6	30.1	30.6	31.1	31.7	32.2	32.7	33.7	34.7	35.7	36.7	37.7	38.7	39.7	40.7	41.7	42.7	43.7	44.7	45.7	46.7	6.51	5.60	37.60
25.8	26.3	26.9	27.4	27.9	28.4	29.0	29.5	30.0	30.5	31.0	32.1	33.1	34.1	35.1	36.1	37.1	38.1	39.1	40.1	41.1	42.1	43.1	44.1	45.1	6.70	5.40	37.60
19.9	20.4	21.0	21.6	22.2	22.7	23.3	23.9	24.4	25.0	25.5	26.1	26.6	27.2	27.7	28.3	28.8	29.3	29.9	30.4	30.9	32.0	33.1	33.6	34.1	6.71	4.20	29.60
27.6	28.2	28.7	29.2	29.7	30.2	30.8	31.3	31.8	32.3	32.8	33.9	34.9	35.9	36.9	37.9	38.9	39.9	40.9	41.9	42.9	43.9	44.9	45.9	46.9	6.81	3.40	24.60
25.9	26.5	27.0	27.5	28.0	28.6	29.1	29.6	30.1	30.7	31.2	32.2	33.2	34.2	35.2	36.2	37.2	38.2	39.2	40.2	41.2	42.2	43.2	44.2	45.2	6.89	5.20	37.60
20.0	20.6	21.2	21.7	22.3	22.9	23.4	24.0	24.6	25.1	25.7	26.2	26.8	27.3	27.9	28.4	28.9	29.5	30.0	30.5	31.1	32.1	33.2	33.7	34.3	6.94	4.80	29.60
26.1	26.6	27.1	27.6	28.2	28.7	29.2	29.7	30.3	30.8	31.3	32.4	33.4	34.4	35.4	36.4	37.4	38.4	39.4	40.4	41.4	42.4	43.4	44.4	45.4	7.02	3.	

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A						
Small Sheave	Large Sheave	Small Sheave	Large Sheave		AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX	AX						
6.95	30.35	6.20	29.60	4.63	27.5	28.1	28.6	29.2	30.2	32.4	32.9	34.0	34.5	35.6	36.6	37.2	37.7	38.8	39.3	40.8	42.9	45.0	47.1	49.1	49.6	50.2
4.75	20.35	4.00	19.60	4.67	38.8	39.3	39.8	40.4	41.4	43.4	43.9	44.9	45.4	46.5	47.5	48.0	48.5	49.5	50.0	51.5	53.5	55.6	57.6	59.6	60.1	60.6
3.75	15.75	3.00	15.00	4.69	43.6	44.1	44.6	45.1	46.1	48.1	48.6	49.6	50.2	51.2	52.2	52.7	53.2	54.2	54.7	56.2	58.2	60.2	62.2	64.2	64.7	65.2
3.35	13.95	2.60	13.20	4.72					47.9					52.0							60.0					
5.75	25.35	5.00	24.60	4.73	33.5	34.0	34.5	35.0	36.1	38.1	38.7	39.7	40.2	41.2	42.3	42.8	43.3	44.3	44.8	46.4	48.4	50.4	52.5	54.5	55.0	55.5
4.35	18.75	3.60	18.00	4.74	40.5	41.1	41.6	42.1	43.1	45.1	45.6	46.6	47.1	48.1	49.2	49.7	50.2	51.2	51.7	53.2	55.2	57.2	59.2	61.3	61.8	62.3
6.75	30.35	6.00	29.60	4.78	27.6	28.2	28.7	29.3	30.4	32.5	33.1	34.1	34.7	35.7	36.8	37.3	37.8	38.9	39.4	41.0	43.1	45.1	47.2	49.3	49.8	50.3
3.75	16.35	3.00	15.60	4.88	43.1	43.6	44.1	44.6	45.6	47.6	48.1	49.1	49.6	50.6	51.7	52.2	52.7	53.7	54.2	55.7	57.7	59.7	61.7	63.7	64.2	64.7
4.55	20.35	3.80	19.60	4.90	39.0	39.5	40.0	40.5	41.5	43.6	44.1	45.1	45.6	46.6	47.6	48.1	48.6	49.6	50.1	51.7	53.7	55.7	57.7	59.7	60.3	60.8
5.55	25.35	4.80	24.60	4.92	33.6	34.1	34.6	35.2	36.2	38.3	38.8	39.8	40.3	41.4	42.4	42.9	43.4	44.5	45.0	46.5	48.5	50.6	52.6	54.7	55.2	55.7
6.55	30.35	5.80	29.60	4.93	27.8	28.3	28.9	29.4	30.5	32.7	33.2	34.3	34.8	35.9	36.9	37.4	38.0	39.0	39.5	41.1	43.2	45.3	47.3	49.4	49.9	50.4
2.95	12.75	2.20	12.00	5.00					49.3					53.3							61.3					
3.55	15.75	2.80	15.00	5.00					48.3					50.3							58.4					
4.15	18.75	3.40	18.00	5.00	40.7	41.2	41.7	42.2	43.2	45.3	45.8	46.8	47.3	48.3	49.3	49.8	50.3	51.3	51.8	53.3	55.4	57.4	59.4	61.4	61.9	62.4
3.15	13.95	2.40	13.20	5.08					48.1					52.1							60.2					
6.35	30.35	5.60	29.60	5.10	27.9	28.4	29.0	29.5	30.6	32.8	33.3	34.4	34.9	36.0	37.0	37.6	38.1	39.2	39.7	41.2	43.3	45.4	47.5	49.5	50.1	50.6
5.35	25.35	4.60	24.60	5.12	33.7	34.2	34.8	35.3	36.3	38.4	38.9	40.0	40.5	41.5	42.5	43.0	43.6	44.6	45.1	46.6	48.7	50.7	52.8	54.8	55.3	55.8
4.35	20.35	3.60	19.60	5.16	39.1	39.6	40.1	40.6	41.7	43.7	44.2	45.2	45.7	46.7	47.8	48.3	48.8	49.8	50.3	51.8	53.8	55.9	57.9	59.9	60.4	60.9
3.55	16.35	2.80	15.60	5.20					45.8					49.8							57.8					
7.75	38.35	7.00	37.60	5.22						24.1	24.7	26.0	27.2	27.8	28.4			29.6	30.1	31.9	34.1	36.4	38.5	40.7	41.2	41.8
6.15	30.35	5.40	29.60	5.28	28.0	28.6	29.1	29.7	30.7	32.9	33.4	34.5	35.1	36.1	37.2	37.7	38.2	39.3	39.8	41.4	43.5	45.5	47.6	49.7	50.2	50.7
3.95	18.75	3.20	18.00	5.29	40.8	41.3	41.8	42.4	43.4	45.4	45.9	46.9	47.4	48.4	49.4	50.0	50.5	51.5	52.0	53.5	55.5	57.5	59.5	61.6	62.1	62.6
5.15	25.35	4.40	24.60	5.34	33.9	34.4	34.9	35.4	36.5	38.5	39.1	40.1	40.6	41.6	42.7	43.2	43.7	44.7	45.2	46.8	48.8	50.9	52.9	54.9	55.5	56.0
3.35	15.75	2.60	15.00	5.35					46.4					50.4							58.5					
4.15	20.35	3.40	19.60	5.44	39.2	39.8	40.3	40.8	41.8	43.8	44.3	45.4	45.9	46.9	47.9	48.4	48.9	49.9	50.4	52.0	54.0	56.0	58.0	60.0	60.5	61.0
5.95	30.35	5.20	29.60	5.48	28.1	28.7	29.2	29.8	30.9	33.0	33.6	34.6	35.2	36.2	37.3	37.8	38.4	39.4	39.9	41.5	43.6	45.7	47.8	49.8	50.3	50.8
2.95	13.95	2.20	13.20	5.49					48.2					52.3							60.3					
7.35	38.35	6.60	37.60	5.53						24.3	24.9	26.2	27.4	28.0	28.6			29.8	30.4	32.1	34.4	36.6	38.8	41.0	41.5	42.0
3.35	16.35	2.60	15.60	5.56					45.9					49.9							58.0					
4.95	25.35	4.20	24.60	5.58	34.0	34.5	35.0	35.6	36.6	38.7	39.2	40.2	40.7	41.8	42.8	43.3	43.8	44.9	45.4	46.9	49.0	51.0	53.0	55.1	55.6	56.1
3.75	18.75	3.00	18.00	5.62	41.0	41.5	42.0	42.5	43.5	45.5	46.0	47.1	47.6	48.6	49.6	50.1	50.6	51.6	52.1	53.6	55.7	57.7	59.7	61.7	62.2	62.7
5.75	30.35	5.00	29.60	5.69	28.3	28.8	29.4	29.9	31.0	33.2	33.7	34.8	35.3	36.4	37.4	38.0	38.5	39.5	40.1	41.6	43.7	45.8	47.9	50.0	50.5	51.0
7.15	38.35	6.40	37.60	5.69						24.4	25.1	26.3	27.5	28.1	28.7			29.9	30.5	32.2	34.5	36.7	38.9	41.1	41.6	42.2
3.15	15.75	2.40	15.00	5.75					46.6					50.6							58.6					
3.95	20.35	3.20	19.60	5.75	39.4	39.9	40.4	40.9	41.9	44.0	44.5	45.5	46.0	47.0	48.0	48.5	49.1	50.1	50.6	52.1	54.1	56.1	58.2	60.2	60.7	61.2
4.75	25.35	4.00	24.60	5.85	34.1	34.6	35.2	35.7	36.7	38.8	39.3	40.4	40.9	41.9	42.9	43.5	44.0	45.0	45.5	47.1	49.1	51.1	53.2	55.2	55.7	56.2
6.95	38.35	6.20	37.60	5.87						24.5	25.2	26.4	27.7	28.3	28.9			30.0	30.6	32.4	34.6	36.9	39.0	41.2	41.8	42.3
5.55	30.35	4.80	29.60	5.91	28.4	28.9	29.5	30.0	31.1	33.3	33.8	34.9	35.4	36.5	37.6	38.1	38.6	39.7	40.2	41.8	43.9	45.9	48.0	50.1	50.6	51.1
3.15	16.35	2.40	15.60	5.98					46.0					50.1							58.1					
3.55	18.75	2.80	18.00	5.98					43.7					47.7							55.8					
6.75	38.35	6.00	37.60	6.06						24.6	25.3	26.5	27.8	28.4	29.0			30.2	30.8	32.5	34.7	37.0	39.2	41.3	41.9	42.4
3.75	20.35	3.00	19.60	6.11	39.5	40.0	40.5	41.1	42.1	44.1	44.6	45.6	46.2	47.2	48.2	48.7	49.2	50.2	50.7	52.2	54.3	56.3	58.3	60.3	60.8	61.3
4.55	25.35	3.80	24.60	6.14	34.3	34.8	35.3	35.8	36.9	38.9	39.5	40.5	41.0	42.1	43.1	43.6	44.1	45.1	45.7	47.2	49.2	51.3	53.3	55.4	55.9	56.4
5.35	30.35	4.60	29.60	6.15	28.5	29.1	29.6	30.2	31.3	33.4	34.0	35.0	35.6	36.6	37.7	38.2	38.8	39.8	40.3	41.9	44.0	46.1	48.2	50.2	50.7	51.3
2.95	15.75	2.20	15.00	6.22					46.7					50.7							58.8					
6.55	38.35	5.80	37.60	6.26						24.8	25.4	26.7	27.9	28.5	29.1			30.3	30.9	32.6	34.9	37.1	39.3	41.5	42.0	42.6
3.35	18.75	2.60	18.00	6.40					43.8					47.8							55.9					
5.15	30.35	4.40	29.60	6.42	28.6	29.2	29.7	30.3	31.4	33.6	34.1	35.2	35.7	36.8	37.8	38.4	38.9	39.9	40.5	42.0	44.1	46.2	48.3	50.4	50.9	51.4
4.35	25.35	3.60	24.60	6.45	34.4	34.9	35.4	36.0	37.0	39.1	39.6	40.6	41.2	42.2	43.2	43.7	44.3	45.3	45.8	47.3	49.4	51.4	53.5	55.5	56.0	56.5
2.95	16.35	2.20	15.60	6.47					46.2					50.2							58.3					
6.35	38.35	5.60	37.60	6.47						23.5	24.9	25.5	26.8	28.0	28.6	29.2		30.4	31.0	32.7	35.0	37.2	39.4	41.6	42.1	42.7
3.55	20.35	2.80	19.60	6.51					42.2					46.3							54.4					
6.15	38.35	5.40	37.60	6.70						23.6	25.0	25.6	26.9	28.1	28.7	29.3	30.5	31.1	32.8	35.1	37.4	39.6	41.7	42.3	42.8	
4.95	30.35	4.20	29.60	6.71	28.7	29.3	29.9</																			

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance								Speed Ratio	Sheave Datum Diameters	
A	A	A AX	A	A	A	A	Small Sheave		Large Sheave	
162	167	173	180	187	197	200				
52.2	54.8	57.8	61.4	65.0	70.1	71.6	4.63	6.20	29.60	
62.6	65.1	68.2	71.7	75.2	80.2	81.7	4.67	4.00	19.60	
67.2	69.8	72.8	76.3	79.8	84.8	86.3	4.69	3.00	15.00	
		74.6					4.72	* 2.60	13.20	
57.6	60.1	63.1	66.7	70.2	75.3	76.8	4.73	5.00	24.60	
64.3	66.8	69.8	73.3	76.8	81.9	83.4	4.74	3.60	18.00	
52.4	54.9	58.0	61.6	65.1	70.2	71.7	4.78	6.00	29.60	
66.7	69.3	72.3	75.8	79.3	84.3	85.8	4.88	3.00	15.60	
62.8	65.3	68.3	71.8	75.4	80.4	81.9	4.90	3.80	19.60	
57.7	60.2	63.3	66.8	70.4	75.4	76.9	4.92	4.80	24.60	
52.5	55.1	58.1	61.7	65.3	70.3	71.9	4.93	5.80	29.60	
		75.8					5.00	* 2.20	12.00	
		72.9					5.00	* 2.80	15.00	
64.4	66.9	70.0	73.5	77.0	82.0	83.5	5.00	3.40	18.00	
		74.7					5.08	* 2.40	13.20	
52.6	55.2	58.3	61.8	65.4	70.5	72.0	5.10	5.60	29.60	
57.8	60.4	63.4	67.0	70.5	75.6	77.1	5.12	4.60	24.60	
62.9	65.4	68.5	72.0	75.5	80.5	82.0	5.16	3.60	19.60	
		72.4					5.20	* 2.80	15.60	
43.9	46.6	49.7	53.4	57.1	62.2	63.8	5.22	7.00	37.60	
52.8	55.3	58.4	62.0	65.5	70.6	72.1	5.28	5.40	29.60	
64.6	67.1	70.1	73.6	77.1	82.2	83.7	5.29	3.20	18.00	
58.0	60.5	63.6	67.1	70.7	75.7	77.2	5.34	4.40	24.60	
		73.1					5.35	* 2.60	15.00	
63.1	65.6	68.6	72.1	75.7	80.7	82.2	5.44	3.40	19.60	
52.9	55.5	58.5	62.1	65.7	70.8	72.3	5.48	5.20	29.60	
		74.9					5.49	* 2.20	13.20	
44.2	46.8	50.0	53.7	57.3	62.5	64.1	5.53	6.60	37.60	
		72.6					5.56	* 2.60	15.60	
58.1	60.7	63.7	67.3	70.8	75.8	77.4	5.58	4.20	24.60	
64.7	67.2	70.3	73.8	77.3	82.3	83.8	5.62	3.00	18.00	
53.0	55.6	58.7	62.3	65.8	70.9	72.4	5.69	5.00	29.60	
44.3	47.0	50.1	53.8	57.5	62.6	64.2	5.69	6.40	37.60	
		73.2					5.75	* 2.40	15.00	
63.2	65.7	68.8	72.3	75.8	80.8	82.3	5.75	3.20	19.60	
58.3	60.8	63.9	67.4	70.9	76.0	77.5	5.85	4.00	24.60	
44.4	47.1	50.3	53.9	57.6	62.8	64.3	5.87	6.20	37.60	
53.2	55.7	58.8	62.4	66.0	71.0	72.6	5.91	4.80	29.60	
		72.7					5.98	* 2.40	15.60	
		70.4					5.98	* 2.80	18.00	
44.6	47.2	50.4	54.1	57.7	62.9	64.5	6.06	6.00	37.60	
63.4	65.9	68.9	72.4	75.9	81.0	82.5	6.11	3.00	19.60	
58.4	61.0	64.0	67.5	71.1	76.1	77.6	6.14	3.80	24.60	
53.3	55.9	59.0	62.5	66.1	71.2	72.7	6.15	4.60	29.60	
		73.4					6.22	* 2.20	15.00	
44.7	47.4	50.5	54.2	57.9	63.0	64.6	6.26	5.80	37.60	
		70.6					6.40	* 2.60	18.00	
53.5	56.0	59.1	62.7	66.2	71.3	72.9	6.42	4.40	29.60	
58.6	61.1	64.1	67.7	71.2	76.3	77.8	6.45	3.60	24.60	
		72.9					6.47	* 2.20	15.60	
44.8	47.5	50.7	54.3	58.0	63.2	64.7	6.47	5.60	37.60	
		69.0					6.51	* 2.80	19.60	
45.0	47.6	50.8	54.5	58.1	63.3	64.9	6.70	5.40	37.60	
53.6	56.2	59.2	62.8	66.4	71.5	73.0	6.71	4.20	29.60	
58.7	61.2	64.3	67.8	71.4	76.4	77.9	6.81	3.40	24.60	
		70.7					6.89	* 2.40	18.00	
45.1	47.8	50.9	54.6	58.3	63.5	65.0	6.94	5.20	37.60	
		69.2					6.96	* 2.60	19.60	
53.7	56.3	59.4	63.0	66.5	71.6	73.1	7.02	4.00	29.60	
58.8	61.4	64.4	68.0	71.5	76.6	78.1	7.20	3.20	24.60	
45.2	47.9	51.1	54.7	58.4	63.6	65.1	7.21	5.00	37.60	
53.9	56.4	59.5	63.1	66.7	71.8	73.3	7.37	3.80	29.60	
		70.8					7.45	* 2.20	18.00	
		69.3					7.49	* 2.40	19.60	
45.4	48.0	51.2	54.9	58.5	63.7	65.3	7.50	4.80	37.60	
59.0	61.5	64.6	68.1	71.7	76.7	78.2	7.65	3.00	24.60	
54.0	56.6	59.7	63.2	66.8	71.9	73.4	7.75	3.60	29.60	
45.5	48.2	51.3	55.0	58.7	63.9	65.4	7.80	4.60	37.60	
		69.5					8.10	* 2.20	19.60	
45.6	48.3	51.5	55.1	58.8	64.0	65.5	8.14	4.40	37.60	
		64.7					8.15	* 2.80	24.60	
54.1	56.7	59.8	63.4	66.9	72.0	73.6	8.18	3.40	29.60	

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																						
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP	A AX AP						
4.95	38.35	4.20	37.60	8.51	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	
3.95	30.35	3.20	29.60	8.65																							
3.35	25.35	* 2.60	24.60	8.72																15.8	16.4	17.1	17.8	18.4	19.0	19.6	
4.75	38.35	4.00	37.60	8.91																							
3.75	30.35	3.00	29.60	9.18																							
4.55	38.35	3.80	37.60	9.35																							
3.15	25.35	* 2.40	24.60	9.38																15.2	15.9	16.6	17.2	17.9	18.5	19.1	19.7
3.55	30.35	* 2.80	29.60	9.79																							
4.35	38.35	3.60	37.60	9.83																							
2.95	25.35	* 2.20	24.60	10.14																							
4.15	38.35	3.40	37.60	10.37																15.3	16.0	16.7	17.3	18.0	18.6	19.2	19.8
3.35	30.35	* 2.60	29.60	10.47																							
3.95	38.35	3.20	37.60	10.97																							
3.15	30.35	* 2.40	29.60	11.26																							
3.75	38.35	3.00	37.60	11.65																							
2.95	30.35	* 2.20	29.60	12.18																							
3.55	38.35	* 2.80	37.60	12.41																							
3.35	38.35	* 2.60	37.60	13.28																							
3.15	38.35	* 2.40	37.60	14.28																							
2.95	38.35	* 2.20	37.60	15.45																							

Key to Horsepower Correction Factor 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																								Speed Ratio	Sheave Datum Diameters			
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Small Sheave		Large Sheave			
88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	110	112	113	114	8.51	4.20	37.60	
20.2	20.8	21.4	22.0	22.5	23.1	23.7	24.2	24.8	25.4	18.4	19.1	19.8	20.5	21.1	21.7	22.4	23.0	23.6	24.2	24.8	25.4	26.5	27.7	28.2	28.8	8.65	3.20	29.60
										25.9	27.0	27.0				28.6	29.7				32.4	33.5			8.72	2.60	24.60	
										18.5	19.2	19.9	20.6	21.2	21.9	22.5	23.1	23.7	24.3	24.9	25.5	26.7	27.8	28.4	28.9	8.91	4.00	37.60
																										9.18	3.00	29.60
20.3	20.9	21.5	22.1	22.7	23.2	23.8	24.4	24.9	25.5	26.0	27.1				28.8	29.9					32.5	33.6			9.35	3.80	37.60	
										18.6	19.3	20.7				22.6	23.8					26.8	27.9			9.38	2.40	24.60
																										9.79	2.80	29.60
20.4	21.0	21.6	22.2	22.8	23.4	23.9	24.5	25.1	25.6	26.2	27.3				28.9	30.0					32.7	33.7			9.83	3.60	37.60	
										18.0	18.7	19.5	20.8			22.7	23.9					26.9	28.0			10.14	2.20	24.60
																										10.37	3.40	37.60
																										10.47	2.60	29.60
										18.1	18.9	19.6	20.9			22.8	24.1					27.0	28.2			10.97	3.20	37.60
																										11.26	2.40	29.60
										18.2	19.0	19.7	21.0			22.9	24.2					27.1	28.3			11.65	3.00	37.60
																										12.18	2.20	29.60
																										12.41	2.80	37.60
																										13.28	2.60	37.60
																										14.28	2.40	37.60
																										15.45	2.20	37.60

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A					
4.95	38.35	4.20	37.60	8.51	115	116	117	118	120	124	125	127	128	130	132	133	134	136	137	140	144	148	152	156	157	158
3.95	30.35	3.20	29.60	8.65	29.4	29.9	30.5	31.0	32.1	34.3	34.9	35.9	36.5	37.5	38.6	39.1	39.7	40.7	41.3	42.8	44.9	47.0	49.1	51.2	51.7	52.2
3.35	25.35	2.60	24.60	8.72					37.7				41.8								50.1					
4.75	38.35	4.00	37.60	8.91						23.7	24.4	25.8	26.4	27.7	28.9	29.6	30.2	31.4	31.9	33.7	36.0	38.2	40.4	42.6	43.2	43.7
3.75	30.35	3.00	29.60	9.18	29.5	30.1	30.6	31.2	32.3	34.4	35.0	36.1	36.6	37.7	38.7	39.3	39.8	40.9	41.4	43.0	45.1	47.2	49.2	51.3	51.8	52.3
4.55	38.35	3.80	37.60	9.35						23.8	24.5	25.9	26.5	27.8	29.1	29.7	30.3	31.5	32.1	33.8	36.1	38.3	40.6	42.7	43.3	43.8
3.15	25.35	2.40	24.60	9.38						37.8			42.0								50.2					
3.55	30.35	2.80	29.60	9.79						32.4			36.7								45.2					
4.35	38.35	3.60	37.60	9.83						24.0	24.7	26.0	26.7	27.9	29.2	29.8	30.4	31.6	32.2	33.9	36.2	38.5	40.7	42.9	43.4	44.0
2.95	25.35	2.20	24.60	10.14						37.9			42.1								50.4					
4.15	38.35	3.40	37.60	10.37						24.1	24.8	26.1	26.8	28.1	29.3	29.9	30.5	31.7	32.3	34.1	36.3	38.6	40.8	43.0	43.5	44.1
3.35	30.35	2.60	29.60	10.47						32.5			36.9								45.3					
3.95	38.35	3.20	37.60	10.97						24.2	24.9	26.2	26.9	28.2	29.4	30.0	30.6	31.8	32.4	34.2	36.5	38.7	40.9	43.1	43.7	44.2
3.15	30.35	2.40	29.60	11.26						32.6			37.0								45.5					
3.75	38.35	3.00	37.60	11.65						24.3	25.0	26.3	27.0	28.3	29.5	30.1	30.8	32.0	32.5	34.3	36.6	38.8	41.1	43.3	43.8	44.3
2.95	30.35	2.20	29.60	12.18						32.8			37.1								45.6					
3.55	38.35	2.80	37.60	12.41									27.1								36.7					
3.35	38.35	2.60	37.60	13.28									27.2								36.8					
3.15	38.35	2.40	37.60	14.28									27.3								37.0					
2.95	38.35	2.20	37.60	15.45									27.5								37.1					

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B21

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance								Speed Ratio	Sheave Datum Diameters	
A	A	A AX	A	A	A	A	Small Sheave		Large Sheave	
162	167	173	180	187	197	200				
45.7	48.4	51.6	55.3	58.9	64.1	65.7	8.51	4.20	37.60	
54.3	56.8	59.9	63.5	67.1	72.2	73.7	8.65	3.20	29.60	
		64.9					8.72	* 2.60	24.60	
45.9	48.5	51.7	55.4	59.1	64.3	65.8	8.91	4.00	37.60	
54.4	57.0	60.1	63.7	67.2	72.3	73.8	9.18	3.00	29.60	
46.0	48.7	51.9	55.5	59.2	64.4	66.0	9.35	3.80	37.60	
		65.0					9.38	* 2.40	24.60	
		60.2					9.79	* 2.80	29.60	
46.1	48.8	52.0	55.7	59.3	64.5	66.1	9.83	3.60	37.60	
		65.1					10.14	* 2.20	24.60	
46.2	48.9	52.1	55.8	59.5	64.7	66.2	10.37	3.40	37.60	
		60.3					10.47	* 2.60	29.60	
46.4	49.1	52.2	55.9	59.6	64.8	66.4	10.97	3.20	37.60	
		60.5					11.26	* 2.40	29.60	
46.5	49.2	52.4	56.1	59.7	64.9	66.5	11.65	3.00	37.60	
		60.6					12.18	* 2.20	29.60	
		52.5					12.41	* 2.80	37.60	
		52.6					13.28	* 2.60	37.60	
		52.8					14.28	* 2.40	37.60	
		52.9					15.45	* 2.20	37.60	

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX					
24	25	26	27		28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45				
3.75	3.75	3.40	3.40	1.00	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1
3.95	3.95	3.60	3.60	1.00	7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7
4.15	4.15	3.80	3.80	1.00	6.9	7.4	7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4
4.35	4.35	4.00	4.00	1.00	6.6	7.1	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1
4.55	4.55	4.20	4.20	1.00	6.3	6.8	7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8
4.75	4.75	4.40	4.40	1.00	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5
4.95	4.95	4.60	4.60	1.00	6.2	6.7	7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7
5.15	5.15	4.80	4.80	1.00	6.4	6.9	7.4	7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9
5.35	5.35	5.00	5.00	1.00	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0
5.55	5.55	5.20	5.20	1.00	6.2	6.7	7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7
5.75	5.75	5.40	5.40	1.00	6.7	7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2
5.95	5.95	5.60	5.60	1.00	6.9	7.4	7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4
6.15	6.15	5.80	5.80	1.00	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5
6.35	6.35	6.00	6.00	1.00	7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7
6.55	6.55	6.20	6.20	1.00	7.4	7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9
6.75	6.75	6.40	6.40	1.00	7.1	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6
6.95	6.95	6.60	6.60	1.00	7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8
7.15	7.15	6.80	6.80	1.00	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0
7.35	7.35	7.00	7.00	1.00	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2
7.75	7.75	7.40	7.40	1.00	7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4
8.35	8.35	8.00	8.00	1.00	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8
8.95	8.95	8.60	8.60	1.00	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0
9.75	9.75	9.40	9.40	1.00	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2
5.75	5.95	5.40	5.60	1.03	7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8
5.95	6.15	5.60	5.80	1.03	7.4	7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9
6.15	6.35	5.80	6.00	1.03	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1
6.35	6.55	6.00	6.20	1.03	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3
6.55	6.75	6.20	6.40	1.03	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5
6.75	6.95	6.40	6.60	1.03	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7
6.95	7.15	6.60	6.80	1.03	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9
7.15	7.35	6.80	7.00	1.03	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1
4.55	4.75	4.20	4.40	1.04	6.1	6.6	7.1	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6
4.75	4.95	4.40	4.60	1.04	6.3	6.8	7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8
4.95	5.15	4.60	4.80	1.04	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0
5.15	5.35	4.80	5.00	1.04	6.7	7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2
5.35	5.55	5.00	5.20	1.04	6.9	7.4	7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4
5.55	5.75	5.20	5.40	1.04	7.1	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6
3.75	3.95	3.40	3.60	1.05	7.4	7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9
3.95	4.15	3.60	3.80	1.05	7.1	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6
4.15	4.35	3.80	4.00	1.05	6.8	7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3
4.35	4.55	4.00	4.20	1.05	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0
7.35	7.75	7.00	7.40	1.05	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2
6.35	6.75	6.00	6.40	1.06	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2
6.55	6.95	6.20	6.60</																							

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																								Speed Ratio	Sheave Datum Diameters		
B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	Small Sheave		Large Sheave		
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	1.00	3.40	3.40
18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	1.00	3.60	3.60
18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	1.00	3.80	3.80
17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	1.00	4.00	4.00
17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	1.00	4.20	4.20
17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	1.00	4.40	4.40
16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	1.00	4.60	4.60
16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	1.00	4.80	4.80
16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	1.00	5.00	5.00
15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	1.00	5.20	5.20
15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	1.00	5.40	5.40
15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	1.00	5.60	5.60
14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	1.00	5.80	5.80
14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	1.00	6.00	6.00
14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	1.00	6.20	6.20
13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	1.00	6.40	6.40
13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	1.00	6.60	6.60
13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	1.00	6.80	6.80
12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	1.00	7.00	7.00
12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	1.00	7.40	7.40
11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	1.00	8.00	8.00
10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	1.00	8.60	8.60
																									1.00	9.40	9.40
15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	1.03	5.40	5.60
14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	1.03	5.60	5.80
14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	1.03	5.80	6.00
14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	1.03	6.00	6.20
14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	1.03	6.20	6.40
13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	1.03	6.40	6.60
13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	1.03	6.60	6.80
13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	1.03	6.80	7.00
12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	1.04	4.20	4.40
16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	1.04	4.40	4.60
16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	1.04	4.60	4.80
16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	1.04	4.80	5.00
15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	1.04	5.00	5.20
15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	1.04	5.20	5.40
18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	1.05	3.40	3.60
18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	1.05	3.60	3.80
17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	1.05	3.80	4.00
17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	1.05	4.00	4.20
12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	1.05	7.00	7.40
14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	1.06	6.00	6.40
13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	1.06	6.20	6.60
13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	1.06	6.40	6.80
13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	1.06	6.60	7.00
15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27				

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																							
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX
					BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP
3.75	3.75	3.40	3.40	1.00	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6		
3.95	3.95	3.60	3.60	1.00	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2		
4.15	4.15	3.80	3.80	1.00	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9		
4.35	4.35	4.00	4.00	1.00	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6		
4.55	4.55	4.20	4.20	1.00	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3		
4.75	4.75	4.40	4.40	1.00	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0		
4.95	4.95	4.60	4.60	1.00	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7		
5.15	5.15	4.80	4.80	1.00	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4		
5.35	5.35	5.00	5.00	1.00	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0		
5.55	5.55	5.20	5.20	1.00	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7		
5.75	5.75	5.40	5.40	1.00	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4		
5.95	5.95	5.60	5.60	1.00	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1		
6.15	6.15	5.80	5.80	1.00	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8		
6.35	6.35	6.00	6.00	1.00	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5		
6.55	6.55	6.20	6.20	1.00	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2		
6.75	6.75	6.40	6.40	1.00	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8		
6.95	6.95	6.60	6.60	1.00	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5		
7.15	7.15	6.80	6.80	1.00	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2		
7.35	7.35	7.00	7.00	1.00	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9		
7.55	7.55	7.40	7.40	1.00	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3		
8.35	8.35	8.00	8.00	1.00	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3		
8.95	8.95	8.60	8.60	1.00	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4		
9.75	9.75	9.40	9.40	1.00	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1		
5.75	5.95	5.40	5.60	1.03	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3		
5.95	6.15	5.60	5.80	1.03	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9		
6.15	6.35	5.80	6.00	1.03	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6		
6.35	6.55	6.00	6.20	1.03	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3		
6.55	6.75	6.20	6.40	1.03	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0		
6.75	6.95	6.40	6.60	1.03	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7		
6.95	7.15	6.60	6.80	1.03	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4		
7.15	7.35	6.80	7.00	1.03	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1		
4.55	4.75	4.20	4.40	1.04	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1		
4.75	4.95	4.40	4.60	1.04	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8		
4.95	5.15	4.60	4.80	1.04	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5		
5.15	5.35	4.80	5.00	1.04	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2		
5.35	5.55	5.00	5.20	1.04	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9		
5.55	5.75	5.20	5.40	1.04	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6		
3.75	3.95	3.40	3.60	1.05	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4		
3.95	4.15	3.60	3.80	1.05	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1		
4.15	4.35	3.80	4.00	1.05	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8		
4.35	4.55	4.00	4.20	1.05	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5		
4.55	4.75	4.20	4.40	1.05	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2		
4.75	4.95	4.40	4.60	1.05	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9		
4.95	5.15	4.60	4.80	1.05	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6		
5.15	5.35	4.80	5.00	1.05	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3		
5.35	5.55	5.00	5.20	1.05	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0		
5.55	5.75	5.20	5.40	1.05	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7												

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters						
B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX		Small Sheave	Large Sheave					
93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	1.00	* 3.40	* 3.40
42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6			47.1	48.1	48.6	49.6	50.6	51.6	52.1	52.6	53.1	53.6	54.1	54.6	55.1	55.6	56.1	1.00	* 3.60	* 3.60
41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9			46.4	47.4	47.9	48.9	49.9	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	1.00	* 3.80	* 3.80
41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6			46.1	47.1	47.6	48.6	49.6	50.6	51.1	51.6	52.1	52.6	53.1	53.6	54.1	54.6	55.1	1.00	* 4.00	* 4.00
40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3			45.8	46.8	47.3	48.3	49.3	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	1.00	* 4.20	* 4.20
40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0			45.5	46.5	47.0	48.0	49.0	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	1.00	* 4.40	* 4.40
40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	50.7	51.2	51.7	52.2	1.00	4.60	4.60
39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.4	51.9	1.00	4.80	4.80
39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5	51.0	51.5	1.00	5.00	5.00
39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	50.7	51.2	1.00	5.20	5.20
38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9	1.00	5.40	5.40
38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6	1.00	5.60	5.60
38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	1.00	5.80	5.80
38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	1.00	6.00	6.00
37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	1.00	6.20	6.20
37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	1.00	6.40	6.40
37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	1.00	6.60	6.60
36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	1.00	6.80	6.80
36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	1.00	7.00	7.00
35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	1.00	7.40	7.40
34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	1.00	8.00	8.00
33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	1.00	8.60	8.60
32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	1.00	9.40	9.40
38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	1.03	5.40	5.60
38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	1.03	5.80	5.80
38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	1.03	5.80	6.00
37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	1.03	6.00	6.20
37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	1.03	6.20	6.40
37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	1.03	6.40	6.60
36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	1.03	6.60	6.80
36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	1.03	6.80	7.00
40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1			45.6	46.6	47.1	48.1	49.1	50.1	50.6	51.1	51.6	52.1	52.6	53.1	53.6	54.1	54.6	1.04	* 4.20	* 4.40
40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8			45.3	46.3	46.8	47.8	48.8	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	1.04	* 4.40	* 4.60
40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5	51.0	51.5	52.0	1.04	4.60	4.80
39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	50.7	51.2	51.7	1.04	4.80	5.00
39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.4	1.04	5.00	5.20
39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6	51.1	1.04	5.20	5.40
41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4			46.9	47.9	48.4	49.4	50.4	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	1.05	* 3.40	* 3.60
41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1			46.6	47.6	48.1	49.1	50.1	51.1	51.6	52.1	52.6	53.1	53.6	54.1	54.6	55.1	1.05	* 3.60	* 3.80	
41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8			46.3	47.3	47.8	48.8	49.8	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.3	1.05	* 3.80	* 4.00
41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5			46.0	47.0	47.5	48.5	49.5	50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	1.05	* 4.00	* 4.20	
36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	1.05	7.00	7.40
37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	1.06	6.00	6.40
37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	1.06	6.20	6.60
37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	1.06	6.40	6.80
36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	1.06	6.60	7.00
39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	50.7	51.2	1.07	5.00	

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B	B	BX BP	B	B	B	BX BP	B	B	B	B	B	B	B	B	B	B	B				
					118	119	120	122	123	124	125	126	127	128	130	131	132	133	134	135	BX BP	137	138	139	140	141
3.75	3.75	3.40	3.40	1.00			56.6		57.6											62.1					65.6	
3.95	3.95	3.60	3.60	1.00			55.2		57.2											61.7					65.2	
4.15	4.15	3.80	3.80	1.00			54.9		56.9											61.4					64.9	
4.35	4.35	4.00	4.00	1.00			54.6		56.6											61.1					64.6	
4.55	4.55	4.20	4.20	1.00			54.3		56.3											60.8					64.3	
4.75	4.75	4.40	4.40	1.00			54.0		56.0											60.5					64.0	
4.95	4.95	4.60	4.60	1.00	52.7	53.2	53.7	54.7	55.2	55.7	56.2	56.7	57.2	57.7	58.2	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2	63.7	64.2
5.15	5.15	4.80	4.80	1.00	52.4	52.9	53.4	54.4	54.9	55.4	55.9	56.4	56.9	57.4	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4	63.9
5.35	5.35	5.00	5.00	1.00	52.0	52.5	53.0	54.0	54.5	55.0	55.5	56.0	56.5	57.0	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5
5.55	5.55	5.20	5.20	1.00	51.7	52.2	52.7	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2
5.75	5.75	5.40	5.40	1.00	51.4	51.9	52.4	53.4	53.9	54.4	54.9	55.4	55.9	56.4	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9
5.95	5.95	5.60	5.60	1.00	51.1	51.6	52.1	53.1	53.6	54.1	54.6	55.1	55.6	56.1	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	62.6
6.15	6.15	5.80	5.80	1.00	50.8	51.3	51.8	52.8	53.3	53.8	54.3	54.8	55.3	55.8	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3
6.35	6.35	6.00	6.00	1.00	50.5	51.0	51.5	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0
6.55	6.55	6.20	6.20	1.00	50.2	50.7	51.2	52.2	52.7	53.2	53.7	54.2	54.7	55.2	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7
6.75	6.75	6.40	6.40	1.00	49.8	50.3	50.8	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3
6.95	6.95	6.60	6.60	1.00	49.5	50.0	50.5	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0
7.15	7.15	6.80	6.80	1.00	49.2	49.7	50.2	51.2	51.7	52.2	52.7	53.2	53.7	54.2	55.2	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7
7.35	7.35	7.00	7.00	1.00	48.9	49.4	49.9	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4
7.75	7.75	7.40	7.40	1.00	48.3	48.8	49.3	50.3	50.8	51.3	51.8	52.3	52.8	53.3	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8
8.35	8.35	8.00	8.00	1.00	47.3	47.8	48.3	49.3	49.8	50.3	50.8	51.3	51.8	52.3	53.3	53.8	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8
8.95	8.95	8.60	8.60	1.00	46.4	46.9	47.4	48.4	48.9	49.4	49.9	50.4	50.9	51.4	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9
9.75	9.75	9.40	9.40	1.00	45.1	45.6	46.1	47.1	47.6	48.1	48.6	49.1	49.6	50.1	51.1	51.6	52.1	52.6	53.1	53.6	54.1	54.6	55.1	55.6	56.1	56.6
5.75	5.95	5.40	5.60	1.03	51.3	51.8	52.3	53.3	53.8	54.3	54.8	55.3	55.8	56.3	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8
5.95	6.15	5.60	5.80	1.03	50.9	51.4	51.9	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4
6.15	6.35	5.80	6.00	1.03	50.6	51.1	51.6	52.6	53.1	53.6	54.1	54.6	55.1	55.6	56.6	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1
6.35	6.55	6.00	6.20	1.03	50.3	50.8	51.3	52.3	52.8	53.3	53.8	54.3	54.8	55.3	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8
6.55	6.75	6.20	6.40	1.03	50.0	50.5	51.0	52.0	52.5	53.0	53.5	54.0	54.5	55.0	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5
6.75	6.95	6.40	6.60	1.03	49.7	50.2	50.7	51.7	52.2	52.7	53.2	53.7	54.2	54.7	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2
6.95	7.15	6.60	6.80	1.03	49.4	49.9	50.4	51.4	51.9	52.4	52.9	53.4	53.9	54.4	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9
7.15	7.35	6.80	7.00	1.03	49.1	49.6	50.1	51.1	51.6	52.1	52.6	53.1	53.6	54.1	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6
4.55	4.75	4.20	4.40	1.04			54.1		56.1											60.6					64.1	
4.75	4.95	4.40	4.60	1.04			53.8		55.8											60.3					63.8	
4.95	5.15	4.60	4.80	1.04	52.5	53.0	53.5	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	64.0
5.15	5.35	4.80	5.00	1.04	52.2	52.7	53.2	54.2	54.7	55.2	55.7	56.2	56.7	57.2	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2	63.7
5.35	5.55	5.00	5.20	1.04	51.9	52.4	52.9	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4
5.55	5.75	5.20	5.40	1.04	51.6	52.1	52.6	53.6	54.1	54.6	55.1	55.6	56.1	56.6	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	62.6	63.1
3.75	3.95	3.40	3.60	1.05			55.4		57.4											61.9					65.4	
3.95	4.15	3.60	3.80	1.05			55.1		57.1											61.6					65.1	
4.15	4.35	3.80	4.00	1.05			54.8		56.8											61.3					64.8	
4.35	4.55	4.00	4.20	1.05			54.5		56.5											61.0					64.5	
7.35	7.75	7.00	7.40	1.05	48.6	49.1	49.6	50.6	51.1	51.6	52.1	52.6	53.1	53.6	54.6	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.1	59.6	60.1
6.35	6.75	6.00	6.40	1.06	50.2	50.7	51.2	52.2	52.7	53.2	53.7	54.2	54.7	55.2	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7
6.55	6.95	6.20	6.60	1.06	49.8	50.3	50.8	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3
6.75	7.15	6.40	6.80	1.06	49.5	50.0	50.5	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0
6.95	7.35	6.60	7.00	1.06	49.2	49.7	50.2	51.2	51.7	52.2	52.7	53.2	53.7	54.2	55.2	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7
5.35	5.75	5.00	5.40	1.07	51.7	52.2	52.7	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2
5.55	5.95	5.20	5.60	1.07	51.4	51.9	52.4	53.4	53.9	54.4	54.9	55.4	55.9	56.4	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9
5.75	6.15	5.40	5.80	1.07	51.1	51.6	52.1	53.1	53.6	54.1	54.6	55.1	55.6	56.1	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	62.6
5.95	6.35	5.60	6.00	1.07	50.8	51.3	51.8	52.8	53.3	53.8	54.3	54.8	55.3	55.8	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3
6.15	6.55	5.80	6.20	1.07	50.5	51.0	51.5	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0
8.35	8.95	8.00	8.60	1.																						

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters							
B	B	B BX BP	B	B	B	B	B	B	B BX	B	B	B	B	B	B BX BP	B	B	B BX	B		B	Small Sheave	Large Sheave					
142	143	144	145	146	147	148	149	150	151	152	153	154	156	157	158	160	161	162	164	165	166	167	168	169	1.00	* 3.40	* 3.40	
		67.6																							1.00	* 3.60	* 3.60	
		67.2																							1.00	* 3.80	* 3.80	
		66.9																							1.00	* 4.00	* 4.00	
		66.6																							1.00	* 4.20	* 4.20	
		66.3																							1.00	* 4.40	* 4.40	
		66.0																							1.00	* 4.60	* 4.60	
64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.2	68.7	69.2	69.7	70.2	70.7	71.2	71.7	72.2	72.7	73.2	74.2	74.7	75.2	75.7	76.2	76.7	77.2	78.2	1.00	* 4.80	* 4.80
64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.4	69.9	70.4	71.4	71.9	72.4	73.4	73.9	74.4	75.4	75.9	76.4	76.9	77.4	77.9		1.00	* 4.80	* 4.80
64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	69.0	69.5	70.0	71.0	71.5	72.0	73.0	73.5	74.0	75.0	75.5	76.0	76.5	77.0	77.5		1.00	* 5.00	* 5.00
63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.2	68.7	69.2	69.7	70.7	71.2	71.7	72.7	73.2	73.7	74.7	75.2	75.7	76.2	76.7	77.2		1.00	* 5.20	* 5.20
63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.4	70.4	70.9	71.4	72.4	72.9	73.4	74.4	74.9	75.4	75.9	76.4	76.9		1.00	* 5.40	* 5.40
63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6	69.1	70.1	70.6	71.1	72.1	72.6	73.1	74.1	74.6	75.1	75.6	76.1	76.6		1.00	* 5.60	* 5.60
62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	68.8	69.8	70.3	70.8	71.8	72.3	72.8	73.8	74.3	74.8	75.3	75.8	76.3		1.00	* 5.80	* 5.80
62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	69.5	70.0	70.5	71.5	72.0	72.5	73.5	74.0	74.5	75.0	75.5	76.0		1.00	* 6.00	* 6.00
62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.2	69.2	69.7	70.2	71.2	71.7	72.2	73.2	73.7	74.2	74.7	75.2	75.7		1.00	* 6.20	* 6.20
61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.8	69.3	69.8	70.8	71.3	71.8	72.8	73.3	73.8	74.3	74.8	75.3		1.00	* 6.40	* 6.40
61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.5	69.0	69.5	70.5	71.0	71.5	72.5	73.0	73.5	74.0	74.5	75.0		1.00	* 6.60	* 6.60
61.2	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	68.2	68.7	69.2	70.2	70.7	71.2	72.2	72.7	73.2	73.7	74.2	74.7		1.00	* 6.80	* 6.80
60.9	61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.9	68.4	68.9	69.9	70.4	70.9	71.9	72.4	72.9	73.4	73.9	74.4		1.00	* 7.00	* 7.00
60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	67.3	67.8	68.3	69.3	69.8	70.3	71.3	71.8	72.3	72.8	73.3	73.8		1.00	* 7.40	* 7.40
59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	66.3	66.8	67.3	68.3	68.8	69.3	70.3	70.8	71.3	71.8	72.3	72.8		1.00	* 8.00	* 8.00
58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4	63.9	64.4	65.4	65.9	66.4	67.4	67.9	68.4	69.4	69.9	70.4	70.9	71.4	71.9		1.00	* 8.60	* 8.60
57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	62.6	63.1	64.1	64.6	65.1	66.1	66.6	67.1	68.1	68.6	69.1	69.6	70.1	70.6		1.00	* 9.40	* 9.40
63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	68.8	69.3	70.3	70.8	71.3	72.3	72.8	73.3	74.3	74.8	75.3	75.8	76.3	76.8		1.03	* 5.40	* 5.60
62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.9	70.4	70.9	71.9	72.4	72.9	73.9	74.4	74.9	75.4	75.9	76.4		1.03	* 5.60	* 5.80
62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6	69.6	70.1	70.6	71.6	72.1	72.6	73.6	74.1	74.6	75.1	75.6	76.1		1.03	* 5.80	* 6.00
62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	69.3	69.8	70.3	71.3	71.8	72.3	73.3	73.8	74.3	74.8	75.3	75.8		1.03	* 6.00	* 6.20
62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	69.0	69.5	70.0	71.0	71.5	72.0	73.0	73.5	74.0	74.5	75.0	75.5		1.03	* 6.20	* 6.40
61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.7	69.2	69.7	70.7	71.2	71.7	72.7	73.2	73.7	74.2	74.7	75.2		1.03	* 6.40	* 6.60
61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	68.4	68.9	69.4	70.4	70.9	71.4	72.4	72.9	73.4	73.9	74.4	74.9		1.03	* 6.60	* 6.80
61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	68.1	68.6	69.1	70.1	70.6	71.1	72.1	72.6	73.1	73.6	74.1	74.6		1.04	* 6.80	* 7.00
		66.1																							1.04	* 4.20	* 4.40	
		65.8																							1.04	* 4.40	* 4.60	
64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	69.0	69.5	70.0	70.5	71.5	72.0	72.5	73.5	74.0	74.5	75.5	76.0	76.5	77.0	77.5	78.0	1.04	* 4.60	* 4.80	
64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.2	68.7	69.2	69.7	70.2	71.2	71.7	72.2	73.2	73.7	74.2	75.2	75.7	76.2	76.7	77.2	77.7		1.04	* 4.80	* 5.00
63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.4	69.9	70.9	71.4	71.9	72.9	73.4	73.9	74.9	75.4	75.9	76.4	76.9	77.4		1.04	* 5.00	* 5.20
63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6	69.1	69.6	70.6	71.1	71.6	72.6	73.1	73.6	74.6	75.1	75.6	76.1	76.6	77.1		1.04	* 5.20	* 5.40
		67.4																							1.05	* 3.40	* 3.60	
		67.1																							1.05	* 3.60	* 3.80	
		66.8																							1.05	* 3.80	* 4.00	
		66.5																							1.05	* 4.00	* 4.20	
60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.6	68.1	68.6	69.6	70.1	70.6	71.6	72.1	72.6	73.1	73.6	74.1		1.05	* 7.00	* 7.40
62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.2	69.2	69.7	70.2	71.2	71.7	72.2	73.2	73.7	74.2	74.7	75.2	75.7		1.06	* 6.00	* 6.40
61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.8	69.3	69.8	70.8	71.3	71.8	72.8	73.3	73.8	74.3	74.8	75.3		1.06	* 6.20	* 6.60
61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.5	69.0	69.5	70.5	71.0	71.5	72.5	73.0	73.5	74.0	74.5	75.0		1.06	* 6.40	* 6.80
61.2	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	68.2	68.7	69.2	70.2	70.7	71.2	72.2	72.7	73.2	73.7	74.2	74.7		1.06	* 6.60	* 7.00
63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.2	68.7	69.2	69.7	70.7	71.2	71.7	72.7	73.2	73.7	74.7	75.2	75.7	76.2	76.7	77.2		1.07	* 5.00	* 5.40
63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.4	70.4	70.9	71.4	72.4	72.9	73.4	74.4	74.9	75.4	75.9	76.4	76.9		1.07	* 5.20	* 5.60
63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6	69.1	70.1	70.6	71.1	72.1	72.6	73.1	74.1	74.6	75.1	75.6	76.1	76.6		1.07	* 5.40	* 5.80
62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8</																		

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B	B	B BX BP	B	B	B	B	B BX	B	B	B	B	B	B	B	B	B BX BP	B	B	B	B	
3.75	3.75	* 3.40	* 3.40	1.00			82.1														93.1					
3.95	3.95	* 3.60	* 3.60	1.00			81.7														92.7					
4.15	4.15	* 3.80	* 3.80	1.00			81.4														92.4					
4.35	4.35	* 4.00	* 4.00	1.00			81.1														92.1					
4.55	4.55	* 4.20	* 4.20	1.00			80.8														91.8					
4.75	4.75	* 4.40	* 4.40	1.00			80.5														91.5					
4.95	4.95	4.60	4.60	1.00	78.7	79.7	80.2	80.7	81.2	82.2	82.7	83.7	84.7	85.7	86.2	86.7	87.2	87.7	88.7	89.2	89.7	91.2	92.2	93.2	93.7	94.2
5.15	5.15	4.80	4.80	1.00	78.4	79.4	79.9	80.4	80.9	81.9	82.4	83.4	84.4	85.4	85.9	86.4	86.9	87.4	88.4	88.9	89.4	90.9	91.9	92.9	93.4	93.9
5.35	5.35	5.00	5.00	1.00	78.0	79.0	79.5	80.0	80.5	81.5	82.0	83.0	84.0	85.0	85.5	86.0	86.5	87.0	88.0	88.5	89.0	90.5	91.5	92.5	93.0	93.5
5.55	5.55	5.20	5.20	1.00	77.7	78.7	79.2	79.7	80.2	81.2	81.7	82.7	83.7	84.7	85.2	85.7	86.2	86.7	87.2	88.2	88.7	90.2	91.2	92.2	92.7	93.2
5.75	5.75	5.40	5.40	1.00	77.4	78.4	78.9	79.4	79.9	80.9	81.4	82.4	83.4	84.4	84.9	85.4	85.9	86.4	87.4	87.9	88.4	89.9	90.9	91.9	92.4	92.9
5.95	5.95	5.60	5.60	1.00	77.1	78.1	78.6	79.1	79.6	80.6	81.1	82.1	83.1	84.1	84.6	85.1	85.6	86.1	87.1	87.6	88.1	89.6	90.6	91.6	92.1	92.6
6.15	6.15	5.80	5.80	1.00	76.8	77.8	78.3	78.8	79.3	80.3	80.8	81.8	82.8	83.8	84.3	84.8	85.3	85.8	86.8	87.3	87.8	89.3	90.3	91.3	91.8	92.3
6.35	6.35	6.00	6.00	1.00	76.5	77.5	78.0	78.5	79.0	80.0	80.5	81.5	82.5	83.5	84.0	84.5	85.0	85.5	86.5	87.0	87.5	89.0	90.0	91.0	91.5	92.0
6.55	6.55	6.20	6.20	1.00	76.2	77.2	77.7	78.2	78.7	79.7	80.2	81.2	82.2	83.2	83.7	84.2	84.7	85.2	86.2	86.7	87.2	88.7	89.7	90.7	91.2	91.7
6.75	6.75	6.40	6.40	1.00	75.8	76.8	77.3	77.8	78.3	79.3	79.8	80.8	81.8	82.8	83.3	83.8	84.3	84.8	85.8	86.3	86.8	88.3	89.3	90.3	90.8	91.3
6.95	6.95	6.60	6.60	1.00	75.5	76.5	77.0	77.5	78.0	79.0	79.5	80.5	81.5	82.5	83.0	83.5	84.0	84.5	85.5	86.0	86.5	88.0	89.0	90.0	90.5	91.0
7.15	7.15	6.80	6.80	1.00	75.2	76.2	76.7	77.2	77.7	78.7	79.2	80.2	81.2	82.2	82.7	83.2	83.7	84.2	85.2	85.7	86.2	87.7	88.7	89.7	90.2	90.7
7.35	7.35	7.00	7.00	1.00	74.9	75.9	76.4	76.9	77.4	78.4	78.9	79.9	80.9	81.9	82.4	82.9	83.4	83.9	84.9	85.4	85.9	87.4	88.4	89.4	89.9	90.4
7.75	7.75	7.40	7.40	1.00	74.3	75.3	75.8	76.3	76.8	77.8	78.3	79.3	80.3	81.3	81.8	82.3	82.8	83.3	84.3	84.8	85.3	86.8	87.8	88.8	89.3	89.8
8.35	8.35	8.00	8.00	1.00	73.3	74.3	74.8	75.3	75.8	76.8	77.3	78.3	79.3	80.3	80.8	81.3	81.8	82.3	83.3	83.8	84.3	85.8	86.8	87.8	88.3	88.8
8.55	8.55	8.60	8.60	1.00	72.4	73.4	73.9	74.4	74.9	75.9	76.4	77.4	78.4	79.4	79.9	80.4	80.9	81.4	82.4	82.9	83.4	84.9	85.9	86.9	87.4	87.9
9.75	9.75	9.40	9.40	1.00	71.1	72.1	72.6	73.1	73.6	74.6	75.1	76.1	77.1	78.1	78.6	79.1	79.6	80.1	81.1	81.6	82.1	83.6	84.6	85.6	86.1	86.6
5.75	5.95	5.40	5.60	1.03	77.3	78.3	78.8	79.3	79.8	80.8	81.3	82.3	83.3	84.3	84.8	85.3	85.8	86.3	87.3	87.8	88.3	89.8	90.8	91.8	92.3	92.8
5.95	6.15	5.60	5.80	1.03	76.9	77.9	78.4	78.9	79.4	80.4	80.9	81.9	82.9	83.9	84.4	84.9	85.4	85.9	86.9	87.4	87.9	89.4	90.4	91.4	91.9	92.4
6.15	6.35	5.80	6.00	1.03	76.6	77.6	78.1	78.6	79.1	80.1	80.6	81.6	82.6	83.6	84.1	84.6	85.1	85.6	86.6	87.1	87.6	89.1	90.1	91.1	91.6	92.1
6.35	6.55	6.00	6.20	1.03	76.3	77.3	77.8	78.3	78.8	79.8	80.3	81.3	82.3	83.3	83.8	84.3	84.8	85.3	86.3	86.8	87.3	88.8	89.8	90.8	91.3	91.8
6.55	6.75	6.20	6.40	1.03	76.0	77.0	77.5	78.0	78.5	79.5	80.0	81.0	82.0	83.0	83.5	84.0	84.5	85.0	86.0	86.5	87.0	88.5	89.5	90.5	91.0	91.5
6.75	6.95	6.40	6.60	1.03	75.7	76.7	77.2	77.7	78.2	79.2	79.7	80.7	81.7	82.7	83.2	83.7	84.2	84.7	85.7	86.2	86.7	88.2	89.2	90.2	90.7	91.2
6.95	7.15	6.60	6.80	1.03	75.4	76.4	76.9	77.4	77.9	78.9	79.4	80.4	81.4	82.4	82.9	83.4	83.9	84.4	85.4	85.9	86.4	87.9	88.9	89.9	90.4	90.9
7.15	7.35	6.80	7.00	1.03	75.1	76.1	76.6	77.1	77.6	78.6	79.1	80.1	81.1	82.1	82.6	83.1	83.6	84.1	85.1	85.6	86.1	87.6	88.6	89.6	90.1	90.6
4.55	4.75	* 4.20	* 4.40	1.04			80.6														91.6					
4.75	4.95	* 4.40	4.60	1.04			80.3														91.3					
4.95	5.15	4.60	4.80	1.04	78.5	79.5	80.0	80.5	81.0	82.0	82.5	83.5	84.5	85.5	86.0	86.5	87.0	87.5	88.5	89.0	89.5	91.0	92.0	93.0	93.5	94.0
5.15	5.35	4.80	5.00	1.04	78.2	79.2	79.7	80.2	80.7	81.7	82.2	83.2	84.2	85.2	85.7	86.2	86.7	87.2	88.2	88.7	90.2	91.2	92.2	93.2	93.7	
5.35	5.55	5.00	5.20	1.04	77.9	78.9	79.4	79.9	80.4	81.4	81.9	82.9	83.9	84.9	85.4	85.9	86.4	86.9	87.9	88.4	88.9	90.4	91.4	92.4	92.9	93.4
5.55	5.75	5.20	5.40	1.04	77.6	78.6	79.1	79.6	80.1	81.1	81.6	82.6	83.6	84.6	85.1	85.6	86.1	86.6	87.6	88.1	88.6	90.1	91.1	92.1	92.6	93.1
3.75	3.95	* 3.40	* 3.60	1.05			81.9														92.9					
3.95	4.15	* 3.60	* 3.80	1.05			81.6														92.6					
4.15	4.35	* 4.00	* 4.00	1.05			81.3														92.3					
4.35	4.55	* 4.00	* 4.20	1.05			81.0														92.0					
7.35	7.75	7.00	7.40	1.05	74.6	75.6	76.1	76.6	77.1	78.1	78.6	79.6	80.6	81.6	82.1	82.6	83.1	83.6	84.6	85.1	85.6	87.1	88.1	89.1	89.6	90.1
6.35	6.75	6.00	6.40	1.06	76.2	77.2	77.7	78.2	78.7	79.7	80.2	81.2	82.2	83.2	83.7	84.2	84.7	85.2	86.2	86.7	87.2	88.7	89.7	90.7	91.2	91.7
6.55	6.95	6.20	6.60	1.06	75.8	76.8	77.3	77.8	78.3	79.3	79.8	80.8	81.8	82.8	83.3	83.8	84.3	84.8	85.8	86.3	86.8	88.3	89.3	90.3	90.8	91.3
6.75	7.15	6.40	6.80	1.06	75.5	76.5	77.0	77.5	78.0	79.0	79.5	80.5	81.5	82.5	83.0	83.5	84.0	84.5	85.5	86.0	86.5	88.0	89.0	90.0	90.5	91.0
6.95	7.35	6.60	7.00	1.06	75.2	76.2	76.7	77.2	77.7	78.7	79.2	80.2	81.2	82.2	82.7	83.2	83.7	84.2	85.2	85.7	86.2	87.7	88.7	89.7	90.2	90.7
5.35	5.75	5.00	5.40	1.07	77.7	78.7	79.2	79.7	80.2	81.2	81.7	82.7	83.7	84.7	85.2	85.7	86.2	86.7	87.7	88.2	88.7	90.2	91.2	92.2	92.7	93.2
5.55	5.95	5.20	5.60	1.07	77.4	78.4	78.9	79.4	79.9	80.9	81.4	82.4	83.4	84.4	84.9	85.4	85.9	86.4	87.4	87.9	88.4	89.9	90.9	91.9	92.4	92.9
5.75	6.15	5.40	5.80	1.07	77.1	78.1	78.6	79.1	79.6	80.6	81.1	82.1	83.1	84.1	84.6	85.1	85.6	86.1	87.1	87.6	88.1	89.6	90.6	91.6	92.1	92.6
5.95	6.35	5.60	6.00	1.07	76.8	77.8	78.3	78.8	79.3	80.3	80.8	81.8	82.8	83.8	84.3	84.8	85.3	85.8	86.8	87.3	87.8	89.3	90.3	91.3	91.8	92.3
6.15	6.55	5.80	6.20	1.07	76.5	77.5	78.0	78.5	79.0	80.0	80.5	81.5	82.5	83.5	84.0	84.5	85.0	85.5	86.5	87.0	87.5	89.0	90.0	91.0	91.5	92.0
8.35	8.95	8.00	8.60	1.07	72.9	73.9	74.4	74.9	75.4	76.4	76.9	77.9	78.9	79.9	80.4	80.9	81.4	81.9	82.9	83.4	83.9	85.4	86.4	87.4	87.9	88.4
4.75	5.15	* 4.40	4.80	1.08			80.2																			

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																								Speed Ratio	Sheave Datum Diameters		
B	B BX	B	B BX	B	B	B	B	B	B	B	B BX	B	B	B	B	B	B	B	B BX	B	B	B	Small Sheave		Large Sheave		
204	205	206	210	212	215	217	218	220	221	223	225	228	230	234	235	236	237	240	248	253	255 BX	265	270 BX	276	1.00	3.40	3.40
	98.1		100.6								107.3										122.3	125.5	129.8		1.00	3.40	3.40
	97.7		100.2								107.0										122.0	125.0	129.5		1.00	3.60	3.60
	97.4		99.9								106.7										121.7	124.7	129.2		1.00	3.80	3.80
	97.1		99.6								106.4										121.4	124.4	128.9		1.00	4.00	4.00
	96.8		99.3								106.1										121.1	124.1	128.6		1.00	4.20	4.20
	96.5		99.0								105.7										120.7	123.7	128.2		1.00	4.40	4.40
95.7	96.2	96.7	98.7	98.9	100.4	101.4	101.9	102.9	103.4	104.4	105.4	106.9	107.9	109.9	110.4	110.9	111.4	112.9	116.9	119.4	120.4	125.4	127.9	130.9	1.00	4.60	4.60
95.4	95.9	96.4	98.4	98.6	100.1	101.1	101.6	102.6	103.1	104.1	105.1	106.6	107.6	109.6	110.1	110.6	111.1	112.6	116.6	119.1	120.1	125.1	127.6	130.6	1.00	4.80	4.80
95.0	95.5	96.0	98.0	98.3	99.8	100.8	101.3	102.3	102.8	103.8	104.8	106.3	107.3	109.3	109.8	110.3	110.8	112.3	116.3	118.8	119.8	124.8	127.3	130.3	1.00	5.00	5.00
94.7	95.2	95.7	97.7	98.0	99.5	100.5	101.0	102.0	102.5	103.5	104.5	106.0	107.0	109.0	109.5	110.0	110.5	112.0	116.0	118.5	119.5	124.5	127.0	130.0	1.00	5.20	5.20
94.4	94.9	95.4	97.4	97.7	99.2	100.2	100.7	101.7	102.2	103.2	104.2	105.7	106.7	108.7	109.2	109.7	110.2	111.7	115.7	118.2	119.2	124.2	126.7	129.7	1.00	5.40	5.40
94.1	94.6	95.1	97.1	97.4	98.9	99.9	100.4	101.4	101.9	102.9	103.9	105.4	106.4	108.4	108.9	109.4	109.9	111.4	115.4	117.9	118.9	123.9	126.4	129.4	1.00	5.60	5.60
93.8	94.3	94.8	96.8	97.0	98.5	99.5	100.0	101.0	101.5	102.5	103.5	105.0	106.0	108.0	108.5	109.0	109.5	111.0	115.0	117.5	118.5	123.5	126.0	129.0	1.00	5.80	5.80
93.5	94.0	94.5	96.5	96.7	98.2	99.2	99.7	100.7	101.2	102.2	103.2	104.7	105.7	107.7	108.2	108.7	109.2	110.7	114.7	117.2	118.2	123.2	125.7	128.7	1.00	6.00	6.00
93.2	93.7	94.2	96.2	96.4	97.9	98.9	99.4	100.4	100.9	101.9	102.9	104.4	105.4	107.4	107.9	108.4	108.9	110.4	114.4	116.9	117.9	122.9	125.4	128.4	1.00	6.20	6.20
92.8	93.3	93.8	95.8	96.1	97.6	98.6	99.1	100.1	100.6	101.6	102.6	104.1	105.1	107.1	107.6	108.1	108.6	110.1	114.1	116.6	117.6	122.6	125.1	128.1	1.00	6.40	6.40
92.5	93.0	93.5	95.5	95.8	97.3	98.3	98.8	99.8	100.3	101.3	102.3	103.8	104.8	106.8	107.3	107.8	108.3	109.8	113.8	116.3	117.3	122.3	124.8	127.8	1.00	6.60	6.60
92.2	92.7	93.2	95.2	95.5	97.0	98.0	98.5	99.5	100.0	101.0	102.0	103.5	104.5	106.5	107.0	107.5	108.0	109.5	113.5	116.0	117.0	122.0	124.5	127.5	1.00	6.80	6.80
91.9	92.4	92.9	94.9	95.2	96.7	97.7	98.2	99.2	99.7	100.7	101.7	103.2	104.2	106.2	106.7	107.2	107.7	109.2	113.2	115.7	116.7	121.7	124.2	127.2	1.00	7.00	7.00
91.3	91.8	92.3	94.3	94.5	96.0	97.0	97.5	98.5	99.0	100.0	101.0	102.5	103.5	105.5	106.0	106.5	107.0	108.5	112.5	115.0	116.0	121.0	123.5	126.5	1.00	7.40	7.40
90.3	90.8	91.3	93.3	93.6	95.1	96.1	96.6	97.6	98.1	99.1	100.1	101.6	102.6	104.6	105.1	105.6	106.1	107.6	111.6	114.1	115.1	120.1	122.6	125.6	1.00	8.00	8.00
89.4	89.9	90.4	92.4	92.6	94.1	95.1	95.6	96.6	97.1	98.1	99.1	100.6	101.6	103.6	104.1	104.6	105.1	106.6	110.6	113.1	114.1	119.1	121.6	124.6	1.00	8.60	8.60
88.1	88.6	89.1	91.1	91.4	92.9	93.9	94.4	95.4	95.9	96.9	97.9	99.4	100.4	102.4	102.9	103.4	103.9	105.4	109.4	111.9	112.9	117.9	120.4	123.4	1.00	9.40	9.40
84.3	84.8	85.3	87.3	87.5	89.0	90.0	90.5	91.5	92.0	93.0	94.0	95.5	96.5	98.5	99.0	99.5	100.0	101.5	105.5	108.0	109.0	124.0	126.5	129.5	1.03	5.40	5.60
83.9	84.4	84.9	86.9	87.2	88.7	89.7	90.2	101.2	101.7	102.7	103.7	105.2	106.2	108.2	108.7	109.2	109.7	111.2	115.2	117.7	118.7	123.7	126.2	129.2	1.03	5.60	5.80
83.6	84.1	84.6	86.6	86.9	88.4	89.4	89.9	100.9	101.4	102.4	103.4	104.9	105.9	107.9	108.4	108.9	109.4	110.9	114.9	117.4	118.4	123.4	125.9	128.9	1.03	5.80	6.00
83.3	83.8	84.3	86.3	86.6	88.1	89.1	89.6	100.6	101.1	102.1	103.1	104.6	105.6	107.6	108.1	108.6	109.1	110.6	114.6	117.1	118.1	123.1	125.6	128.6	1.03	6.00	6.20
83.0	83.5	84.0	86.0	86.3	87.8	88.8	89.3	100.3	100.8	101.8	102.8	104.3	105.3	107.3	107.8	108.3	108.8	110.3	114.3	116.8	117.8	122.8	125.3	128.3	1.03	6.20	6.40
82.7	83.2	83.7	85.7	85.9	87.4	88.4	88.9	99.9	100.4	101.4	102.4	103.9	104.9	106.9	107.4	107.9	108.4	109.9	113.9	116.4	117.4	122.4	124.9	127.9	1.03	6.40	6.60
82.4	82.9	83.4	85.4	85.6	87.1	88.1	88.6	99.6	100.1	101.1	102.1	103.6	104.6	106.6	107.1	107.6	108.1	109.6	113.6	116.1	117.1	122.1	124.6	127.6	1.03	6.60	6.80
82.1	82.6	83.1	85.1	85.3	86.8	87.8	88.3	99.3	99.8	100.8	101.8	103.3	104.3	106.3	106.8	107.3	107.8	109.3	113.3	115.8	116.8	121.8	124.3	127.3	1.03	6.80	7.00
	96.6		99.1								105.9									120.9	123.9	128.4			1.04	4.20	4.40
	96.3		98.8								105.6									120.6	123.6	128.1			1.04	4.40	4.60
95.5	96.0	96.5	98.5	98.8	100.3	101.3	101.8	102.8	103.3	104.3	105.3	106.8	107.8	109.8	110.3	110.8	111.3	112.8	116.8	119.3	120.3	125.3	127.8	130.8	1.04	4.60	4.80
95.2	95.7	96.2	98.2	98.5	100.0	101.0	101.5	102.5	103.0	104.0	105.0	106.5	107.5	109.5	110.0	110.5	111.0	112.5	116.5	119.0	120.0	125.0	127.5	130.5	1.04	4.80	5.00
94.9	95.4	95.9	97.9	98.1	99.6	100.6	101.1	102.1	102.6	103.6	104.6	106.1	107.1	109.1	109.6	110.1	110.6	112.1	116.1	118.6	119.6	124.6	127.1	130.1	1.04	5.00	5.20
94.6	95.1	95.6	97.6	97.8	99.3	100.3	100.8	101.8	102.3	103.3	104.3	105.8	106.8	108.8	109.3	109.8	110.3	111.8	115.8	118.3	119.3	124.3	126.8	129.8	1.04	5.20	5.40
	97.9		100.4								107.2									122.2	125.2	129.7			1.05	3.40	3.60
	97.6		100.1								106.8									121.8	124.8	129.3			1.05	3.60	3.80
	97.3		99.8								106.5									121.5	124.5	129.0			1.05	3.80	4.00
	97.0		99.5								106.2									121.2	124.2	128.7			1.05	4.00	4.20
91.6	92.1	92.6	94.6	94.8	96.3	97.3	97.8	98.8	99.3	100.3	101.3	102.8	103.8	105.8	106.3	106.8	107.3	108.8	112.8	115.3	116.3	121.3	123.8	126.8	1.05	7.00	7.40
93.2	93.7	94.2	96.2	96.4	97.9	98.9	99.4	100.4	100.9	101.9	102.9	104.4	105.4	107.4	107.9	108.4	108.9	110.4	114.4	116.9	117.9	122.9	125.4	128.4	1.06	6.00	6.40
92.8	93.3	93.8	95.8	96.1	97.6	98.6	99.1	100.1	100.6	101.6	102.6	104.1	105.1	107.1	107.6	108.1	108.6	110.1	114.1	116.6	117.6	122.6	125.1	128.1	1.06	6.20	6.60
92.5	93.0	93.5	95.5	95.8	97.3	98.3	98.8	99.8	100.3	101.3	102.3	103.8	104.8	106.8	107.3	107.8	108.3	109.8	113.8	116.3	117.3	122.3	124.8	127.8	1.06	6.40	6.80
92.2	92.7	93.2	95.2	95.5	97.0	98.0	98.5	99.5	100.0	101.0	102.0	103.5	104.5	106.5	107.0	107.5	108.0	109.5	113.5	116.0	117.0	122.0	124.5	127.5	1.06	6.60	7.00
91.9	92.4	92.9	94.9	95.2	96.7	97.7	98.2	99.2	99.7	100.7	101.7	103.2	104.2	106.2	106.7	107.2	107.7	109.2	113.2	115.							

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																
Small Sheave	Large Sheave	Small Sheave	Large Sheave		BX																
					B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
				279	280	285	290	292	293	300	310	315	330	340	345	355	360	394	433	472	
3.75	3.75	* 3.40	* 3.40	1.00						144.8											
3.95	3.95	* 3.60	* 3.60	1.00						144.5											
4.15	4.15	* 3.80	* 3.80	1.00						144.2											
4.35	4.35	* 4.00	* 4.00	1.00						143.9											
4.55	4.55	* 4.20	* 4.20	1.00						143.6											
4.75	4.75	* 4.40	* 4.40	1.00						143.2											
4.95	4.95	4.60	4.60	1.00	132.4	132.9	135.4	137.9	138.9	139.4	142.9	147.9	150.4	157.9	162.9	165.4	170.4	172.9	189.9	209.4	228.9
5.15	5.15	4.80	4.80	1.00	132.1	132.6	135.1	137.6	138.6	139.1	142.6	147.6	150.1	157.6	162.6	165.1	170.1	172.6	189.6	209.1	228.6
5.35	5.35	5.00	5.00	1.00	131.8	132.3	134.8	137.3	138.3	138.8	142.3	147.3	149.8	157.3	162.3	164.8	169.8	172.3	189.3	208.8	228.3
5.55	5.55	5.20	5.20	1.00	131.5	132.0	134.5	137.0	138.0	138.5	142.0	147.0	149.5	157.0	162.0	164.5	169.5	172.0	189.0	208.5	228.0
5.75	5.75	5.40	5.40	1.00	131.2	131.7	134.2	136.7	137.7	138.2	141.7	146.7	149.2	156.7	161.7	164.2	169.2	171.7	188.7	208.2	227.7
5.95	5.95	5.60	5.60	1.00	130.9	131.4	133.9	136.4	137.4	137.9	141.4	146.4	148.9	156.4	161.4	163.9	168.9	171.4	188.4	207.9	227.4
6.15	6.15	5.80	5.80	1.00	130.5	131.0	133.5	136.0	137.0	137.5	141.0	146.0	148.5	156.0	161.0	163.5	168.5	171.0	188.0	207.5	227.0
6.35	6.35	6.00	6.00	1.00	130.2	130.7	133.2	135.7	136.7	137.2	140.7	145.7	148.2	155.7	160.7	163.2	168.2	170.7	187.7	207.2	226.7
6.55	6.55	6.20	6.20	1.00	129.9	130.4	132.9	135.4	136.4	136.9	140.4	145.4	147.9	155.4	160.4	162.9	167.9	170.4	187.4	206.9	226.4
6.75	6.75	6.40	6.40	1.00	129.6	130.1	132.6	135.1	136.1	136.6	140.1	145.1	147.6	155.1	160.1	162.6	167.6	170.1	187.1	206.6	226.1
6.95	6.95	6.60	6.60	1.00	129.3	129.8	132.3	134.8	135.8	136.3	139.8	144.8	147.3	154.8	159.8	162.3	167.3	169.8	186.8	206.3	225.8
7.15	7.15	6.80	6.80	1.00	129.0	129.5	132.0	134.5	135.5	136.0	139.5	144.5	147.0	154.5	159.5	162.0	167.0	169.5	186.5	206.0	225.5
7.35	7.35	7.00	7.00	1.00	128.7	129.2	131.7	134.2	135.2	135.7	139.2	144.2	146.7	154.2	159.2	161.7	166.7	169.2	186.2	205.7	225.2
7.75	7.75	7.40	7.40	1.00	128.0	128.5	131.0	133.5	134.5	135.0	138.5	143.5	146.0	153.5	158.5	161.0	166.0	168.5	185.5	205.0	224.5
8.35	8.35	8.00	8.00	1.00	127.1	127.6	130.1	132.6	133.6	134.1	137.6	142.6	145.1	152.6	157.6	160.1	165.1	167.6	184.6	204.1	223.6
8.95	8.95	8.60	8.60	1.00	126.1	126.6	129.1	131.6	132.6	133.1	136.6	141.6	144.1	151.6	156.6	159.1	164.1	166.6	183.6	203.1	222.6
9.75	9.75	9.40	9.40	1.00	124.9	125.4	127.9	130.4	131.4	131.9	135.4	140.4	142.9	150.4	155.4	157.9	162.9	165.4	182.4	201.9	221.4
5.75	5.95	5.40	5.60	1.03	121.0	131.5	134.0	136.5	137.5	138.0	141.5	146.5	149.0	156.5	161.5	164.0	169.0	171.5	188.5	208.0	227.5
5.95	6.15	5.60	5.80	1.03	130.7	131.2	133.7	136.2	137.2	137.7	141.2	146.2	148.7	156.2	161.2	163.7	168.7	171.2	188.2	207.7	227.2
6.15	6.35	5.80	6.00	1.03	130.4	130.9	133.4	135.9	136.9	137.4	140.9	145.9	148.4	155.9	160.9	163.4	168.4	170.9	187.9	207.4	226.9
6.35	6.55	6.00	6.20	1.03	130.1	130.6	133.1	135.6	136.6	137.1	140.6	145.6	148.1	155.6	160.6	163.1	168.1	170.6	187.6	207.1	226.6
6.55	6.75	6.20	6.40	1.03	129.8	130.3	132.8	135.3	136.3	136.8	140.3	145.3	147.8	155.3	160.3	162.8	167.8	170.3	187.3	206.8	226.3
6.75	6.95	6.40	6.60	1.03	129.4	129.9	132.4	134.9	135.9	136.4	139.9	144.9	147.4	154.9	159.9	162.4	167.4	169.9	186.9	206.4	225.9
6.95	7.15	6.60	6.80	1.03	129.1	129.6	132.1	134.6	135.6	136.1	139.6	144.6	147.1	154.6	159.6	162.1	167.1	169.6	186.6	206.1	225.6
7.15	7.35	6.80	7.00	1.03	128.8	129.3	131.8	134.3	135.3	135.8	139.3	144.3	146.8	154.3	159.3	161.8	166.8	169.3	186.3	205.8	225.3
4.55	4.75	* 4.20	* 4.40	1.04						143.4											
4.75	4.95	* 4.40	4.60	1.04						143.1											
4.95	5.15	4.60	4.80	1.04	132.3	132.8	135.3	137.8	138.8	139.3	142.8	147.8	150.3	157.8	162.8	165.3	170.3	172.8	189.8	209.3	228.8
5.15	5.35	4.80	5.00	1.04	132.0	132.5	135.0	137.5	138.5	139.0	142.5	147.5	150.0	157.5	162.5	165.0	170.0	172.5	189.5	209.0	228.5
5.35	5.55	5.00	5.20	1.04	131.6	132.1	134.6	137.1	138.1	138.6	142.1	147.1	149.6	157.1	162.1	164.6	169.6	172.1	189.1	208.6	228.1
5.55	5.75	5.20	5.40	1.04	131.3	131.8	134.3	136.8	137.8	138.3	141.8	146.8	149.3	156.8	161.8	164.3	169.3	171.8	188.8	208.3	227.8
3.75	3.95	* 3.40	* 3.60	1.05						144.7											
3.95	4.15	* 3.60	* 3.80	1.05						144.3											
4.15	4.35	* 3.80	* 4.00	1.05						144.0											
4.35	4.55	* 4.00	* 4.20	1.05						143.7											
7.35	7.75	7.00	7.40	1.05	128.3	128.8	131.3	133.8	134.8	135.3	138.8	143.8	146.3	153.8	158.8	161.3	166.3	168.8	185.8	205.3	224.8
6.35	6.75	6.00	6.40	1.06	129.9	130.4	132.9	135.4	136.4	136.9	140.4	145.4	147.9	155.4	160.4	162.9	167.9	170.4	187.4	206.9	226.4
6.55	6.95	6.20	6.60	1.06	129.6	130.1	132.6	135.1	136.1	136.6	140.1	145.1	147.6	155.1	160.1	162.6	167.6	170.1	187.1	206.6	226.1
6.75	7.15	6.40	6.80	1.06	129.3	129.8	132.3	134.8	135.8	136.3	139.8	144.8	147.3	154.8	159.8	162.3	167.3	169.8	186.8	206.3	225.8
6.95	7.35	6.60	7.00	1.06	129.0	129.5	132.0	134.5	135.5	136.0	139.5	144.5	147.0	154.5	159.5	162.0	167.0	169.5	186.5	206.0	225.5
5.35	5.75	5.00	5.40	1.07	131.5	132.0	134.5	137.0	138.0	138.5	142.0	147.0	149.5	157.0	162.0	164.5	169.5	172.0	189.0	208.5	228.0
5.55	5.95	5.20	5.60	1.07	131.2	131.7	134.2	136.7	137.7	138.2	141.7	146.7	149.2	156.7	161.7	164.2	169.2	171.7	188.7	208.2	227.7
5.75	6.15	5.40	5.80	1.07	130.9	131.4	133.9	136.4	137.4	137.9	141.4	146.4	148.9	156.4	161.4	163.9	168.9	171.4	188.4	207.9	227.4
5.95	6.35	5.60	6.00	1.07	130.5	131.0	133.5	136.0	137.0	137.5	141.0	146.0	148.5	156.0	161.0	163.5	168.5	171.0	188.0	207.5	227.0
6.15	6.55	5.80	6.20	1.07	130.2	130.7	133.2	135.7	136.7	137.2	140.7	145.7	148.2	155.7	160.7	163.2	168.2	170.7	187.7	207.2	226.7
8.35	8.95	8.00	8.60	1.07	126.6	127.1	129.6	132.1	133.1	133.6	137.1	142.1	144.6	152.1	157.1	159.6	164.6	167.1	184.1	203.6	223.1
4.75	5.15	* 4.40	4.80	1.08						142.9											
4.95	5.35	4.60	5.00	1.08	132.1	132.6	135.1	137.6	138.6	139.1	142.6	147.6	150.1	157.6	162.6	165.1	170.1	172.6	189.6	209.1	228.6
5.15	5.55	4.80	5.20	1.08	131.8	132.3	134.8	137.3	138.3	138.8	142.3	147.3	149.8	157.3	162.3	164.8	169.8	172.3	189.3	208.8	228.3
7.15	7.75	6.80	7.40	1.08	128.5	129.0	131.5	134.0	135.0	135.5	139.0	144.0	146.5	154.0	159.0	161.5	166.5	169.0	186.0	205.5	225.0
7.75	8.35	7.40	8.00	1.08	127.6	128.1	130.6	133.1	134.1	134.6	138.1	143.1	145.6	153.1	158.1	160.6	165.6	168.1	185.1	204.6	224.1
4.35	4.75	* 4.00	* 4.40	1.09						143.6											
4.55	4.95	* 4.20	4.60	1.09						143.2											
6.35	6.95	6.00	6.60	1.09	129.8	130.3	132.8	135.3	136.3	136.8	140.3	145.3	147.8	155.3	160.3	162.8	167.8	170.3	1		

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																										
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX		
BP	BP	BP	BP		46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	
4.95	5.55	4.60	5.20	1.12	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	
5.15	5.75	4.80	5.40	1.12	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	
6.55	7.35	6.20	7.00	1.12	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	
6.95	7.75	6.60	7.40	1.12	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	
4.55	5.15	4.20	4.80	1.13	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	
4.75	5.35	4.40	5.00	1.13	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	
5.95	6.75	5.60	6.40	1.13	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	
6.15	6.95	5.80	6.60	1.13	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	
6.35	7.15	6.00	6.80	1.13	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	
4.15	4.75	3.80	4.40	1.14	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	
4.35	4.95	4.00	4.60	1.14	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	
5.55	6.35	5.20	6.00	1.14	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	
5.75	6.55	5.40	6.20	1.14	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	
7.35	8.35	7.00	8.00	1.14	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	
3.95	4.55	3.60	4.20	1.15	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	
5.35	6.15	5.00	5.80	1.15	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	
6.75	7.75	6.40	7.40	1.15	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	
7.75	8.95	7.40	8.60	1.15	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	
3.75	4.35	3.40	4.00	1.16	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	
4.95	5.75	4.60	5.40	1.16	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	
5.15	5.95	4.80	5.60	1.16	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	
6.15	7.15	5.80	6.80	1.16	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	
6.35	7.35	6.00	7.00	1.16	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	
9.75	11.35	9.40	11.00	1.16	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	
4.75	5.55	4.40	5.20	1.17	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	
5.75	6.75	5.40	6.40	1.17	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	
5.95	6.95	5.60	6.60	1.17	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	
7.15	8.35	6.80	8.00	1.17	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	
8.35	9.75	8.00	9.40	1.17	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	
4.35	5.15	4.00	4.80	1.18	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	
4.55	5.35	4.20	5.00	1.18	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	
5.55	6.55	5.20	6.20	1.18	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	
6.55	7.75	6.20	7.40	1.18	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	
4.15	4.95	3.80	4.60	1.19	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	
5.15	6.15	4.80	5.80	1.19	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	
5.35	6.35	5.00	6.00	1.19	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	
3.95	4.75	3.60	4.40	1.20	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6														

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																								Speed Ratio	Sheave Datum Diameters		
B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	Small Sheave		Large Sheave		
27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	1.12	4.60	5.20
26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	1.12	4.80	5.40
24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	1.12	6.20	7.00
23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	1.12	6.60	7.40
27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	1.13	4.20	4.80
27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	1.13	4.40	5.00
25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	1.13	5.60	6.40
25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	1.13	5.80	6.60
24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	1.13	6.00	6.80
28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	1.14	3.80	4.40
28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	1.14	4.00	4.60
26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	1.14	5.20	6.00
25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	1.14	5.40	6.20
23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	1.14	7.00	8.00
28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	1.15	3.60	4.20
26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	1.15	5.00	5.80
24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	1.15	6.40	7.40
22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	1.15	7.40	8.60
29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	1.16	3.40	4.00
27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	1.16	4.60	5.40
26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	1.16	4.80	5.60
25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	1.16	5.80	6.80
24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	1.16	6.00	7.00
18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	1.16	9.40	11.00
27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	1.17	4.40	5.20
25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	1.17	5.40	6.40
25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	1.17	5.60	6.60
23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	1.17	6.80	8.00
21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	1.17	6.00	9.40
28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	1.18	4.00	4.80
27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	1.18	4.20	5.00
25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	1.18	5.20	6.20
24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	1.18	6.20	7.40
28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	1.19	3.80	4.60
26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	1.19	4.80	5.80
26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	1.19	5.00	6.00
28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	1.20	3.60	4.40
26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	1.20	4.60	5.60
25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	1.20	5.60	6.80
24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	1.20	5.80	7.00
23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	1.20	6.60	8.00
28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	1.21	3.40	4.20
27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	1.21	4.40	5.40
25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	1.21	5.40	6.60
27.6	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	1.22	4.20	5.20
26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	1.22	5.00	6.20
25.8	26.3	26.8</																									

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX					
93	94	95	96		97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114				
4.95	5.55	4.80	5.20	1.12	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2
5.15	5.75	4.80	5.40	1.12	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9
6.55	7.35	6.20	7.00	1.12	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5
6.95	7.75	6.60	7.40	1.12	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9
4.55	5.15	4.20	4.80	1.13	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	
4.75	5.35	4.40	5.00	1.13	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	
5.95	6.75	5.60	6.40	1.13	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5
6.15	6.95	5.80	6.60	1.13	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2
6.35	7.15	6.00	6.80	1.13	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8
4.15	4.75	3.80	4.40	1.14	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5	51.0	
4.35	4.95	4.00	4.60	1.14	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6	
5.55	6.35	5.20	6.00	1.14	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1
5.75	6.55	5.40	6.20	1.14	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8
7.35	8.35	7.00	8.00	1.14	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1
3.95	4.55	3.60	4.20	1.15	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3	
5.35	6.15	5.00	5.80	1.15	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4
6.75	7.75	6.40	7.40	1.15	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1
7.75	8.95	7.40	8.60	1.15	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3
3.75	4.35	3.40	4.00	1.16	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6	51.1	51.6	
4.95	5.75	4.60	5.40	1.16	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0
5.15	5.95	4.80	5.60	1.16	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7
6.15	7.15	5.80	6.80	1.16	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0
6.35	7.35	6.00	7.00	1.16	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7
9.75	11.35	9.40	11.00	1.16	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9
4.75	5.55	4.40	5.20	1.17	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	
5.75	6.75	5.40	6.40	1.17	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6
5.95	6.95	5.60	6.60	1.17	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3
7.15	8.35	6.80	8.00	1.17	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3
8.35	9.75	8.00	9.40	1.17	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2
4.35	5.15	4.00	4.80	1.18	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5	
4.55	5.35	4.20	5.00	1.18	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	
5.55	6.55	5.20	6.20	1.18	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9
6.55	7.75	6.20	7.40	1.18	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2
4.15	4.95	3.80	4.60	1.19	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	
5.15	6.15	4.80	5.80	1.19	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6
5.35	6.35	5.00	6.00	1.19	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3
3.95	4.75	3.60	4.40	1.20	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6	51.1	
4.95	5.95	4.60	5.60	1.20	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9
5.95	7.15	5.60	6.80	1.20	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2
6.15	7.35	5.80	7.00	1.20	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8
6.95	8.35	6.60	8.00	1.20	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4
3.75	4.55	3.40	4.20	1.21	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.4	
5.75	6.75	5.40	6.40	1.21	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	
5.95	6.95	5.60	6.60	1.21	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	
4.55	5.55	4.20	5.20	1.22	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	
5.35	6.35	5.00	6.20	1.22	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	
5.55	6.75	5.20	6.40	1.22	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	
6.35	7.75	6.00	7.40	1.22																						

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																								Sheave Datum Diameters			
B BX	B BX	B	B	B	B BX BP	B	B	B BX BP	B	B	B BX BP	B	B	B BX BP	B	B	B BX BP	B	B	B BX BP	B BX	B	Speed Ratio	Small Sheave	Large Sheave		
115	116	117	118	119	120	122	123	124	125	126	127	128	130	131	132	133	134	135	136	137	138	139	140	141	1.12	4.60	5.20
50.7	51.2	51.7	52.2	52.7	53.2	54.2	54.7	55.2	55.7	56.2	56.7	57.2	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2	63.7	1.12	4.60	5.20
50.4	50.9	51.4	51.9	52.4	52.9	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4	1.12	4.80	5.40
48.0	48.5	49.0	49.5	50.0	50.5	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	1.12	6.20	7.00
47.4	47.9	48.4	48.9	49.4	49.9	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	1.12	6.60	7.40
51.3	51.8				53.8				55.8				57.8						60.3						1.13	4.20	4.80
51.0	51.5				53.5				55.5				57.5						60.0						1.13	4.40	5.00
49.0	49.5	50.0	50.5	51.0	51.5	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	1.13	5.60	6.40
48.7	49.2	49.7	50.2	50.7	51.2	52.2	52.7	53.2	53.7	54.2	54.7	55.2	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	1.13	5.80	6.60
48.3	48.8	49.3	49.8	50.3	50.8	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	1.13	6.00	6.80
52.0	52.5				54.5				56.5				58.5						61.0						1.13	3.80	4.40
51.6	52.1				54.1				56.1				58.1						60.6						1.14	4.00	4.60
49.6	50.1	50.6	51.1	51.6	52.1	53.1	53.6	54.1	54.6	55.1	55.6	56.1	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	62.6	1.14	5.20	6.00
49.3	49.8	50.3	50.8	51.3	51.8	52.8	53.3	53.8	54.3	54.8	55.3	55.8	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	1.14	5.40	6.20
46.6	47.1	47.6	48.1	48.6	49.1	50.1	50.6	51.1	51.6	52.1	52.6	53.1	54.1	54.6	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.1	59.6	1.14	7.00	8.00
52.3	52.8				54.8				56.8				58.8						61.3						1.15	3.60	4.20
49.9	50.4	50.9	51.4	51.9	52.4	53.4	53.9	54.4	54.9	55.4	55.9	56.4	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	1.15	5.00	5.80
47.6	48.1	48.6	49.1	49.6	50.1	51.1	51.6	52.1	52.6	53.1	53.6	54.1	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	1.15	8.40	7.40
45.8	46.3	46.8	47.3	47.8	48.3	49.3	49.8	50.3	50.8	51.3	51.8	52.3	53.3	53.8	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	1.15	7.40	8.60
52.6	53.1				55.1				57.1				59.1						61.6						1.16	3.40	4.00
50.5	51.0	51.5	52.0	52.5	53.0	54.0	54.5	55.0	55.5	56.0	56.5	57.0	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	1.16	4.60	5.40
50.2	50.7	51.2	51.7	52.2	52.7	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2	1.16	4.80	5.60
48.5	49.0	49.5	50.0	50.5	51.0	52.0	52.5	53.0	53.5	54.0	54.5	55.0	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	1.16	5.80	6.80
48.2	48.7	49.2	49.7	50.2	50.7	51.7	52.2	52.7	53.2	53.7	54.2	54.7	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	1.16	6.00	7.00
42.4	42.9	43.4	43.9	44.4	44.9	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	1.16	9.40	11.00
50.9	51.4				53.4				55.4				57.4						59.9						1.17	4.40	5.20
49.1	49.6	50.1	50.6	51.1	51.6	52.6	53.1	53.6	54.1	54.6	55.1	55.6	56.6	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	1.17	5.40	6.40
48.8	49.3	49.8	50.3	50.8	51.3	52.3	52.8	53.3	53.8	54.3	54.8	55.3	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	1.17	5.60	6.60
46.8	47.3	47.8	48.3	48.8	49.3	50.3	50.8	51.3	51.8	52.3	52.8	53.3	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	1.17	6.80	8.00
44.7	45.2	45.7	46.2	46.7	47.2	48.2	48.7	49.2	49.7	50.2	50.7	51.2	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.2	57.7	1.17	8.00	9.40
51.5	52.0				54.0				56.0				58.0						60.5						1.18	4.00	4.80
51.2	51.7				53.7				55.7				57.7						60.2						1.18	4.20	5.00
49.4	49.9	50.4	50.9	51.4	51.9	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	1.18	5.20	6.20
47.7	48.2	48.7	49.2	49.7	50.2	51.2	51.7	52.2	52.7	53.2	53.7	54.2	55.2	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	1.18	6.20	7.40
51.8	52.3				54.3				56.3				58.3						60.8						1.19	3.80	4.60
50.1	50.6	51.1	51.6	52.1	52.6	53.6	54.1	54.6	55.1	55.6	56.1	56.6	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	62.6	63.1	1.19	4.80	5.80
49.8	50.3	50.8	51.3	51.8	52.3	53.3	53.8	54.3	54.8	55.3	55.8	56.3	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	1.19	5.00	6.00
52.1	52.6				54.6				56.6				58.6						61.1						1.20	3.60	4.40
50.4	50.9	51.4	51.9	52.4	52.9	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4	1.20	4.60	5.60
48.7	49.2	49.7	50.2	50.7	51.2	52.2	52.7	53.2	53.7	54.2	54.7	55.2	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	1.20	5.60	6.80
48.3	48.8	49.3	49.8	50.3	50.8	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	1.20	5.80	7.00
46.9	47.4	47.9	48.4	48.9	49.4	50.4	50.9	51.4	51.9	52.4	52.9	53.4	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	1.20	6.60	8.00
52.4	52.9				54.9				56.9				58.9						61.4						1.21	3.40	4.20
50.7	51.2				53.2				55.2				57.2						59.7						1.21	4.40	5.40
49.0	49.5	50.0	50.5	51.0	51.5	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	1.21	5.40	6.60	
51.0	51.5				53.5				55.5				57.5						60.0						1.22	4.20	5.20
49.6	50.1	50.6	51.1	51.6	52.1	53.1	53.6	54.1	54.6	55.1	55.6	56.1	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	1.22	5.00	6.20	
49.3	49.8	50.3	50.8	51.3	51.8	52.8	53.3	53.8	54.3	54.8	55.3	55.8	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	1.22	5.20	6.40
47.9	48.4	48.9	49.4	49.9	50.4	51.4	51.9	52.4	52.9	53.4	53.9	54.4	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	1.22	6.00	7.40
46.1	46.6	47.1	47.6	48.1	48.6	49.6	50.1	50.6	51.1	51.6	52.1	52.6	53.6	54.1	54.6	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.1	1.22	7.00	8.60
51.3	51.8				53.8				55.8				57.8						60.3						1.23	4.00	5.00
49.9	50.4	50.9	51.4	51.9	52.4	53.4	53.9	54.4	54.9	55.4	55.9	56.4	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	1.23	4.80	6.00</

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B			
4.95	5.55	4.60	5.20	1.12	142	143	144	145	146	147	148	149	150	151	152	153	154	156	157	158	160	161	162	164	165	166
5.15	5.75	4.80	5.40	1.12	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.4	69.9	70.9	71.4	71.9	72.9	73.4	73.9	74.9	75.4	75.9
6.55	7.35	6.20	7.00	1.12	61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.5	69.0	69.5	70.5	71.0	71.5	72.5	73.0	73.5
6.95	7.75	6.60	7.40	1.12	60.9	61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.9	68.4	68.9	69.9	70.4	70.9	71.9	72.4	72.9
4.55	5.15	4.20	4.80	1.13																						
4.75	5.35	4.40	5.00	1.13																						
5.95	6.75	5.60	6.40	1.13	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	69.5	70.0	70.5	71.5	72.0	72.5	73.5	74.0	74.5
6.15	6.95	5.80	6.60	1.13	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.2	69.2	69.7	70.2	71.2	71.7	72.2	73.2	73.7	74.2
6.35	7.15	6.00	6.80	1.13	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.8	69.3	69.8	70.8	71.3	71.8	72.8	73.3	73.8
4.15	4.75	3.80	4.40	1.14																						
4.35	4.95	4.00	4.60	1.14																						
5.55	6.35	5.20	6.00	1.14	63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6	69.1	70.1	70.6	71.1	72.1	72.6	73.1	74.1	74.6	75.1
5.75	6.55	5.40	6.20	1.14	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	68.8	69.8	70.3	70.8	71.8	72.3	72.8	73.8	74.3	74.8
7.35	8.35	7.00	8.00	1.14	60.1	60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.1	67.1	67.6	68.1	69.1	69.6	70.1	71.1	71.6	72.1
3.95	4.55	3.60	4.20	1.15																						
5.35	6.15	5.00	5.80	1.15	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.4	70.4	70.9	71.4	72.4	72.9	73.4	74.4	74.9	75.4
6.75	7.75	6.40	7.40	1.15	61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	68.1	68.6	69.1	70.1	70.6	71.1	72.1	72.6	73.1
7.75	8.95	7.40	8.60	1.15	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	66.3	66.8	67.3	68.3	68.8	69.3	70.3	70.8	71.3
3.75	4.35	3.40	4.00	1.16																						
4.95	5.75	4.60	5.40	1.16	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	69.0	69.5	70.0	71.0	71.5	72.0	73.0	73.5	74.0	75.0	75.5	76.0
5.15	5.95	4.80	5.60	1.16	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.2	68.7	69.2	69.7	70.7	71.2	71.7	72.7	73.2	73.7	74.7	75.2	75.7
6.15	7.15	5.80	6.80	1.16	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	69.0	69.5	70.0	71.0	71.5	72.0	73.0	73.5	74.0
6.35	7.35	6.00	7.00	1.16	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.7	69.2	69.7	70.7	71.2	71.7	72.7	73.2	73.7
9.75	11.35	9.40	11.00	1.16	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.9	63.4	63.9	64.9	65.4	65.9	66.9	67.4	67.9
4.75	5.55	4.40	5.20	1.17																						
5.75	6.75	5.40	6.40	1.17	62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6	69.6	70.1	70.6	71.6	72.1	72.6	73.6	74.1	74.6
5.95	6.95	5.60	6.60	1.17	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	69.3	69.8	70.3	71.3	71.8	72.3	73.3	73.8	74.3
7.15	8.35	6.80	8.00	1.17	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	67.3	67.8	68.3	69.3	69.8	70.3	71.3	71.8	72.3
8.35	9.75	8.00	9.40	1.17	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2	63.7	64.2	65.2	65.7	66.2	67.2	67.7	68.2	69.2	69.7	70.2
4.35	5.15	4.00	4.80	1.18																						
4.55	5.35	4.20	5.00	1.18																						
5.55	6.55	5.20	6.20	1.18	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.9	70.4	70.9	71.9	72.4	72.9	73.9	74.4	74.9
6.55	7.55	6.20	7.40	1.18	61.2	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	68.2	68.7	69.2	70.2	70.7	71.2	72.2	72.7	73.2
4.15	4.95	3.80	4.60	1.19																						
5.15	6.15	4.80	5.80	1.19	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6	69.1	69.6	70.6	71.1	71.6	72.6	73.1	73.6	74.6	75.1	75.6
5.35	6.35	5.00	6.00	1.19	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	68.8	69.3	70.3	70.8	71.3	72.3	72.8	73.3	74.3	74.8	75.3
3.95	4.75	3.60	4.40	1.20																						
4.95	5.95	4.60	5.60	1.20	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.4	69.9	70.9	71.4	71.9	72.9	73.4	73.9	74.9	75.4	75.9
5.95	7.15	5.80	6.80	1.20	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.2	69.2	69.7	70.2	71.2	71.7	72.2	73.2	73.7	74.2
6.15	7.35	6.00	7.00	1.20	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.8	69.3	69.8	70.8	71.3	71.8	72.8	73.3	73.8
8.95	8.35	6.60	8.00	1.20	60.4	60.9	61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	67.4	67.9	68.4	69.4	69.9	70.4	71.4	71.9	72.4
3.75	4.55	3.40	4.20	1.21																						
4.75	5.75	4.40	5.40	1.21																						
5.75	6.95	5.40	6.60	1.21	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	69.5	70.0	70.5	71.5	72.0	72.5	73.5	74.0	74.5
4.55	5.55	4.20	5.20	1.22																						
5.35	6.55	5.00	6.20	1.22	63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6	69.1	70.1	70.6	71.1	72.1	72.6	73.1	74.1	74.6	75.1
5.55	6.75	5.20	6.40	1.22	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	68.8	69.8	70.3	70.8	71.8	72.3	72.8	73.8	74.3	74.8
6.35	7.75	6.00	7.40	1.22	61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	68.4	68.9	69.4	70.4	70.9	71.4	72.4	72.9	73.4
7.35	8.95	7.00	8.60	1.22	59.6	60.1	60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.6	67.1	67.6	68.6	69.1	69.6	70.6	71.1	71.6
4.35	5.35	4.00	5.00	1.23																						
5.15	6.35	4.80	6.00	1.23	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.4	70.4	70.9	71.4	72.4	72.9	73.4	74.4	74.9	75.4
4.15	5.15	3.80	4.80	1.24																						
4.95	6.15	4.60	5.80	1.24	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.2	68.7	69.2	69.7	70.7	71.2	71.7	72.7	73.2	73.7	74.7	75.2	75.7
5.75	7.15	5.40	6.80	1.24	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	69.3	69.8	70.3	71.3	71.8	72.3	73.3	73.8	74.3
5.95	7.35	5.60	7.00	1.24	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.											

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																					Speed Ratio	Sheave Datum Diameters					
B	B	B	B	B	B BX BP	B	B	B	B	B BX	B	B	B	B	B	B	B	B BX BP	B	B		Small Sheave	Large Sheave				
167	168	169	170	172	173	174	175	177	178	180	182	184	185	186	187	188	190	191	192	195	197	199	200	201	1.12	4.60	5.20
76.7	77.2	77.7	78.2	78.2	79.7	80.2	80.7	81.7	82.2	83.2	84.2	85.2	85.7	86.2	86.7	87.2	88.2	88.7	89.2	90.7	91.7	92.7	93.2	93.7	1.12	4.80	5.40
76.4	76.9	77.4	77.9	78.9	79.4	79.9	80.4	81.4	81.9	82.9	83.9	84.9	85.9	86.4	86.9	87.9	88.4	88.9	90.4	91.4	92.4	92.9	93.4	93.9	1.12	6.20	7.00
74.0	74.5	75.0	75.5	76.5	77.0	77.5	78.0	79.0	79.5	80.5	81.5	82.5	83.0	83.5	84.0	84.5	85.5	86.0	86.5	88.0	89.0	90.0	90.5	91.0	1.12	6.60	7.40
73.4	73.9	74.4	74.9	75.9	76.4	76.9	77.4	78.4	78.9	79.9	80.9	81.9	82.4	82.9	83.4	83.9	84.9	85.4	85.9	87.4	88.4	89.4	89.9	90.4	1.12	6.60	7.40
					80.3					83.8										91.3					1.13	4.40	4.80
					80.0					83.5										91.0					1.13	4.40	5.00
75.0	75.5	76.0	76.5	77.5	78.0	78.5	79.0	80.0	80.5	81.5	82.5	83.5	84.0	84.5	85.0	85.5	86.5	87.0	87.5	89.0	90.0	91.0	91.5	92.0	1.13	5.60	6.40
74.7	75.2	75.7	76.2	77.2	77.7	78.2	78.7	79.7	80.2	81.2	82.2	83.2	83.7	84.2	84.7	85.2	86.2	86.7	87.2	88.7	89.7	90.7	91.2	91.7	1.13	5.80	6.60
74.3	74.8	75.3	75.8	76.8	77.3	77.8	78.3	79.3	79.8	80.8	81.8	82.8	83.3	83.8	84.3	84.8	85.8	86.3	86.8	88.3	89.3	90.3	90.8	91.3	1.13	6.00	6.80
					81.0					84.5										92.0					1.13	6.00	6.80
					80.6					84.1										91.6					1.14	3.80	4.40
					81.6					85.1										92.6					1.14	4.00	4.60
75.6	76.1	76.6	77.1	78.1	78.6	79.1	79.6	80.6	81.1	82.1	83.1	84.1	84.6	85.1	85.6	86.1	87.1	87.6	89.1	90.6	91.6	92.1	92.6	1.14	5.20	6.00	
75.3	75.8	76.3	76.8	77.8	78.3	78.8	79.3	80.3	80.8	81.8	82.8	83.8	84.3	84.8	85.3	85.8	86.8	87.3	87.8	89.3	90.3	91.3	91.8	92.3	1.14	5.40	6.20
72.6	73.1	73.6	74.1	75.1	75.6	76.1	76.6	77.6	78.1	79.1	80.1	81.1	81.6	82.1	82.6	83.1	84.1	84.6	85.1	86.6	87.6	88.6	89.1	89.6	1.14	7.00	8.00
					81.3					84.8										92.3					1.15	3.60	4.20
75.9	76.4	76.9	77.4	78.4	78.9	79.4	79.9	80.9	81.4	82.4	83.4	84.4	84.9	85.4	85.9	86.4	87.4	87.9	88.4	89.9	90.9	91.9	92.4	92.9	1.15	5.00	5.80
73.6	74.1	74.6	75.1	76.1	76.6	77.1	77.6	78.6	79.1	80.1	81.1	82.1	82.6	83.1	83.6	84.1	85.1	85.6	86.1	87.6	88.6	89.6	90.1	90.6	1.15	6.40	7.40
71.8	72.3	72.8	73.3	74.3	74.8	75.3	75.8	76.8	77.3	78.3	79.3	80.3	80.8	81.3	81.8	82.3	83.3	83.8	84.3	85.8	86.8	87.8	88.3	88.8	1.15	7.40	8.60
					81.6					85.1										92.6					1.16	3.40	4.00
76.5	77.0	77.5	78.0	79.0	79.5	80.0	80.5	81.5	82.0	83.0	84.0	85.0	85.5	86.0	86.5	87.0	88.0	88.5	89.0	90.5	91.5	92.5	93.0	93.5	1.16	4.60	5.40
76.2	76.7	77.2	77.7	78.7	79.2	79.7	80.2	81.2	81.7	82.7	83.7	84.7	85.2	85.7	86.2	86.7	87.7	88.2	88.7	90.2	91.2	92.2	92.7	93.2	1.16	4.80	5.60
74.5	75.0	75.5	76.0	77.0	77.5	78.0	78.5	79.5	80.0	81.0	82.0	83.0	83.5	84.0	84.5	85.0	86.0	86.5	87.0	88.5	89.5	90.5	91.0	91.5	1.16	5.80	6.80
74.2	74.7	75.2	75.7	76.7	77.2	77.7	78.2	79.2	79.7	80.7	81.7	82.7	83.2	83.7	84.2	84.7	85.7	86.2	86.7	88.2	89.2	90.2	90.7	91.2	1.16	6.00	7.00
68.4	68.9	69.4	69.9	70.9	71.4	71.9	72.4	73.4	73.9	74.9	75.9	76.9	77.4	77.9	78.4	78.9	79.9	80.4	80.9	82.4	83.4	84.4	84.9	85.4	1.16	9.40	11.00
					79.9					83.4										90.9					1.17	4.40	5.20
75.1	75.6	76.1	76.6	77.6	78.1	78.6	79.1	80.1	80.6	81.6	82.6	83.6	84.1	84.6	85.1	85.6	86.6	87.1	87.6	89.1	90.1	91.1	91.6	92.1	1.17	5.40	6.40
74.8	75.3	75.8	76.3	77.3	77.8	78.3	78.8	79.8	80.3	81.3	82.3	83.3	83.8	84.3	84.8	85.3	86.3	86.8	87.3	88.8	89.8	90.8	91.3	91.8	1.17	5.60	6.60
72.8	73.3	73.8	74.3	75.3	75.8	76.3	76.8	77.8	78.3	79.3	80.3	81.3	81.8	82.3	82.8	83.3	84.3	84.8	85.3	86.8	87.8	88.8	89.3	89.8	1.17	6.80	8.00
70.7	71.2	71.7	72.2	73.2	73.7	74.2	74.7	75.7	76.2	77.2	78.2	79.2	79.7	80.2	80.7	81.2	82.2	82.7	83.2	84.7	85.7	86.7	87.2	87.7	1.17	8.00	9.40
					80.2					84.0										91.5					1.18	4.00	4.80
					80.7					83.7										91.2					1.18	4.20	5.00
75.4	75.9	76.4	76.9	77.9	78.4	78.9	79.4	80.4	80.9	81.9	82.9	83.9	84.4	84.9	85.4	85.9	86.9	87.4	87.9	89.4	90.4	91.4	91.9	92.4	1.18	5.20	6.20
73.7	74.2	74.7	75.2	76.2	76.7	77.2	77.7	78.7	79.2	80.2	81.2	82.2	82.7	83.2	83.7	84.2	85.2	85.7	86.2	87.7	88.7	89.7	90.2	90.7	1.18	6.20	7.40
					80.8					84.3										91.8					1.19	3.80	4.60
76.1	76.6	77.1	77.6	78.6	79.1	79.6	80.1	81.1	81.6	82.6	83.6	84.6	85.1	85.6	86.1	86.6	87.6	88.1	88.6	90.1	91.1	92.1	92.6	93.1	1.19	4.80	5.80
75.8	76.3	76.8	77.3	78.3	78.8	79.3	79.8	80.8	81.3	82.3	83.3	84.3	84.8	85.3	85.8	86.3	87.3	87.8	88.3	89.8	90.8	91.8	92.3	92.8	1.19	5.00	6.00
					81.1					84.6										92.1					1.20	3.60	4.40
76.4	76.9	77.4	77.9	78.9	79.4	79.9	80.4	81.4	81.9	82.9	83.9	84.9	85.4	85.9	86.4	86.9	87.9	88.4	88.9	90.4	91.4	92.4	92.9	93.4	1.20	4.60	5.60
74.7	75.2	75.7	76.2	77.2	77.7	78.2	78.7	79.7	80.2	81.2	82.2	83.2	83.7	84.2	84.7	85.2	86.2	86.7	87.2	88.7	89.7	90.7	91.2	91.7	1.20	5.60	6.80
74.3	74.8	75.3	75.8	76.8	77.3	77.8	78.3	79.3	79.8	80.8	81.8	82.8	83.3	83.8	84.3	84.8	85.8	86.3	86.8	88.3	89.3	90.3	90.8	91.3	1.20	5.80	7.00
72.9	73.4	73.9	74.4	75.4	75.9	76.4	76.9	77.9	78.4	79.4	80.4	81.4	81.9	82.4	82.9	83.4	84.4	84.9	85.4	86.9	87.9	88.9	89.4	89.9	1.20	6.60	8.00
					81.4					84.9										92.4					1.21	3.40	4.20
					81.7					83.2										90.7					1.21	4.40	5.40
75.0	75.5	76.0	76.5	77.5	78.0	78.5	79.0	80.0	80.5	81.5	82.5	83.5	84.0	84.5	85.0	85.5	86.5	87.0	87.5	89.0	90.0	91.0	91.5	92.0	1.21	5.40	6.60
					80.0					83.5										91.0					1.22	4.20	5.20
75.6	76.1	76.6	77.1	78.1	78.6	79.1	79.6	80.6	81.1	82.1	83.1	84.1	84.6	85.1	85.6	86.1	87.1	87.6	88.1	89.6	90.6	91.6	92.1	92.6	1.22	5.00	6.20
75.3	75.8	76.3	76.8	77.8	78.3	78.8	79.3	80.3	80.8	81.8	82.8	83.8	84.3	84.8	85.3	85.8	86.8	87.3	87.8	89.3	90.3	91.3	91.8	92.3	1.22	5.20	6.40
73.9	74.4	74.9	75.4	76.4	76.9	77.4	77.9	78.9	79.4	80.4	81.4	82.4	82.9	83.4	83.9	84.4	85.4	85.9	86.4	87.9	88.9	89.9	90.4	90.9	1.22	6.00	7.40
72.1	72.6	73.1	73.6	74.6	75.1	75.6	76.1	77.1	77.6	78.6	79.6	80.6	81.1	81.6	82.1	82.6	83.6	84.1	84.6	86.1	87.1	88.1	88.6	89.1	1.22	7.00	8.60
					80.3					83.8										91.3					1.23	4.00	5.00
75.9	76.4	76.9	77.4	78.4	78.9	79.4	79.9	80.9	81.4	82.4	83.4	84.4	84.9	85.4	85.9	86.4	87.4	87.9	88.4	89.9	90.9	91.9	92.4	92.9	1.23	4.80	6.00
					80.6					84.1										91.6							

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters	
B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		Small Sheave	Large Sheave
265	270	276	279	280	285	290	292	293	300	310	315	330	340	345	355	360	394	433	472	1.12	4.60	5.20
125.0	127.5	130.5	132.0	132.5	135.0	137.5	138.5	139.0	142.5	147.5	150.0	157.5	162.5	165.0	170.0	172.5	189.5	209.0	228.5	1.12	4.80	5.40
124.6	127.1	130.1	131.6	132.1	134.6	137.1	138.1	138.6	142.1	147.1	149.6	157.1	162.1	164.6	169.6	172.1	189.1	208.6	228.1	1.12	6.20	7.00
122.3	124.8	127.8	129.3	129.8	132.3	134.8	135.8	136.3	139.8	144.8	147.3	154.8	159.8	162.3	167.3	169.8	186.8	206.3	225.8	1.12	6.60	7.40
121.7	124.2	127.2	128.7	129.2	131.7	134.2	135.2	135.7	139.2	144.2	146.7	154.2	159.2	161.7	166.7	169.2	186.2	205.7	225.2	1.12	4.20	4.80
	128.1								143.1											1.13	4.40	5.00
	127.8								142.8											1.13	5.60	6.40
123.2	125.7	128.7	130.2	130.7	133.2	135.7	136.7	137.2	140.7	145.7	148.2	155.7	160.7	163.2	168.2	170.7	187.7	207.2	226.7	1.13	5.80	6.60
122.9	125.4	128.4	129.9	130.4	132.9	135.4	136.4	136.9	140.4	145.4	147.9	155.4	160.4	162.9	167.9	170.4	187.4	206.9	226.4	1.13	6.00	6.80
122.6	125.1	128.1	129.6	130.1	132.6	135.1	136.1	136.6	140.1	145.1	147.6	155.1	160.1	162.6	167.6	170.1	187.1	206.6	226.1	1.14	3.80	4.40
	128.7								143.7											1.14	4.00	4.60
	128.4								143.4											1.14	5.20	6.00
123.9	126.4	129.4	130.9	131.4	133.9	136.4	137.4	137.9	141.4	146.4	148.9	156.4	161.4	163.9	168.9	171.4	188.4	207.9	227.4	1.14	5.40	6.20
123.5	126.0	129.0	130.5	131.0	133.5	136.0	137.0	137.5	141.0	146.0	148.5	156.0	161.0	163.5	168.5	171.0	188.0	207.5	227.0	1.14	7.00	8.00
120.9	123.4	126.4	127.9	128.4	130.9	133.4	134.4	134.9	138.4	143.4	145.9	153.4	158.4	160.9	165.9	168.4	185.4	204.9	224.4	1.15	3.60	4.20
	129.0								144.0											1.15	5.00	5.80
124.2	126.7	129.7	131.2	131.7	134.2	136.7	137.7	138.2	141.7	146.7	149.2	156.7	161.7	164.2	169.2	171.7	188.7	208.2	227.7	1.15	6.40	7.40
121.8	124.3	127.3	128.8	129.3	131.8	134.3	135.3	135.8	139.3	144.3	146.8	154.3	159.3	161.8	166.8	169.3	186.3	205.8	225.3	1.15	7.40	8.60
120.1	122.6	125.6	127.1	127.6	130.1	132.6	133.6	134.1	137.6	142.6	145.1	152.6	157.6	160.1	165.1	167.6	184.6	204.1	223.6	1.16	3.40	4.00
	129.3								144.3											1.16	4.60	5.40
124.8	127.3	130.3	131.8	132.3	134.8	137.3	138.3	138.8	142.3	147.3	149.8	157.3	162.3	164.8	169.8	172.3	189.3	208.8	228.3	1.16	4.80	5.60
124.5	127.0	130.0	131.5	132.0	134.5	137.0	138.0	138.5	142.0	147.0	149.5	157.0	162.0	164.5	169.5	172.0	189.0	208.5	228.0	1.16	5.80	6.80
122.8	125.3	128.3	129.8	130.3	132.8	135.3	136.3	136.8	140.3	145.3	147.8	155.3	160.3	162.8	167.8	170.3	187.3	206.8	226.3	1.16	6.00	7.00
124.4	124.9	127.9	129.4	129.9	132.4	134.9	135.9	136.4	139.9	144.9	147.4	154.9	159.9	162.4	167.4	169.9	186.9	206.4	225.9	1.16	9.40	11.00
116.6	119.1	122.1	123.6	124.1	126.6	129.1	130.1	130.6	134.1	139.1	141.6	149.1	154.1	156.6	161.6	164.1	181.1	200.6	220.1	1.16	4.40	5.20
	127.6								142.6											1.17	5.40	6.40
123.4	125.9	128.9	130.4	130.9	133.4	135.9	136.9	137.4	140.9	145.9	148.4	155.9	160.9	163.4	168.4	170.9	187.9	207.4	226.9	1.17	5.60	6.60
123.1	125.6	128.6	130.1	130.6	133.1	135.6	136.6	137.1	140.6	145.6	148.1	155.6	160.6	163.1	168.1	170.6	187.6	207.1	226.6	1.17	6.80	8.00
121.0	123.5	126.5	128.0	128.5	131.0	133.5	134.5	135.0	138.5	143.5	146.0	153.5	158.5	161.0	166.0	168.5	185.5	205.0	224.5	1.17	8.00	9.40
119.0	121.5	124.5	126.0	126.5	129.0	131.5	132.5	133.0	136.5	141.5	144.0	151.5	156.5	159.0	164.0	166.5	183.5	203.0	222.5	1.18	4.00	4.80
	128.2								143.2											1.18	4.20	5.00
	127.9								142.9											1.18	5.20	6.20
123.7	126.2	129.2	130.7	131.2	133.7	136.2	137.2	137.7	141.2	146.2	148.7	156.2	161.2	163.7	168.7	171.2	188.2	207.7	227.2	1.18	6.20	7.40
122.0	124.5	127.5	129.0	129.5	132.0	134.5	135.5	136.0	139.5	144.5	147.0	154.5	159.5	162.0	167.0	169.5	186.5	206.0	225.5	1.19	3.80	4.60
	128.6								143.6											1.19	4.80	5.60
124.3	126.8	129.8	131.3	131.8	134.3	136.8	137.8	138.3	141.8	146.8	149.3	156.8	161.8	164.3	169.3	171.8	188.8	208.3	227.8	1.19	4.80	5.60
124.0	126.5	129.5	131.0	131.5	134.0	136.5	137.5	138.0	141.5	146.5	149.0	156.5	161.5	164.0	169.0	171.5	188.5	208.0	227.5	1.20	5.00	6.00
	128.9								143.9											1.20	3.60	4.40
124.6	127.1	130.1	131.6	132.1	134.6	137.1	138.1	138.6	142.1	147.1	149.6	157.1	162.1	164.6	169.6	172.1	189.1	208.6	228.1	1.20	4.60	5.60
122.9	125.4	128.4	129.9	130.4	132.9	135.4	136.4	136.9	140.4	145.4	147.9	155.4	160.4	162.9	167.9	170.4	187.4	206.9	226.4	1.20	5.60	6.60
122.6	125.1	128.1	129.6	130.1	132.6	135.1	136.1	136.6	140.1	145.1	147.6	155.1	160.1	162.6	167.6	170.1	187.1	206.6	226.1	1.20	5.80	7.00
121.2	123.7	126.7	128.2	128.7	131.2	133.7	134.7	135.2	138.7	143.7	146.2	153.7	158.7	161.2	166.2	168.7	185.7	205.2	224.7	1.20	6.60	8.00
	129.2								144.2											1.21	3.40	4.20
	127.5								142.5											1.21	4.40	5.40
123.2	125.7	128.7	130.2	130.7	133.2	135.7	136.7	137.2	140.7	145.7	148.2	155.7	160.7	163.2	168.2	170.7	187.7	207.2	226.7	1.21	5.40	6.60
	127.8								142.8											1.22	4.20	5.20
123.9	126.4	129.4	130.9	131.4	133.9	136.4	137.4	137.9	141.4	146.4	148.9	156.4	161.4	163.9	168.9	171.4	188.4	207.9	227.4	1.22	5.00	6.20
123.5	126.0	129.0	130.5	131.0	133.5	136.0	137.0	137.5	141.0	146.0	148.5	156.0	161.0	163.5	168.5	171.0	188.0	207.5	227.0	1.22	5.20	6.40
122.1	124.6	127.6	129.1	129.6	132.1	134.6	135.6	136.1	139.6	144.6	147.1	154.6	159.6	162.1	167.1	169.6	186.6	206.1	225.6	1.22	6.00	7.40
120.4	122.9	125.9	127.4	127.9	130.4	132.9	133.9	134.4	137.9	142.9	145.4	152.9	157.9	160.4	165.4	167.9	184.9	204.4	223.9	1.22	7.00	8.60
	128.1								143.1											1.23	4.00	5.00
124.2	126.7	129.7	131.2	131.7	134.2	136.7	137.7	138.2	141.7	146.7	149.2	156.7	161.7	164.2	169.2	171.7	188.7	208.2	227.7	1.23	4.80	6.00
	128.4								143.4											1.24	3.60	4.80
124.5	127.0	130.0	131.5	132.0	134.5	137.0	138.0	138.5	142.0	147.0	149.5	157.0	162.0	164.5	169.5	172.0	189.0	208.5	228.0	1.24	4.60	5.80
123.1	125.6	128.6	130.1	130.6	133.1	135.6	136.6	137.1	140.6	145.6	148.1	155.6	160.6	163.1	168.1	170.6	187.6	207.1	226.6	1.24	5.40	6.80
122.8	125.3	128.3	129.8	130.3	132.8	135.3	136.3	136.8	140.3	145.3	147.8	155.3	160.3	162.8	167.8	170.3	187.3	206.8	226.3	1.24	5.60	7.00
121.3	123.8	126.8	128.3	128.8	131.3	133.8	134.8	135.3	138.8	143.8	146.3	153.8	158.8	161.3	166.3	168.8	185.8	205.3	224.8	1.24	6.40	8.00
	128.7								143.7											1.25	3.60	4.60
	127.3								142.3											1.25	4.40	5.60

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																						
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX					
24	25	26	27		28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45					
4.15	5.35	3.80	5.00	1.29	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	
4.75	6.15	4.40	5.80	1.29					6.9	7.4	7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	
5.55	7.15	5.20	6.80	1.29												8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	13.0	13.5	14.0	
6.95	8.95	6.60	8.60	1.29																							
3.95	5.15	3.60	4.80	1.30	6.3	6.8	7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	
5.35	6.95	5.00	6.60	1.30												9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	
5.95	7.75	5.60	7.40	1.30												8.1	8.6	9.1	9.6	10.1	10.7	11.2	11.7	12.2	12.7	13.2	
4.55	5.95	4.20	5.60	1.31			6.7	7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7		
5.15	6.75	4.80	6.40	1.31					7.1	7.6	8.1	8.6	9.1			9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	
6.35	8.35	6.00	8.00	1.31																							
9.75	12.75	9.40	12.40	1.31																							
3.75	4.95	3.40	4.60	1.32	6.6	7.1	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	
4.35	5.75	4.00	5.40	1.32			6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	
4.95	6.55	4.60	6.20	1.32												9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	
5.55	7.35	5.20	7.00	1.32												8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	
6.75	8.95	6.40	8.60	1.33																							
7.35	9.75	7.00	9.40	1.33																							
4.15	5.55	3.80	5.20	1.34			6.3	6.8	7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3
4.75	6.35	4.40	6.00	1.34												10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7
5.35	7.15	5.00	6.80	1.34												9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6
3.95	5.35	3.60	5.00	1.35	6.1	6.6	7.1	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	
4.55	6.15	4.20	5.80	1.35				6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	
5.15	6.95	4.80	6.60	1.35												9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	
5.75	7.75	5.40	7.40	1.35												8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	
4.95	6.75	4.60	6.40	1.36					7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	
6.15	8.35	5.80	8.00	1.36																							
7.15	9.75	6.80	9.40	1.36																							
8.35	11.35	8.00	11.00	1.36																							
3.75	5.15	3.40	4.80	1.37	6.4	6.9	7.4	7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	
4.35	5.95	4.00	5.60	1.37			6.3	6.8	7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	
5.35	7.35	5.00	7.00	1.37												9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9
6.55	8.95	6.20	8.60	1.37																							
4.75	6.55	4.40	6.20	1.38						7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	
4.15	5.75	3.80	5.40	1.38			6.1	6.6	7.1	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.2	13.7	14.2	14.7	15.2	15.7	
5.15	7.15	4.80	6.80	1.39												9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	
4.55	6.35	4.20	6.00	1.40				6.8	7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	
4.95	6.95	4.60	6.60	1.40						7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	
5.55	7.75	5.20	7.40	1.40												7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	
5.95	8.35	5.60	8.00	1.40																							
6.95	9.75	6.60	9.40	1.40																							
3.95	5.55	3.60	5.20	1.41	5.9	6.4	6.9	7.4	7.9	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	
4.35	6.15	4.00	5.80	1.41												10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	
6.35	8.95	6.00	8.60	1.41																							
4.75	6.75	4.40	6.40	1.42						6.8	7.3	7.9	8.4	8.9	9.4	9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	
8.95	12.75	8.60	12.40	1.42																							
3.75	5.35	3.40	5.00	1.43	6.3	6.8	7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	
4.15	5.95	3.80	5.60	1.43			6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	
5.15	7.35	4.80	7.00	1.43												9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	
9.75	13.95	9.40	13.60	1.43																							
4.55	6.55	4.20	6.20	1.44						6.7	7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	
4.95	7.15	4.60	6.80	1.44												9.9	10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	
6.75	9.75	6.40	9.40	1.44																							
5.35	7.75	5.00	7.40	1.45												7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	
5.75	8.35	5.40	8.00	1.45																							
3.95	5.75	3.60	5.40	1.46			6.3	6.8	7.3	7.8	8.3	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	
4.35	6.35	4.00	6.00	1.46				6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	
4.75	6.95	4.40	6.60	1.46						7.2	7.7	8.2	8.7	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.7	13.2	13.7	14.2	14.7	15.2	
6.15	8.95	5.80	8.60	1.46																							
7.75	11.35	7.40	11.00	1.46																							
3.75	5.55	3.40	5.20	1.48	6.1	6.6	7.1	7.6	8.1	8.6	9.1	9.6	10.1	10.6	11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	
4.15	6.15	3.80	5.8																								

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																												Speed Ratio	Sheave Datum Diameters	
B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	Small Sheave
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	1.29	3.80	5.00			
15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	1.29	4.40	5.80			
14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	1.29	5.20	6.80			
11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	1.29	6.60	8.60			
17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	1.30	3.60	4.80			
14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	1.30	5.00	6.60			
13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	1.30	5.60	7.40			
16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	1.31	4.20	5.60			
15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	1.31	4.80	6.40			
12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	1.31	6.00	8.00			
17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	1.31	9.40	12.40			
16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	1.32	4.00	5.40			
15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	1.32	4.60	6.20			
14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	1.32	5.20	7.00			
12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	1.33	6.40	8.60			
11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	1.33	7.00	9.40			
16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	1.34	3.80	5.20			
15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	1.34	4.40	6.00			
14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	1.34	5.00	6.80			
17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	1.35	3.60	5.00			
16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	1.35	4.20	5.80			
14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	1.35	4.80	6.60			
13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	1.35	5.40	7.40			
15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	1.36	4.60	6.40			
13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	1.36	5.80	8.00			
11.1	11.6	12.1	12.6	13.1	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	1.36	6.80	9.40			
17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	1.37	3.40	4.80			
16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	1.37	4.00	5.60			
14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	1.37	5.00	7.00			
12.2	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	1.37	6.20	8.60			
15.5	16.0	16.5	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	1.38	4.40	6.20			
16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	1.39	3.80	5.40			
14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	1.39	4.80	6.80			
15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	1.40	4.20	6.00			
14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	1.40	4.60	6.60			
13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	1.40	5.60	8.00			
11.2	11.8	12.3	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	1.40	6.60	9.40			
17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	1.41	3.60	5.20			
16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	1.41	4.00	5.80			
12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	1.41	6.00	8.60			
15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	1.42	4.40	6.40			
17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	1.42	8.60	12.40			
16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	1.43	3.40	5.00			
14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	1.43	3.80	5.60			
15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	1.43	4.80	6.80			
14.9	15.4	15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	1.44	4.60	6.60			
11.4	11.9	12.4	12.9	13.4	13.9	14.4	14.9	15.4	15.9	16.4	16.9	17.4	17.																	

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters		
B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX	B	BX		Small Sheave	Large Sheave	
40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	1.29	3.80	5.00	
39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	1.29	4.40	5.80
38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	1.29	5.20	6.80
35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	1.29	6.60	8.60
40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	1.30	3.60	4.80
38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	1.30	5.00	6.60
37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	1.30	5.60	7.40
39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	1.31	4.20	5.60
38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	1.31	4.80	6.40
36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	1.31	6.00	8.00
30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	1.31	9.40	12.40
41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6	51.1	1.32	3.40	4.60
40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	1.32	4.00	5.40
38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	1.32	4.60	6.20
37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	1.32	5.20	7.00
35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	1.33	6.40	8.60
34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	1.33	7.00	9.40
40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	1.34	3.80	5.20
39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	1.34	4.40	6.00
38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	1.34	5.00	6.80
40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6	1.35	3.60	5.00
39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	1.35	4.20	5.80
38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	1.35	4.80	6.60
37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	1.35	5.40	7.40
38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	1.36	6.40	8.60
36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	1.36	5.80	8.00
34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	1.36	6.80	9.40
32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.5	42.0	42.5	1.36	8.00	11.00
41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5	51.0	1.37	3.40	4.80
39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	1.37	4.00	5.60
38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	1.37	5.00	7.00
35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	1.37	6.20	8.60
39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	1.38	4.40	6.20
40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	1.39	3.80	5.40
38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	1.39	4.40	6.80
39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	1.40	4.20	6.00
38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	1.40	4.60	6.60
37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	1.40	5.20	7.40
36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	1.40	5.60	8.00
34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	1.40	6.60	9.40
40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5	1.41	3.60	5.20
39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	1.41	4.00	5.80
35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	1.41	6.00	8.60
38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	1.42	4.40	6.40
30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	1.42	8.60	12.40
40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	1.43	3.40	5.00
40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	1.43	4.00	5.60
38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	1.43	4.80	7.00
29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	1.43	9.40	13.60
39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	1.44	4.20	6.20
38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	1.44	4.60	6.80
35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	1.44	6.40	9.40
37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	1.45	5.00	7.40
36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	1.45	5.40	8.00

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters						
B	B	B BX BP	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	Small Sheave	Large Sheave				
142	143	144	145	146	147	148	149	150	151	152	153	154	156	157	158	160	161	162	164	165	166	167	168	169	1.29	3.80	5.00
62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	69.0	70.0	70.5	71.5	72.0	72.5	73.5	74.0	74.5	75.0	75.5	76.0	1.29	4.40	5.80
60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	67.0	67.5	68.0	69.0	69.5	70.0	71.0	71.5	72.0	72.5	73.0	73.5	1.29	5.20	6.80
62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	68.8	69.8	70.8	71.8	72.8	73.8	74.3	74.8	75.3	75.8	76.3	76.8	77.3	1.30	3.60	4.80
61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.7	69.2	69.7	70.7	71.2	71.7	72.7	73.2	73.7	74.2	74.7	75.2	1.30	5.00	6.60
63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6	69.1	70.1	70.6	71.1	72.1	72.6	73.1	74.1	74.6	75.1	75.6	76.1	76.6	1.30	5.60	7.40
54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.8	62.3	62.8	63.8	64.3	64.8	65.8	66.3	66.8	67.3	67.8	68.3	1.31	4.20	5.60
63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.4	70.4	70.9	71.4	72.4	72.9	73.4	74.4	74.9	75.4	75.9	76.4	76.9	1.31	9.40	12.40
62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	69.3	69.8	70.3	71.3	71.8	72.3	73.3	73.8	74.3	74.8	75.3	75.8	1.32	3.40	4.60
60.1	60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.1	67.1	67.6	68.1	69.1	69.6	70.1	71.1	71.6	72.1	72.6	73.1	73.6	1.32	4.60	6.20
59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	66.0	66.5	67.0	68.0	68.5	69.0	70.0	70.5	71.0	71.5	72.0	72.5	1.32	5.20	7.00
62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6	69.6	70.1	70.6	71.6	72.1	72.6	73.6	74.1	74.6	75.1	75.6	76.1	1.34	3.80	5.20
62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.9	70.4	70.9	71.9	72.4	72.9	73.9	74.4	74.9	75.4	75.9	76.4	1.34	4.40	6.00
61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.8	69.3	69.8	70.8	71.3	71.8	72.8	73.3	73.8	74.3	74.8	75.3	1.34	5.00	6.80
63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	68.8	69.3	70.3	70.8	71.3	72.3	72.8	73.3	74.3	74.8	75.3	75.8	76.3	76.8	1.35	3.60	4.80
61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	68.1	68.6	69.1	70.1	70.6	71.1	72.1	72.6	73.1	73.6	74.1	74.6	1.35	4.20	5.80
59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	66.2	66.7	67.2	68.2	68.7	69.2	70.2	70.7	71.2	71.7	72.2	72.7	1.35	4.80	6.60
57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	64.0	64.5	65.0	66.0	66.5	67.0	68.0	68.5	69.0	69.5	70.0	70.5	1.35	5.40	7.40
62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	69.5	70.0	70.5	71.5	72.0	72.5	73.5	74.0	74.5	75.0	75.5	76.0	1.36	3.40	4.80
60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	67.3	67.8	68.3	69.3	69.8	70.3	71.3	71.8	72.3	72.8	73.3	73.8	1.37	4.00	5.60
62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	68.8	69.8	70.3	70.8	71.8	72.3	72.8	73.8	74.3	74.8	75.3	75.8	76.3	1.37	4.60	6.20
63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6	69.1	70.1	70.6	71.1	72.1	72.6	73.1	74.1	74.6	75.1	75.6	76.1	76.6	1.39	3.80	5.40
62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	69.0	69.5	70.0	71.0	71.5	72.0	73.0	73.5	74.0	74.5	75.0	75.5	1.39	4.40	6.00
61.2	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	68.2	68.7	69.2	70.2	70.7	71.2	72.2	72.7	73.2	73.7	74.2	74.7	1.39	4.80	6.80
59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	66.3	66.8	67.3	68.3	68.8	69.3	70.3	70.8	71.3	71.8	72.3	72.8	1.40	3.60	5.20
60.4	60.9	61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	67.4	67.9	68.4	69.4	69.9	70.4	71.4	71.9	72.4	72.9	73.4	73.9	1.41	4.00	5.80
55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	62.4	62.9	63.4	64.4	64.9	65.4	66.4	66.9	67.4	67.9	68.4	68.9	1.41	4.60	6.40
53.8	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.8	61.3	61.8	62.8	63.3	63.8	64.8	65.3	65.8	66.3	66.8	67.3	1.42	3.40	4.80
62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.9	70.4	70.9	71.9	72.4	72.9	73.9	74.4	74.9	75.4	75.9	76.4	1.42	4.20	6.20
59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.5	67.0	67.5	68.5	69.0	69.5	70.5	71.0	71.5	72.0	72.5	73.0	1.44	3.80	5.60
62.1	62.6	63.1	63.6	64.1	64.6	65.2	65.7	66.2	66.7	67.2	67.7	68.2	69.2	69.7	70.2	71.2	71.7	72.2	73.2	73.7	74.2	74.7	75.2	75.7	1.44	4.40	6.40
61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	68.4	68.9	69.4	70.4	70.9	71.4	72.4	72.9	73.4	73.9	74.4	74.9	1.44	4.80	7.00
60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.6	68.1	68.6	69.6	70.1	70.6	71.6	72.1	72.6	73.1	73.6	74.1	1.45	3.60	5.20
57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4	64.4	64.9	65.4	66.4	66.9	67.4	68.4	68.9	69.4	69.9	70.4	70.9	1.46	4.00	6.00
62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	68.8	69.8	70.3	70.8	71.8	72.3	72.8	73.8	74.3	74.8	75.3	75.8	76.3	1.46	4.40	6.60
59.6	60.1	60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.6	67.1	67.6	68.6	69.1	69.6	70.6	71.1	71.6	72.1	72.6	73.1	1.48	3.80	5.80
62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	69.3	69.8	70.3	71.3	71.8	72.3	73.3	73.8	74.3	74.8	75.3	75.8	1.48	4.20	6.40
61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.5	69.0	69.5	70.5	71.0	71.5	72.5	73.0	73.5	74.0	74.5	75.0	1.48	4.60	7.00
60.7	61.2	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.7	68.2	68.7	69.7	70.2	70.7	71.7	72.2	72.7	73.2	73.7	74.2	1.49	3.40	5.40
64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6	69.1	69.6	70.6	71.1	71.6	72.6	73.1	73.6	74.6	75.1	75.6	76.1	76.6	77.1	1.51	3.60	5.60	
64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.4	69.9	70.9	71.4	71.9	72.9	73.4	73.9	74.9	75.4	75.9	76.4	76.9	77.4	1.51	4.00	6.20	
66.0	66.5	67.0	67.5	68.0	68.5	69.0	69.5	70.0	70.5	71.0	71.5	72.5	73.0	73.5	74.5	75.0	75.5	76.5	77.0	77.5	78.0	78.5	79.0	1.51	4.40	6.80	
65.2	65.7	66.2	66.7	67.2	67.7	68.2	68.7	69.2	69.7	70.2	70.7	71.7	72.2	72.7	73.7	74.2	74.7	75.7	76.2	76.7	77.2	77.7	78.2	1.53	3.40	5.40	
55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.8	63.3	63.8	64.8	65.3	65.8	66.8	67.3	67.8	68.3	68.8	69.3	1.53	4.20	6.60

Key to Horsepower Correction Factor

- 0.7
- 0.8
- 0.9
- 1.0
- 1.1
- 1.2
- 1.3
- 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B	B	B BX BP	B	B	B	B	B BX	B	B	B	B	B	B	B	B BX BP	B	B	B	B		
4.15	6.35	3.80	5.00	1.29	170	172	173	174	175	177	178	180	182	184	185	186	187	188	190	191	192	195	197	199	200	201
4.75	6.15	4.40	5.80	1.29			80.5					84.0										91.5				
5.55	7.15	5.20	6.80	1.29	76.5	77.5	78.0	78.5	79.0	80.0	80.5	81.5	82.5	83.5	84.0	84.5	85.0	85.5	86.5	87.0	87.5	89.0	90.0	91.0	91.5	92.0
6.95	8.95	6.60	8.60	1.29	74.0	75.0	75.5	76.0	76.5	77.5	78.0	79.0	80.0	81.0	81.5	82.0	82.5	83.0	84.0	84.5	85.0	86.5	87.5	88.5	89.0	89.5
3.95	5.15	3.60	4.80	1.30			80.8					84.3										91.8				
5.35	6.95	5.00	6.60	1.30	76.8	77.8	78.3	78.8	79.3	80.3	80.8	81.8	82.8	83.8	84.3	84.8	85.3	85.8	86.8	87.3	87.8	89.3	90.3	91.3	91.8	92.3
5.95	7.75	5.60	7.40	1.30	75.7	76.7	77.2	77.7	78.2	79.2	79.7	80.7	81.7	82.7	83.2	83.7	84.2	84.7	85.7	86.2	86.7	88.2	89.2	90.2	90.7	91.2
4.55	5.95	4.20	5.60	1.31			79.7					83.2										90.7				
5.15	6.75	4.80	6.40	1.31	77.1	78.1	78.6	79.1	79.6	80.6	81.1	82.1	83.1	84.1	84.6	85.1	85.6	86.1	87.1	87.6	88.1	89.6	90.6	91.6	92.1	92.6
6.35	8.35	6.00	8.00	1.31	74.9	75.9	76.4	76.9	77.4	78.4	78.9	79.9	80.9	81.9	82.4	82.9	83.4	83.9	84.9	85.4	85.9	87.4	88.4	89.4	89.9	90.4
9.75	12.75	9.40	12.40	1.31	68.8	69.8	70.3	70.8	71.3	72.3	72.8	73.8	74.8	75.8	76.3	76.8	77.3	77.8	78.8	79.3	79.8	81.3	82.3	83.3	83.8	84.3
3.75	4.95	3.40	4.60	1.32			81.1					84.6										92.1				
4.35	5.75	4.00	5.40	1.32			80.0					83.5										91.0				
4.95	6.55	4.60	6.20	1.32	77.4	78.4	78.9	79.4	79.9	80.9	81.4	82.4	83.4	84.4	84.9	85.4	85.9	86.4	87.4	87.9	88.4	89.9	90.9	91.9	92.4	92.9
5.55	7.35	5.20	7.00	1.32	76.3	77.3	77.8	78.3	78.8	79.8	80.3	81.3	82.3	83.3	83.8	84.3	84.8	85.3	86.3	86.8	87.3	88.8	89.8	90.8	91.3	91.8
6.75	8.95	6.40	8.60	1.33	74.1	75.1	75.6	76.1	76.6	77.6	78.1	79.1	80.1	81.1	81.6	82.1	82.6	83.1	84.1	84.6	85.1	86.6	87.6	88.6	89.1	89.6
7.35	9.75	7.00	9.40	1.33	73.0	74.0	74.5	75.0	75.5	76.5	77.0	78.0	79.0	80.0	80.5	81.0	81.5	82.0	83.0	83.5	84.0	85.5	86.5	87.5	88.0	88.5
4.15	5.55	3.80	5.20	1.34			80.3					83.8										91.3				
4.75	6.35	4.40	6.00	1.34			79.2					82.7										90.2				
5.35	7.15	5.00	6.80	1.34	76.6	77.6	78.1	78.6	79.1	80.1	80.6	81.6	82.6	83.6	84.1	84.6	85.1	85.6	86.6	87.1	87.6	89.1	90.1	91.1	91.6	92.1
3.95	5.35	3.60	5.00	1.35			80.6					84.1										91.6				
4.55	6.15	4.20	5.80	1.35			79.5					83.0										90.5				
5.15	6.95	4.80	6.60	1.35	76.9	77.9	78.4	78.9	79.4	80.4	80.9	81.9	82.9	83.9	84.4	84.9	85.4	85.9	86.9	87.4	87.9	89.4	90.4	91.4	91.9	92.4
5.75	7.75	5.40	7.40	1.35	75.8	76.8	77.3	77.8	78.3	79.3	79.8	80.8	81.8	82.8	83.3	83.8	84.3	84.8	85.8	86.3	86.8	88.3	89.3	90.3	90.8	91.3
4.95	6.75	4.60	6.40	1.36	77.3	78.3	78.8	79.3	79.8	80.8	81.3	82.3	83.3	84.3	84.8	85.3	85.8	86.3	87.3	87.8	88.3	89.8	90.8	91.8	92.3	92.8
6.15	8.35	5.80	8.00	1.36	75.1	76.1	76.6	77.1	77.6	78.6	79.1	80.1	81.1	82.1	82.6	83.1	83.6	84.1	85.1	85.6	86.1	87.6	88.6	89.6	90.1	90.6
7.15	9.75	6.80	9.40	1.36	73.2	74.2	74.7	75.2	75.7	76.7	77.2	78.2	79.2	80.2	80.7	81.2	81.7	82.2	83.2	83.7	84.2	85.7	86.7	87.7	88.2	88.7
8.35	11.35	8.00	11.00	1.36	71.0	72.0	72.5	73.0	73.5	74.5	75.0	76.0	77.0	78.0	78.5	79.0	79.5	80.0	81.0	81.5	82.0	83.5	84.5	85.5	86.0	86.5
3.75	5.15	3.40	4.80	1.37			81.0					84.5										92.0				
4.35	5.95	4.00	5.60	1.37			79.9					83.4										90.9				
5.35	7.35	5.00	7.00	1.37	76.5	77.5	78.0	78.5	79.0	80.0	80.5	81.5	82.5	83.5	84.0	84.5	85.0	85.5	86.5	87.0	87.5	89.0	90.0	91.0	91.5	92.0
6.55	8.95	6.20	8.60	1.37	74.3	75.3	75.8	76.3	76.8	77.8	78.3	79.3	80.3	81.3	81.8	82.3	82.8	83.3	84.3	84.8	85.3	86.8	87.8	88.8	89.3	89.8
4.75	6.55	4.40	6.20	1.38			79.1					82.6										90.1				
4.15	5.75	3.80	5.40	1.39			80.2					83.7										91.2				
5.15	7.15	4.80	6.80	1.39	76.8	77.8	78.3	78.8	79.3	80.3	80.8	81.8	82.8	83.8	84.3	84.8	85.3	85.8	86.8	87.3	87.8	89.3	90.3	91.3	91.8	92.3
4.55	6.35	4.20	6.00	1.40			79.4					82.9										90.4				
4.95	6.95	4.60	6.60	1.40	77.1	78.1	78.6	79.1	79.6	80.6	81.1	82.1	83.1	84.1	84.6	85.1	85.6	86.1	87.1	87.6	88.1	89.6	90.6	91.6	92.1	92.6
5.55	7.75	5.20	7.40	1.40	76.0	77.0	77.5	78.0	78.5	79.5	80.0	81.0	82.0	83.0	83.5	84.0	84.5	85.0	86.0	86.5	87.0	88.5	89.5	90.5	91.0	91.5
5.95	8.35	5.60	8.00	1.40	75.2	76.2	76.7	77.2	77.7	78.7	79.2	80.2	81.2	82.2	82.7	83.2	83.7	84.2	85.2	85.7	86.2	87.7	88.7	89.7	90.2	90.7
6.95	9.75	6.60	9.40	1.40	73.3	74.3	74.8	75.3	75.8	76.8	77.3	78.3	79.3	80.3	80.8	81.3	81.8	82.3	83.3	83.8	84.3	85.8	86.8	87.8	88.3	88.8
3.95	5.55	3.60	5.20	1.41			80.5					84.0										91.5				
4.35	6.15	4.00	5.80	1.41			79.7					83.2										90.7				
6.35	8.95	6.00	8.60	1.41	74.4	75.4	75.9	76.4	76.9	77.9	78.4	79.4	80.4	81.4	81.9	82.4	82.9	83.4	84.4	84.9	85.4	86.9	87.9	88.9	89.4	89.9
4.75	6.75	4.40	6.40	1.42			81.0					84.4										91.8				
8.95	12.75	8.60	12.40	1.42	69.4	70.4	70.9	71.4	71.9	72.9	73.4	74.4	75.4	76.4	76.9	77.4	77.9	78.4	79.4	79.9	80.4	81.9	82.9	83.9	84.4	84.9
3.75	5.35	3.40	5.00	1.43			80.8					84.3										91.8				
4.15	5.95	3.80	5.60	1.43			80.0					83.5										91.0				
5.15	7.35	4.80	7.00	1.43	76.6	77.6	78.1	78.6	79.1	80.1	80.6	81.6	82.6	83.6	84.1	84.6	85.1	85.6	86.6	87.1	87.6	89.1	90.1	91.1	91.6	92.1
9.75	13.95	9.40	13.60	1.43	67.8	68.8	69.3	69.8	70.3	71.3	71.8	72.8	73.8	74.8	75.3	75.8	76.3	76.8	77.8	78.3	78.8	80.3	81.3	82.3	82.8	83.3
4.55	6.55	4.20	6.20	1.44			79.2					82.7										90.2				
4.95	7.15	4.60	6.80	1.44	76.9	77.9	78.4	78.9	79.4	80.4	80.9	81.9	82.9	83.9	84.4	84.9	85.4	85.9	86.9	87.4	87.9	89.4	90.4	91.4	91.9	92.4
6.75	9.75	6.40	9.40	1.44	73.5	74.5	75.0	75.5	76.0	77.0	77.5	78.5	79.5	80.5	81.0	81.5	82.0	82.5	83.5	84.0	84.5	86.0	87.0	88.0	88.5	89.0
5.35	7.75	5.00	7.40	1.45	76.2	77.2	77.7	78.2	78.7	79.7	80.2	81.2	82.2	83.2	83.7	84.2	84.7	85.2	86.2	86.7	87.2	88.7	89.7	90.7	91.2	91.7
5.75	8.35	5.40	8.00	1.45	75.4	76.4	76.9	77.4	77.9	78.9	79.4	80.4	81.4	82.4	82.9	83.4	83.9	84.4	85.4	85.9	86.4	87.9	88.9	89.9	90.4	90.9
3.95	5.75	3.60	5.40	1.46			80.3					83.8										91.3				
4.35	6.35	4.00	6.00	1.46			79.5					83.0														

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																										Speed Ratio	Sheave Datum Diameters	
B	B BX	B	B BX	B	B	B	B	B	B	B	B BX	B	B	B	B	B	B	B	B	B BX	B	B BX	B	Small Sheave	Large Sheave			
204	205	206	210	212	215	217	218	220	221	223	225	228	230	234	235	236	237	240	248	253	255	265	270	276	1.29	3.80	5.00	
96.5	98.0										105.7										120.7				1.29	4.40	5.80	
95.4	97.9										104.6										119.6				1.29	5.20	6.80	
93.5	94.0	94.5	96.5	96.7	98.2	99.2	99.7	100.7	101.2	102.2	103.2	104.7	105.7	107.7	108.2	108.7	109.2	110.7	114.7	117.2	118.2	123.2	125.7	128.7	1.29	5.60	8.60	
91.0	91.5	92.0	94.0	94.2	95.7	96.7	97.2	98.2	98.7	99.7	100.7	102.2	103.2	105.2	105.7	106.2	106.7	108.2	112.2	114.7	115.7	120.7	123.2	126.2	1.29	6.60	8.60	
	96.8		99.3								106.1										121.1				1.30	3.60	4.80	
93.8	94.3	94.8	96.8	97.0	98.5	99.5	100.0	101.0	101.5	102.5	103.5	105.0	106.0	108.0	108.5	109.0	109.5	111.0	115.0	117.5	118.5	123.5	126.0	129.0	1.30	5.00	6.60	
92.7	93.2	93.7	95.7	95.9	97.4	98.4	98.9	99.9	100.4	101.4	102.4	103.5	103.9	104.9	106.9	107.4	107.9	108.4	109.9	113.9	116.4	117.4	122.4	124.9	127.9	1.30	5.60	7.40
	96.7		98.2								105.0										120.0				1.31	4.20	5.60	
94.1	94.6	95.1	97.1	97.4	98.9	99.9	100.4	101.4	101.9	102.9	103.9	105.4	106.4	108.4	108.9	109.4	109.9	111.4	115.4	117.9	118.9	123.9	126.4	129.4	1.31	4.80	6.40	
91.9	92.4	92.9	94.9	95.1	96.6	97.6	98.1	99.1	99.6	100.6	101.6	103.1	104.1	106.1	106.6	107.1	107.6	109.1	113.2	115.7	116.7	121.7	124.2	127.2	1.31	6.00	8.00	
85.8	86.3	86.8	88.8	89.0	91.5	92.0	93.0	93.5	94.5	95.5	96.5	97.0	98.0	100.0	100.5	101.0	101.5	103.0	107.0	109.5	110.5	115.5	118.0	121.0	1.31	9.40	12.40	
	96.1		99.6								106.4										121.4				1.32	3.40	4.60	
	96.0		98.5								105.3										120.3				1.32	4.00	5.40	
94.4	94.9	95.4	97.4	97.7	99.2	100.2	100.7	101.7	102.2	103.2	104.2	105.7	106.7	108.7	109.2	109.7	110.2	111.7	115.7	118.2	119.2	124.2	126.7	129.7	1.32	4.60	6.20	
93.3	93.8	94.3	96.3	96.6	98.1	99.1	99.6	100.6	101.1	102.1	103.1	104.6	105.6	107.6	108.1	108.6	109.1	110.6	114.6	117.1	118.1	123.1	125.6	128.6	1.32	5.20	7.00	
91.1	91.6	92.1	94.1	94.4	95.9	96.9	97.4	98.4	98.9	99.9	100.9	102.4	103.4	105.4	105.9	106.4	106.9	108.4	112.4	114.9	115.9	120.9	123.4	126.4	1.33	6.40	8.60	
90.0	90.5	91.0	93.0	93.3	94.8	95.8	96.3	97.3	97.8	98.8	99.8	101.3	102.3	104.3	104.8	105.3	105.8	107.3	111.3	113.8	114.8	119.8	122.3	125.3	1.33	7.00	9.40	
	96.3		98.8								105.6										120.6				1.34	3.80	5.20	
	95.2		97.7								104.5										119.5				1.34	4.40	6.00	
93.6	94.1	94.6	96.6	96.9	98.4	99.4	99.9	100.9	101.4	102.4	103.4	104.9	105.9	107.9	108.4	108.9	109.4	110.9	114.9	117.4	118.4	123.4	125.9	128.9	1.34	5.00	6.80	
	96.6		99.1								105.9										120.9				1.35	3.60	5.00	
	95.5		98.0								104.8										119.8				1.35	4.20	5.80	
93.9	94.4	94.9	96.9	97.2	98.7	99.7	100.2	101.2	101.7	102.7	103.7	105.2	106.2	108.2	108.7	109.2	109.7	111.2	115.2	117.7	118.7	123.7	126.2	129.2	1.35	4.80	6.60	
92.8	93.3	93.8	95.8	96.1	97.6	98.6	99.1	100.1	100.6	101.6	102.6	104.1	105.1	107.1	107.6	108.1	108.6	110.1	114.1	116.6	117.6	122.6	125.1	128.1	1.35	5.40	7.40	
94.3	94.8	95.3	97.3	97.5	99.0	100.0	100.5	101.5	102.0	103.0	104.0	105.5	106.5	108.5	109.0	109.5	110.0	111.5	115.5	118.0	119.0	124.0	126.5	129.5	1.36	4.60	6.40	
92.1	92.6	93.1	95.1	95.3	96.8	97.8	98.3	99.3	99.8	100.8	101.8	103.3	104.3	106.3	106.8	107.3	107.8	109.3	113.3	115.8	116.8	121.8	124.3	127.3	1.36	5.80	8.00	
90.2	90.7	91.2	93.2	93.4	94.9	95.9	96.4	97.4	97.9	98.9	99.9	101.4	102.4	104.4	104.9	105.4	105.9	107.4	111.4	113.9	114.9	119.9	122.4	125.4	1.36	6.80	9.40	
88.0	88.5	89.0	91.0	91.2	92.7	93.7	94.2	95.2	95.7	96.7	97.7	99.2	100.2	102.2	102.7	103.2	103.7	105.2	109.2	111.7	112.7	117.7	120.2	123.2	1.36	8.00	11.00	
	97.0		99.5								106.2										121.2				1.37	3.40	4.80	
	95.9		98.4								105.1										120.1				1.37	4.00	5.60	
93.5	94.0	94.5	96.5	96.7	98.2	99.2	99.7	100.7	101.2	102.2	103.2	104.7	105.7	107.7	108.2	108.7	109.2	110.7	114.7	117.2	118.2	123.2	125.7	128.7	1.37	5.00	7.00	
91.3	91.8	92.3	94.3	94.5	96.0	97.0	97.5	98.5	99.0	100.0	101.0	102.5	103.5	105.5	106.0	106.5	107.0	108.5	112.5	115.0	116.0	121.0	123.5	126.5	1.37	6.20	8.60	
	95.1		97.6								104.3										119.3				1.38	4.40	6.20	
	96.2		98.7								105.4										120.4				1.39	3.80	5.40	
93.8	94.3	94.8	96.8	97.0	98.5	99.5	100.0	101.0	101.5	102.5	103.5	105.0	106.0	108.0	108.5	109.0	109.5	111.0	115.0	117.5	118.5	123.5	126.0	129.0	1.39	4.80	6.80	
	95.4		97.9								104.6										119.6				1.40	4.20	6.00	
94.1	94.6	95.1	97.1	97.3	98.8	99.8	100.3	101.3	101.8	102.8	103.8	105.3	106.3	108.3	108.8	109.3	109.8	111.3	115.3	117.8	118.8	123.8	126.3	129.3	1.40	4.60	6.60	
93.0	93.5	94.0	96.0	96.2	97.7	98.7	99.2	100.2	100.7	101.7	102.7	104.2	105.2	107.2	107.7	108.2	108.7	110.2	114.2	116.7	117.7	122.7	125.2	128.2	1.40	5.20	7.40	
92.2	92.7	93.2	95.2	95.5	97.0	98.0	98.5	99.5	100.0	101.0	102.0	103.5	104.5	106.5	107.0	107.5	108.0	109.5	113.5	116.0	117.0	122.0	124.5	127.5	1.40	5.60	8.00	
90.3	90.8	91.3	93.3	93.6	95.1	96.1	96.6	97.6	98.1	99.1	100.1	101.6	102.6	104.6	105.1	105.6	106.1	107.6	111.6	114.1	115.1	120.1	122.6	125.6	1.40	6.60	9.40	
	96.5		99.0								105.7										120.7				1.41	3.60	5.20	
	91.4		93.9								104.9										119.9				1.41	4.00	5.80	
	91.7		94.2								104.2										119.2				1.41	6.00	8.60	
	94.9		97.4								104.2										119.2				1.42	4.40	6.40	
86.4	86.9	87.4	89.4	89.6	91.1	92.1	92.6	93.6	94.1	95.1	96.1	97.6	98.6	100.6	101.1	101.6	102.1	103.6	107.6	110.1	111.1	116.1	118.6	121.6	1.42	8.60	12.40	
	96.8		99.3								106.0										121.1				1.43	3.40	5.00	
	96.0		98.5								105.3										120.3				1.43	3.80	5.60	
93.6	94.1	94.6	96.6	96.9	98.4	99.4	99.9	100.9	101.4	102.4	103.4	104.9	105.9	107.9	108.4	108.9	109.4	110.9	114.9	117.4	118.4	123.4	125.9	128.9	1.43	4.80	7.00	
84.8	85.3	85.8	87.8	88.1	89.6	90.6	91.1	92.1	92.6	93.6	94.6	96.1	97.1	99.1	99.6	100.1	100.6	102.1	106.1	108.6	109.6	114.6	117.1	120.1	1.43	9.40	13.60	
	95.2		97.7								104.5										119.5				1.44	4.20	6.20	
93.9	94.4	94.9	96.9	97.2	98.7	99.7	100.2	101.2	101.7	102.7	103.7	105.2	106.2	108.2	108.7	109.2	109.7	111.2	115.2	117.7	118.7	123.7	126.2	129.2	1.44	4.60	6.80	
90.5	91.0	91.5	93.5	93.7	95.2	96.2	96.7	97.7	98.2	99.2	100.2	101.7	102.7	104.7	105.2	105.7	106.2	107.7	111.7	114.2	115.2	120.2						

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																				
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX			
24	25	26	27		28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45			
6.35	9.75	6.00	9.40	1.54																9.1	9.7	10.2	10.7	11.2	
7.35	11.35	7.00	11.00	1.54																					
4.35	6.75	4.00	6.40	1.55																					
4.75	7.35	4.40	7.00	1.55																					
3.95	6.15	3.60	5.80	1.56			6.6	7.1	7.6	8.1	8.6	9.2	9.7	10.2											
5.35	8.35	5.00	8.00	1.56			6.4	6.9	7.4	7.9	8.4	8.9	9.5	10.0	10.5										
5.75	8.95	5.40	8.60	1.56																					
8.95	13.95	8.60	13.60	1.56																					
4.55	7.15	4.20	6.80	1.57					7.1	7.6	8.2	8.7	9.2	9.7											
4.95	7.75	4.60	7.40	1.57																					
4.15	6.55	3.80	6.20	1.58																					
3.75	5.95	3.40	5.60	1.59																					
6.15	9.75	5.80	9.40	1.59																					
7.15	11.35	6.80	11.00	1.59																					
4.35	6.95	4.00	6.60	1.60																					
3.95	6.35	3.60	6.00	1.61																					
5.55	8.95	5.20	8.60	1.61																					
4.55	7.35	4.20	7.00	1.62																					
5.15	8.35	4.80	8.00	1.62																					
9.75	15.75	9.40	15.40	1.62																					
4.15	6.75	3.80	6.40	1.63																					
4.75	7.75	4.40	7.40	1.63																					
6.95	11.35	6.60	11.00	1.63																					
3.75	6.15	3.40	5.80	1.64																					
4.35	7.15	4.00	6.80	1.64																					
5.95	9.75	5.60	9.40	1.64																					
7.75	12.75	7.40	12.40	1.65																					
3.95	6.55	3.60	6.20	1.66																					
4.15	6.95	3.80	6.60	1.67																					
5.35	8.95	5.00	8.60	1.67																					
8.35	13.95	8.00	13.60	1.67																					
6.75	11.35	6.40	11.00	1.68																					
9.75	16.35	9.40	16.00	1.68																					
4.35	6.35	4.00	6.00	1.69																					
4.75	7.35	4.40	7.00	1.69																					
4.95	8.35	4.60	8.00	1.69																					
4.55	7.75	4.20	7.40	1.70																					
5.75	9.75	5.40	9.40	1.70																					
3.95	6.75	3.60	6.40	1.71																					
4.15	7.15	3.80	6.80	1.72																					
6.55	11.35	6.20	11.00	1.73																					
7.35	12.75	7.00	12.40	1.73																					
5.15	8.95	4.80	8.60	1.74																					
3.75	6.55	3.40	6.20	1.75																					
3.95	6.95	3.60	6.60	1.76																					
4.75	8.35	4.40	8.00	1.76																					
5.55	9.75	5.20	9.40	1.76																					
8.95	15.75	8.60	15.40	1.76																					
4.15	7.35	3.80	7.00	1.77																					
4.35	7.75	4.00	7.40	1.78																					
7.15	12.75	6.80	12.40	1.78																					
6.35	11.35	6.00	11.00	1.79																					
3.75	6.75	3.40	6.40	1.80																					
7.75	13.95	7.40	13.60	1.80																					
3.95	7.15	3.60	6.80	1.81																					
4.95	8.95	4.60	8.60	1.81																					
5.35	9.75	5.00	9.40	1.82																					
6.95	12.75	6.60	12.40	1.83																					
8.95	16.35	8.60	16.00	1.83																					
4.55	8.35	4.20	8.00	1.84																					
3.75	6.95	3.40	6.60	1.85																					
6.15	11.35	5.80	11.00	1.85																					
3.95	7.35	3.60	7.00	1.86																					
4.15	7.75	3.80	7.40	1.87																					
4.75	8.95	4.40	8.60	1.88																					
5.15	9.75	4.80	9.40	1.89																					
6.75	12.75	6.40	12.40	1.89																					
8.35	15.75	8.00	15.40	1.89																					
7.35	13.95	7.00	13.60	1.90																					
3.75	7.15	3.40	6.80	1.91																					
5.95	11.35	5.60	11.00	1.91																					

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																								Speed Ratio	Sheave Datum Diameters			
B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	Small Sheave		Large Sheave			
68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	1.54	6.00	9.40	
20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	1.54	7.00	11.00	
26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	1.55	4.00	6.40	
25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	1.55	4.40	7.00	
27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	1.56	3.60	5.80	
24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	1.56	5.00	8.00
23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	1.56	5.40	8.60
17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	1.56	8.60	13.60
26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	1.57	4.20	6.80	
25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	1.57	4.60	7.40	
27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	1.58	3.80	6.20	
27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	1.59	3.40	5.60	
22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	1.59	5.80	9.40	
20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	1.59	6.80	11.00	
26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	1.60	4.00	6.60	
27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	1.61	3.60	6.00	
24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	1.61	5.20	8.60	
26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	1.62	4.20	7.00	
24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	1.62	4.80	8.00	
15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	1.62	9.40	15.40	
26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	1.63	3.80	6.40	
25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	1.63	4.40	7.40	
21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	1.63	6.60	11.00	
27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	1.64	3.40	5.80	
26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	1.64	4.00	6.80	
23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	1.64	5.60	9.40	
19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	1.65	7.40	12.40	
27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	1.66	3.60	6.20	
26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	1.67	3.80	6.60	
24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	1.67	5.00	8.60	
17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	1.67	8.00	13.60	
21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	1.68	6.40	11.00	
14.6	15.1	15.6	16.1	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	1.68	9.40	16.00	
27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	1.69	3.40	6.00	
26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	1.69	4.00	7.00	
24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	1.69	4.60	8.00	
25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	1.70	4.20	7.40	
23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	1.70	5.40	9.40	
27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	1.71	3.60	6.40	
26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	1.72	3.80	6.80	
21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	1.73	6.20	11.00	
19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	1.73	7.00	12.40	
24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	1.74	4.80	8.60	
27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	1.75	3.40	6.20	
26.8	27.3	27.8	28.3	28.8	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	1.76	3.60	6.60	
25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	1.76	4.40	8.00	
23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8																					

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																							
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX		
93	94	95	96		97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114						
6.35	9.75	6.00	9.40	1.54	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8		
7.35	11.35	7.00	11.00	1.54	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7		
4.35	6.75	4.00	6.40	1.55	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7		
4.75	7.35	4.40	7.00	1.55	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9		
3.95	6.15	3.60	5.80	1.56	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5		
5.35	8.35	5.00	8.00	1.56	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7		
5.75	8.95	5.40	8.60	1.56	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9		
8.95	13.95	8.60	13.60	1.56	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4		
4.55	7.15	4.20	6.80	1.57	39.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2		
4.95	7.75	4.60	7.40	1.57	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4		
4.15	6.55	3.80	6.20	1.58	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0		
3.75	5.95	3.40	5.60	1.59	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8		
6.15	9.75	5.80	9.40	1.59	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9		
7.15	11.35	6.80	11.00	1.59	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9		
4.35	6.95	4.00	6.60	1.60	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6		
3.95	6.35	3.60	6.00	1.61	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3		
5.55	8.95	5.20	8.60	1.61	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0		
4.55	7.35	4.20	7.00	1.62	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1		
5.15	8.35	4.80	8.00	1.62	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8		
9.75	15.75	9.40	15.40	1.62	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3		
4.15	6.75	3.80	6.40	1.63	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9		
4.75	7.75	4.40	7.40	1.63	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6		
6.95	11.35	6.60	11.00	1.63	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0		
3.75	6.15	3.40	5.80	1.64	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	50.7		
4.35	7.15	4.00	6.80	1.64	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4		
5.95	9.75	5.60	9.40	1.64	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1		
7.75	12.75	7.40	12.40	1.65	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3		
3.95	6.55	3.60	6.20	1.66	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2		
4.15	6.95	3.80	6.60	1.67	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7		
5.35	8.95	5.00	8.60	1.67	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2		
8.35	13.95	8.00	13.60	1.67	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8		
6.75	11.35	6.40	11.00	1.68	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2		
9.75	16.35	9.40	16.00	1.68	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8		
3.75	6.35	3.40	6.00	1.69	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0			
4.35	7.35	4.00	7.00	1.69	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2		
4.95	8.35	4.60	8.00	1.69	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0		
4.55	7.75	4.20	7.40	1.70	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8		
5.75	9.75	5.40	9.40	1.70	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2		
3.95	6.75	3.60	6.40	1.71	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5			
4.15	7.15	3.80	6.80	1.72	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0			
6.55	11.35	6.20	11.00	1.73	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3		
7.35	12.75	7.00	12.40	1.73	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5		
5.																												

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																					Speed Ratio	Sheave Datum Diameters					
B BX	B BX	B	B	B	B BX BP	B	B	B	B BX BP	B	B	B	B BX BP	B	B	B	B BX BP	B	B	B		B BX	Small Sheave	Large Sheave			
115	116																					1.54	6.00	9.40			
46.3	46.8	47.3	47.8	48.3	48.8	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.8	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	1.54	7.00	11.00
44.2	44.7	45.2	45.7	46.2	46.7	47.7	48.2	48.7	49.2	49.7	50.2	50.7	51.7	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.2	1.55	4.00	6.40
50.2	50.7				52.7			54.7			56.7					59.2			60.7			62.7			1.55	4.00	6.40
49.4	49.9				51.9			53.9			55.9					58.4			59.9			61.9			1.55	4.40	7.00
51.0	51.5				53.5			55.5			57.5					60.0			61.5			63.5			1.56	3.60	5.80
48.2	48.7	49.2	49.7	50.2	50.7	51.7	52.2	52.7	53.2	53.7	54.2	54.7	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	1.56	5.00	8.00
47.4	47.9	48.4	48.9	49.4	49.9	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	1.56	5.40	8.60
40.9	41.4	41.9	42.4	42.9	43.4	44.4	44.9	45.4	45.9	46.4	46.9	47.4	48.4	48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9	1.56	8.60	13.60
49.7	50.2				52.2			54.2			56.2					58.7			60.2			62.2			1.57	4.20	6.80
49.0	49.5	50.0	50.5	51.0	51.5	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	1.57	4.60	7.40
50.5	51.0				53.0			55.0			57.0					59.5			61.0			63.0			1.58	3.80	6.20
51.3	51.8				53.8			55.8			57.8					60.3			61.8			63.8			1.59	3.40	5.60
46.4	46.9	47.4	47.9	48.4	48.9	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	1.59	5.80	9.40
44.4	44.9	45.4	45.9	46.4	46.9	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.4	1.59	6.80	11.00
50.1	50.6				52.6			54.6			56.6					59.1			60.6			62.6			1.60	4.00	6.60
50.8	51.3				53.3			55.3			57.3					59.8			61.3			63.3			1.61	3.60	5.80
47.5	48.0	48.5	49.0	49.5	50.0	51.0	51.5	52.0	52.5	53.0	53.5	54.0	55.0	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	1.61	5.20	8.60
49.6	50.1				52.1			54.1			56.1					58.6			60.1			62.1			1.62	4.20	7.00
48.3	48.8	49.3	49.8	50.3	50.8	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	1.62	4.80	8.00
38.8	39.3	39.8	40.3	40.8	41.3	42.3	42.8	43.3	43.8	44.3	44.8	45.3	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3	51.8	1.62	9.40	15.40
50.4	50.9				52.9			54.9			56.9					59.4			60.9			62.9			1.63	3.80	6.40
49.1	49.6				51.6			53.6			55.6					58.1			59.6			61.6			1.63	4.40	7.40
44.5	45.0	45.5	46.0	46.5	47.0	48.0	48.5	49.0	49.5	50.0	50.5	51.0	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	1.63	6.60	11.00
51.2	51.7				53.7			55.7			57.7					60.2			61.7			63.7			1.64	3.40	5.80
49.9	50.4				52.4			54.4			56.4					58.9			60.4			62.4			1.64	4.00	6.80
46.6	47.1	47.6	48.1	48.6	49.1	50.1	50.6	51.1	51.6	52.1	52.6	53.1	54.1	54.6	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.1	59.6	1.64	5.60	9.40
42.8	43.3	43.8	44.3	44.8	45.3	46.3	46.8	47.3	47.8	48.3	48.8	49.3	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.3	55.8	1.65	7.40	12.40
50.7	51.2				53.2			55.2			57.2					59.7			61.2			63.2			1.66	3.60	6.20
50.2	50.7				52.7			54.7			56.7					59.2			60.7			62.7			1.67	3.80	6.60
47.7	48.2	48.7	49.2	49.7	50.2	51.2	51.7	52.2	52.7	53.2	53.7	54.2	55.2	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	1.67	5.00	8.60
41.3	41.8	42.3	42.8	43.3	43.8	44.8	45.3	45.8	46.4	46.9	47.4	47.9	48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	1.67	8.00	13.60
44.7	45.2	45.7	46.2	46.7	47.2	48.2	48.7	49.2	49.7	50.2	50.7	51.2	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.2	57.7	1.68	6.40	11.00
38.3	38.8	39.3	39.8	40.3	40.8	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3	1.68	9.40	16.00
51.0	51.5				53.5			55.5			57.5					60.0			61.5			63.5			1.69	3.40	6.00
49.7	50.2				52.2			54.2			56.2					58.7			60.2			62.2			1.69	4.00	7.00
48.5	49.0	49.5	50.0	50.5	51.0	52.0	52.5	53.0	53.5	54.0	54.5	55.0	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	1.69	4.60	8.00
49.3	49.8				51.8			53.8			55.8					58.3			59.8			61.8			1.70	4.20	7.40
46.7	47.2	47.7	48.2	48.7	49.2	50.2	50.7	51.2	51.7	52.2	52.7	53.2	54.2	54.7	55.2	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	1.70	5.40	9.40
50.5	51.0				53.0			55.0			57.0					59.5			61.0			63.0			1.71	3.60	6.40
50.1	50.6				52.6			54.6			56.6					59.1			60.6			62.6			1.72	3.80	6.80
44.8	45.3	45.8	46.3	46.8	47.3	48.3	48.8	49.3	49.8	50.3	50.8	51.3	52.3	52.8	53.3	53.8	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	1.73	6.20	11.00
43.1	43.6	44.1	44.6	45.1	45.6	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.6	51.1	51.6	52.1	52.6	53.1	53.6	54.1	54.6	55.1	55.6	56.1	1.73	7.00	12.40
47.8	48.3	48.8	49.3	49.8	50.3	51.3	51.8	52.3	52.8	53.3	53.8	54.3	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	1.74	4.80	8.60
50.8	51.3				53.3			55.3			57.3					59.8			61.3			63.3			1.75	3.40	6.20
50.4	50.9				52.9			54.9			56.9					59.4			60.9			62.9			1.76	3.60	6.60
48.6	49.1				51.1			53.1			55.1					57.6			59.1			61.1			1.76	4.40	8.00
46.9	47.4	47.9	48.4	48.9	49.4	50.4	50.9	51.4	51.9	52.4	52.9	53.4	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	1.76	5.20	9.40
39.4	39.9	40.4	40.9	41.4	41.9	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.4	1.76	8.60	15.40
49.9	50.4				52.4			54.4			56.4					58.9			60.4			62.4			1.77	3.80	7.00
49.4	49.9				51.9			53.9			55.9					58.4			59.9			61.9			1.78	4.00	7.40
43.2	43.7	44.2	44.7	45.2	45.7	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.7	51.2	51.7	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.8	56.3	1.78	6.80	12.40
45.0	45.5	46.0	46.5	47.0	47.5	48.5	49.0	49.5	50.0	50.5	51.0	51.5	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.0	1.79	6.00	11.00
50.7	51.2				53.2			55.2			57.2					59.7			61.2			63.2			1.80	3.40	6.40
41.8	42.3	42.8	43.3	43.8	44.3	45.3	45.8	46.3	46.8	47.3	47.8	48.3	49.3	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	1.80	7.40	13.60
50.2	50.7				52.7			54.7			56.7																

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B			
6.35	9.75	6.00	9.40	1.54	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3				
7.35	11.35	7.00	11.00	1.54	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2				
4.35	6.75	4.00	6.40	1.55	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9				
4.75	7.35	4.40	7.00	1.55			63.9						66.9							70.9						
3.95	6.15	3.60	5.80	1.56			65.5						68.5							72.5						
5.35	8.35	5.00	8.00	1.56			62.7						65.7							69.7						
5.75	8.95	5.40	8.60	1.56	60.9	61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9	69.4				
8.95	13.95	8.60	13.60	1.56	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9				
4.55	7.15	4.20	6.80	1.57			64.2						67.2							71.2						
4.95	7.75	4.60	7.40	1.57			65.8						68.8							72.8						
4.15	6.55	3.80	6.20	1.58	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	69.0	69.5	70.0	70.5	71.0				
3.75	5.95	3.40	5.60	1.59			65.8						68.8							72.8						
6.15	9.75	5.80	9.40	1.59	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4				
7.15	11.35	6.80	11.00	1.59	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4				
4.35	6.95	4.00	6.60	1.60			64.6						67.6							71.6						
3.95	6.35	3.60	6.00	1.61			65.3						68.3							72.4						
5.55	8.95	5.20	8.60	1.61	61.0	61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	69.0	69.5				
4.55	7.35	4.20	7.00	1.62			64.1						67.1							71.1						
5.15	8.35	4.80	8.00	1.62	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	68.8	69.3	69.8	70.3				
9.75	15.75	9.40	15.40	1.62	52.3	52.8	53.3	53.8	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8				
4.15	6.75	3.80	6.40	1.63			64.9						67.9							71.9						
4.75	7.75	4.40	7.40	1.63			63.6						66.6							70.6						
6.95	11.35	6.60	11.00	1.63	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5				
3.75	6.15	3.40	5.80	1.64			65.7						68.7							72.7						
4.35	7.15	4.00	6.80	1.64			64.4						67.4							71.4						
5.95	9.75	5.60	9.40	1.64	60.1	60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6				
7.75	12.75	7.40	12.40	1.65	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8				
3.95	6.55	3.60	6.20	1.66			65.2						68.2							72.2						
4.15	6.95	3.80	6.60	1.67			64.7						67.7							71.7						
5.35	8.95	5.00	8.60	1.67	61.2	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.2	68.7	69.2	69.7				
8.35	13.95	8.00	13.60	1.67	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4				
6.75	11.35	6.40	11.00	1.68	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7				
9.75	16.35	9.40	16.00	1.68	51.8	52.3	52.8	53.3	53.8	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4				
3.75	6.35	3.40	6.00	1.69			65.5						68.5							72.5						
4.35	7.35	4.00	7.00	1.69			64.2						67.2							71.2						
4.95	8.35	4.60	8.00	1.69	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	69.0	69.5	70.0	70.5				
4.55	7.35	4.20	7.40	1.70			63.8						66.8							70.8						
5.75	9.75	5.40	9.40	1.70	60.2	60.7	61.2	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.2	68.7				
3.95	6.75	3.60	6.40	1.71			65.0						68.0							72.0						
4.15	7.15	3.80	6.80	1.72			64.6						67.6							71.6						
6.55	11.35	6.20	11.00	1.73	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8				
7.35	12.75	7.00	12.40	1.73	56.6	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1				
5.15	8.95	4.80	8.60	1.74	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	67.3	67.8	68.3	68.8	69.3	69.8				
3.75	6.55	3.40	6.20	1.75			65.3						68.3							72.3						
3.95	6.95	3.60	6.60	1.76			64.9						67.9							71.9						
4.75	8.35	4.40	8.00	1.76			63.1						66.1							70.1						
5.55	9.75	5.20	9.40	1.76	60.4	60.9	61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.4	67.9	68.4	68.9				
8.95	15.75	8.60	15.40	1.76	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4				
4.15	7.35	3.80	7.00	1.77			64.4						67.4							71.4						
4.35	7.75	4.00	7.40	1.78			63.9						66.9							70.9						
7.15	12.75	6.80	12.40	1.78	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3				
6.35	11.35	6.00	11.00	1.79	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0				
3.75	6.75	3.40	6.40	1.80			65.2						68.2							72.2						
7.75	13.95	7.40	13.60	1.80	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8				
3.95	7.15	3.60	6.80	1.81			64.7						67.7							71.7						
4.95	8.95	4.60	8.60	1.81	61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0	67.5	68.0	68.5	69.0	69.5	70.0				
5.35	9.75	5.00	9.40	1.82	60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.1	66.6	67.1	67.6	68.1	68.6	69.1				
6.95	12.75	6.60	12.40	1.83	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4				
8.95	16.35	8.60	16.00	1.83	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9				
4.55	8.35	4.20	8.00	1.84			63.3						66.3							70.3						
3.75	6.95	3.40	6.60	1.85			65.0						68.0							72.0						
6.15	11.35	5.80	11.00	1.85	58.6	59.1	59.6	60.1	60.6	61.2	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2				
3.95	7.35	3.60	7.00	1.86			64.6						67.6							71.6						
4.15	7.75	3.80	7.40	1.87			64.1						67.1							71.1						
4.75	8.95	4.40	8.60	1.88			62.7						65.7							69.7						
5.15	9.75	4.80	9.40	1.89	60.7	61.2	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	65.7	66.2	66.7	67.2	67.7	68.2	68.7	69.2				
6.75	12.75	6.40	12.40	1.89	57.1	57.6	58.1	58.6	59.1</																	

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																					Speed Ratio	Sheave Datum Diameters					
B	B	B	B	B	B BX BP	B	B	B	B	B BX	B	B	B	B	B	B	B	B	B BX BP	B		B	B	B	Small Sheave	Large Sheave	
167	168	169	170	172	173	174	175	177	178	180	182	184	185	186	187	188	190	191	192	195	197	199	200	201	1.54	6.00	9.40
72.3	72.8	73.3	73.8	74.8	75.3	75.8	76.3	77.3	77.8	78.8	79.8	80.8	81.3	81.8	82.3	82.8	83.8	84.3	84.8	86.3	87.3	88.3	88.8	89.3	1.54	7.00	11.00
70.2	70.7	71.2	71.7	72.7	73.2	73.7	74.2	75.2	75.7	76.7	77.7	78.7	79.2	79.7	80.2	80.7	81.7	82.2	82.7	90.2	84.2	85.2	86.2	86.7	1.55	4.00	6.40
					79.2	78.4				81.9										89.4					1.55	4.40	7.00
					80.0					83.5										91.0					1.56	3.60	5.80
74.2	74.7	75.2	75.7	76.7	77.2	77.7	78.2	79.2	79.7	80.7	81.7	82.7	83.2	83.7	84.2	84.7	85.7	86.2	86.7	88.2	89.2	90.2	90.7	91.2	1.56	5.00	8.00
73.4	73.9	74.4	74.9	75.9	76.4	76.9	77.4	78.4	78.9	79.9	80.9	81.9	82.4	82.9	83.4	83.9	84.9	85.4	85.9	87.4	88.4	89.4	89.9	90.4	1.56	5.40	8.60
66.9	67.4	67.9	68.4	69.4	69.9	70.4	70.9	71.9	72.4	73.4	74.4	75.4	75.9	76.4	76.9	77.4	78.4	78.9	79.4	80.9	81.9	82.9	83.4	83.9	1.56	8.60	13.60
					78.7					82.3										89.8					1.57	4.20	6.80
75.0	75.5	76.0	76.5	77.5	78.0	78.5	79.0	80.0	80.5	81.5	82.5	83.5	84.0	84.5	85.0	85.5	86.5	87.0	87.5	89.0	90.0	91.0	91.5	92.0	1.57	4.60	7.40
					79.5					83.0										90.5					1.58	3.80	6.20
					80.3					83.8										91.3					1.59	3.40	5.60
72.4	72.9	73.4	73.9	74.9	75.4	75.9	76.4	77.4	77.9	78.9	79.9	80.9	81.4	81.9	82.4	82.9	83.9	84.4	84.9	86.4	87.4	88.4	88.9	89.4	1.59	5.80	9.40
70.4	70.9	71.4	71.9	72.9	73.4	73.9	74.4	75.4	75.9	76.9	77.9	78.9	79.4	79.9	80.4	80.9	81.9	82.4	82.9	84.4	85.4	86.4	86.9	87.4	1.59	6.80	11.00
					79.1					82.6										90.1					1.60	4.00	6.60
					79.9					83.4										90.9					1.61	3.60	6.00
73.5	74.0	74.5	75.0	76.0	76.5	77.0	77.5	78.5	79.0	80.0	81.0	82.0	82.5	83.0	83.5	84.0	85.0	85.5	86.0	87.5	88.5	89.5	90.0	90.5	1.61	5.20	8.60
					78.6					82.1										89.6					1.62	4.20	7.00
74.3	74.8	75.3	75.8	76.8	77.3	77.8	78.3	79.3	79.8	80.8	81.8	82.8	83.3	83.8	84.3	84.8	85.8	86.3	86.8	88.3	89.3	90.3	90.8	91.3	1.62	4.80	8.00
64.9	65.4	65.9	66.4	67.4	67.9	68.4	68.9	69.9	70.4	71.4	72.4	73.4	73.9	74.4	74.9	75.4	76.4	76.9	77.4	78.9	79.9	80.9	81.4	81.9	1.62	9.40	15.40
					79.4					82.9										90.4					1.63	3.80	6.40
					78.1					81.6										89.1					1.63	4.40	7.40
70.5	71.0	71.5	72.0	73.0	73.5	74.0	74.5	75.5	76.0	77.0	78.0	79.0	79.5	80.0	80.5	81.0	82.0	82.5	83.0	84.5	85.5	86.5	87.0	87.5	1.63	6.60	11.00
					80.2					83.7										91.2					1.64	3.40	5.80
					79.9					82.4										89.9					1.64	4.00	6.80
72.6	73.1	73.6	74.1	75.1	75.6	76.1	76.6	77.6	78.1	79.1	80.1	81.1	81.6	82.1	82.6	83.1	84.1	84.6	85.1	86.6	87.6	88.6	89.1	89.6	1.64	5.60	9.40
68.8	69.3	69.8	70.3	71.3	71.8	72.3	72.8	73.8	74.3	75.3	76.3	77.3	77.8	78.3	78.8	79.3	80.3	80.8	81.3	82.8	83.8	84.8	85.3	85.8	1.65	7.40	12.40
					79.7					83.2										90.7					1.66	3.60	6.20
					79.2					82.7										90.2					1.67	3.80	6.60
73.7	74.2	74.7	75.2	76.2	76.7	77.2	77.7	78.7	79.2	80.2	81.2	82.2	82.7	83.2	83.7	84.2	85.2	85.7	86.2	87.7	88.7	89.7	90.2	90.7	1.67	5.00	8.60
67.4	67.9	68.4	68.9	69.9	70.4	70.9	71.4	72.4	72.9	73.9	74.9	75.9	76.4	76.9	77.4	77.9	78.9	79.4	79.9	81.4	82.4	83.4	83.9	84.4	1.67	8.00	13.60
70.7	71.2	71.7	72.2	73.2	73.7	74.2	74.7	75.7	76.2	77.2	78.2	79.2	79.7	80.2	80.7	81.2	82.2	82.7	83.2	84.7	85.7	86.7	87.2	87.7	1.68	6.40	11.00
64.4	64.9	65.4	65.9	66.9	67.4	67.9	68.4	69.4	69.9	70.9	71.9	72.9	73.4	73.9	74.4	74.9	75.9	76.4	76.9	78.4	79.4	80.4	80.9	81.4	1.68	9.40	16.00
					80.0					83.5										91.0					1.69	3.40	6.00
					78.7					82.2										89.7					1.69	4.00	7.00
74.5	75.0	75.5	76.0	77.0	77.5	78.0	78.5	79.5	80.0	81.0	82.0	83.0	83.5	84.0	84.5	85.0	86.0	86.5	87.0	88.5	89.5	90.5	91.0	91.5	1.69	4.60	8.00
					78.3					81.8										89.3					1.70	4.20	7.40
72.7	73.2	73.7	74.2	75.2	75.7	76.2	76.8	77.8	78.3	79.3	80.3	81.3	81.8	82.3	82.8	83.3	84.3	84.8	85.3	86.8	87.8	88.8	89.3	89.8	1.70	5.40	9.40
					79.5					83.0										90.5					1.71	3.60	6.40
					79.1					82.6										90.1					1.72	3.80	6.80
70.9	71.4	71.9	72.4	73.4	73.9	74.4	74.9	75.9	76.4	77.4	78.4	79.4	79.9	80.4	80.9	81.4	82.4	82.9	83.4	84.9	85.9	86.9	87.4	87.9	1.73	6.20	11.00
69.1	69.6	70.1	70.6	71.6	72.1	72.6	73.1	74.1	74.6	75.6	76.6	77.6	78.1	78.6	79.1	79.6	80.6	81.1	81.6	83.1	84.1	85.1	85.6	86.1	1.73	7.00	12.40
73.9	74.4	74.9	75.4	76.4	76.9	77.4	77.9	78.9	79.4	80.4	81.4	82.4	82.9	83.4	83.9	84.4	85.4	85.9	86.4	87.9	88.9	89.9	90.4	90.9	1.74	4.80	8.60
					79.8					83.3										90.8					1.75	3.40	6.20
					79.4					82.9										90.4					1.76	3.60	6.60
72.9	73.4	73.9	74.4	75.4	75.9	76.4	76.9	77.9	78.4	79.4	80.4	81.4	81.9	82.4	82.9	83.4	84.4	84.9	85.4	86.9	87.9	88.9	89.4	89.9	1.76	4.40	8.00
65.5	66.0	66.5	67.0	68.0	68.5	69.0	69.5	70.5	71.0	72.0	73.0	74.0	74.5	75.0	75.5	76.0	77.0	77.5	78.0	79.5	80.5	81.5	82.0	82.5	1.76	5.20	9.40
					78.9					82.4										89.9					1.77	3.80	7.00
					78.4					81.9										89.4					1.78	4.00	7.40
69.3	69.8	70.3	70.8	71.8	72.3	72.8	73.3	74.3	74.8	75.8	76.8	77.8	78.3	78.8	79.3	79.8	80.8	81.3	81.8	83.3	84.3	85.3	85.8	86.3	1.78	6.80	12.40
71.0	71.5	72.0	72.5	73.5	74.0	74.5	75.0	76.0	76.5	77.5	78.5	79.5	80.0	80.5	81.0	81.5	82.5	83.0	83.5	85.0	86.0	87.0	87.5	88.0	1.79	6.00	11.00
					79.7					83.2										90.7					1.80	3.40	6.40
67.8	68.3	68.8	69.3	70.3	70.8	71.3	71.8	72.8	73.3	74.3	75.3	76.3	76.8	77.3	77.8	78.3	79.3	79.8	80.3	81.8	82.8	83.8	84.3	84.9	1.80	7.40	13.60
					79.2					82.7										90.2					1.81	3.60	6.80
74.0	74.5	75.0	75.5	76.5	77.0	77.5	78.0	79.0	79.5	80.5	81.5	82.5	83.0	83.5	84.0	84.5	85.5	86.0	86.5	88.0	89.0	90.0	90.5	91.0	1.81	4.60	8.60
73.1	73.6	74.1	74.6	75.6	76.1	76.6	77.1	78.1	78.6	79.6	80.6	81.6	82.1	82.6	83.1	83.6	84.6	85.1	85.6	87.1	88.1	89.1	89.6	90.1	1.82	5.00	9.40
69.4	69.9	70.4	70.9	71.9	72.4	7																					

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B BX										B BX											
					204	205	206	210	212	215	217	218	220	221	223	225	228	230	234	235	236	237	240	248	253	255
6.35	9.75	6.00	9.40	1.54	90.8	91.3	91.8	93.8	94.0	95.5	96.5	97.0	98.0	98.5	99.5	100.5	102.0	103.0	105.0	105.5	106.0	106.5	108.0	112.0	114.5	115.5
7.35	11.35	7.00	11.00	1.54	88.7	89.2	89.7	91.7	92.0	93.5	94.5	95.0	96.0	96.5	97.5	98.5	100.0	101.0	103.0	103.5	104.0	104.5	106.0	110.0	112.5	113.5
4.35	6.75	4.00	6.40	1.55																						
4.75	7.35	4.40	7.00	1.55																						
3.95	6.15	3.60	5.80	1.56																						
5.35	8.35	5.00	8.00	1.56	92.7	93.2	93.7	95.7	95.9	97.4	98.4	98.9	99.9	100.4	101.4	102.4	103.9	104.9	106.9	107.4	107.9	108.4	109.9	113.9	116.4	117.4
5.75	8.95	5.40	8.60	1.56	91.9	92.4	92.9	94.9	95.1	96.6	97.6	98.1	99.1	99.6	100.6	101.6	103.1	104.1	106.1	106.6	107.1	107.6	109.1	113.1	115.6	116.6
8.95	13.95	8.60	13.60	1.56	85.4	85.9	86.4	88.4	88.7	90.2	91.2	91.7	92.7	93.2	94.2	95.2	96.7	97.7	99.7	100.2	100.7	101.2	102.7	106.7	109.2	110.2
4.55	7.15	4.20	6.80	1.57																						
4.95	7.75	4.60	7.40	1.57																						
4.15	6.55	3.80	6.20	1.58																						
3.75	5.95	3.40	5.60	1.59																						
6.15	9.75	5.80	9.40	1.59	90.9	91.4	91.9	93.9	94.2	95.7	96.7	97.2	98.2	98.7	99.7	100.7	102.2	103.2	105.2	105.7	106.2	106.7	108.2	112.2	114.7	115.7
7.15	11.35	6.80	11.00	1.59	88.9	89.4	89.9	91.9	92.1	93.6	94.6	95.1	96.1	96.6	97.6	98.6	100.1	101.1	103.1	103.6	104.1	104.6	106.1	110.1	112.7	113.7
4.35	6.95	4.00	6.60	1.60																						
3.95	6.35	3.60	6.00	1.61																						
5.55	8.95	5.20	8.60	1.61	92.0	92.5	93.0	95.0	95.3	96.8	97.8	98.3	99.3	99.8	100.8	101.8	103.3	104.3	106.3	106.8	107.3	107.8	109.3	113.3	115.8	116.8
4.55	7.35	4.20	7.00	1.62																						
5.15	8.35	4.80	8.00	1.62	92.8	93.3	93.8	95.8	96.1	97.6	98.6	99.1	100.1	100.6	101.6	102.6	104.1	105.1	107.1	107.6	108.1	108.6	110.1	114.1	116.6	117.6
9.75	15.75	9.40	15.40	1.62	83.4	83.9	84.4	86.4	86.6	88.1	89.1	89.6	90.6	91.1	92.1	93.1	94.6	95.6	97.6	98.1	98.6	99.1	100.6	104.6	107.1	108.1
4.15	6.75	3.80	6.40	1.63																						
4.75	7.75	4.40	7.40	1.63																						
6.95	11.35	6.60	11.00	1.63	89.0	89.5	90.1	92.1	92.3	93.8	94.8	95.3	96.3	96.8	97.8	98.8	100.3	101.3	103.3	103.8	104.3	104.8	106.3	110.3	112.8	113.8
3.75	6.15	3.40	5.80	1.64																						
4.35	7.15	4.00	6.80	1.64																						
5.95	9.75	5.60	9.40	1.64	91.1	91.6	92.1	94.1	94.3	95.9	96.9	97.4	98.4	98.9	99.9	100.9	102.4	103.4	105.4	105.9	106.4	106.9	108.4	112.4	114.9	115.9
7.75	12.75	7.40	12.40	1.65	87.3	87.8	88.3	90.3	90.6	92.1	93.1	93.6	94.6	95.1	96.1	97.1	98.6	99.6	101.6	102.1	102.6	103.1	104.6	108.6	111.1	112.1
3.95	6.55	3.60	6.20	1.66																						
4.15	6.95	3.80	6.60	1.67																						
5.35	8.95	5.00	8.60	1.67	92.2	92.7	93.2	95.2	95.5	97.0	98.0	98.5	99.5	100.0	101.0	102.0	103.5	104.5	106.5	107.0	107.5	108.0	109.5	113.5	116.0	117.0
8.35	13.95	8.00	13.60	1.67	85.9	86.4	86.9	88.9	89.1	90.6	91.6	92.1	93.1	93.6	94.6	95.6	97.1	98.1	100.1	100.6	101.1	101.6	103.1	107.1	109.6	110.6
6.75	11.35	6.40	11.00	1.68	89.2	89.7	90.2	92.2	92.5	94.0	95.0	95.5	96.5	97.0	98.0	99.0	100.5	101.5	103.5	104.0	104.5	105.0	106.5	110.5	113.0	114.0
9.75	16.35	9.40	16.00	1.68	82.9	83.4	83.9	85.9	86.1	87.6	88.6	89.1	90.1	90.6	91.6	92.6	94.1	95.1	97.1	97.6	98.1	98.6	100.1	104.1	106.6	107.6
3.75	6.35	3.40	6.00	1.69																						
4.35	7.35	4.00	7.00	1.69																						
4.95	8.35	4.60	8.00	1.69	93.0	93.5	94.0	96.0	96.2	97.7	98.7	99.2	100.2	100.7	101.7	102.7	104.2	105.2	107.2	107.7	108.2	108.7	110.2	114.2	116.7	117.7
4.55	7.75	4.20	7.40	1.70																						
5.75	9.75	5.40	9.40	1.70	91.3	91.8	92.3	94.3	94.3	94.5	96.0	97.0	97.5	98.5	99.0	100.0	101.0	102.5	103.5	105.5	106.0	106.5	108.5	112.5	115.0	116.0
3.95	6.75	3.60	6.40	1.71																						
4.15	7.15	3.80	6.80	1.72																						
6.55	11.35	6.20	11.00	1.73	89.4	89.9	90.4	92.4	92.6	94.1	95.1	95.6	96.6	97.1	98.1	99.1	100.6	101.6	103.6	104.1	104.6	105.1	106.6	110.6	113.1	114.1
7.35	12.75	7.00	12.40	1.73	87.6	88.1	88.6	90.6	90.9	92.4	93.4	93.9	94.9	95.4	96.4	97.4	98.9	99.9	101.9	102.4	102.9	103.4	104.9	108.9	111.4	112.4
5.15	8.95	4.80	8.60	1.74	92.4	92.9	93.4	95.4	95.6	97.1	98.1	98.6	99.6	100.1	101.1	102.1	103.6	104.6	106.6	107.1	107.6	108.1	109.6	113.6	116.1	117.1
3.75	6.55	3.40	6.20	1.75																						
3.95	6.95	3.60	6.60	1.76																						
4.75	8.35	4.40	8.00	1.76																						
5.55	9.75	5.20	9.40	1.76	91.4	91.9	92.4	94.4	94.7	96.2	97.2	97.7	98.7	99.2	100.2	101.2	102.7	103.7	105.7	106.2	106.7	107.2	108.7	112.7	115.2	116.2
8.95	15.75	8.60	15.40	1.76	84.0	84.5	85.0	87.0	87.2	88.7	89.7	90.2	91.2	91.7	92.7	93.7	95.2	96.2	98.2	98.7	99.2	99.7	101.2	105.2	107.7	108.7
4.15	7.35	3.80	7.00	1.77																						
4.35	7.75	4.00	7.40	1.78																						
7.15	12.75	6.80	12.40	1.78	87.8	88.3	88.8	90.8	91.0	92.5	93.5	94.0	95.0	95.5	96.5	97.5	99.0	100.0	102.0	102.5	103.0	103.5	105.0	109.0	111.5	112.5
6.35	11.35	6.00	11.00	1.79	89.5	90.0	90.5	92.5	92.8	94.3	95.3	95.8	96.8	97.3	98.3	99.3	100.8	101.8	103.8	104.3	104.8	105.3	106.8	110.8	113.3	114.3
3.75	6.75	3.40	6.40	1.80																						
7.75	13.95	7.40	13.60	1.80	86.4	86.9	87.4	89.4	89.6	91.1	92.1	92.6	93.6	94.1	95.1	96.1	97.6	98.6	100.6	101.1	101.6	102.1	103.6	107.6	110.1	111.1
3.95	7.15	3.60	6.80	1.81																						
4.95	8.95	4.60	8.60	1.81	92.5	93.0	93.5	95.5	95.8	97.3	98.3	98.8	99.8	100.3	101.3	102.3	103.8	104.8	106.8	107.3	107.8	108.3	109.8	113.8	116.3	117.3
5.35	9.75	5.00	9.40	1.82	91.6	92.1	92.6	94.6	94.8	96.3	97.3	97.8	98.8	99.3	100.3	101.3	102.8	103.8	105.8	106.3	106.8	107.3	108.8	112.8	115.3	116.3
6.95	12.75	6.60	12.40	1.83	87.9	88.4	88.9	90.9	91.2	92.7	93.7	94.2	95.2	95.7	96.7	97.7	99.2	100.2	102.2	102.7	103.2	103.7	105.2	109.2	11	

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																							
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX		
71	72	73	74		75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	
4.35	8.35	4.00	8.00	1.92	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	
9.75	18.75	9.40	18.40	1.92																								
6.55	12.75	6.20	12.40	1.95	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	
7.15	13.95	6.80	13.60	1.95	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	
3.75	7.35	3.40	7.00	1.96	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	
3.95	7.75	3.60	7.40	1.96	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	
8.35	16.35	8.00	16.00	1.96	17.1	17.6	18.1	18.6	19.1	19.6	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	
4.55	8.95	4.20	8.60	1.97	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	
4.95	9.75	4.60	9.40	1.97	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	
5.75	11.35	5.40	11.00	1.97	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	
4.15	8.35	3.80	8.00	2.01	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	
6.35	12.75	6.00	12.40	2.01	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	
6.95	13.95	6.60	13.60	2.01	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	
7.75	15.75	7.40	15.40	2.03	18.0	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	
4.75	9.75	4.40	9.40	2.05	25.4	25.9	26.4	26.9	27.4	27.9	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	
5.55	11.35	5.20	11.00	2.05	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	
4.35	8.95	4.00	8.60	2.06	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	
3.75	7.75	3.40	7.40	2.07	27.8	28.3	28.8	29.3	29.8	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	
6.15	12.75	5.80	12.40	2.07	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	
6.75	13.95	6.40	13.60	2.07	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	
8.95	18.75	8.60	18.40	2.09		15.4	15.9	16.5	17.0	17.5	18.0	18.5	19.1	19.6	20.1	20.6	21.1	21.6	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	
9.75	20.35	9.40	20.00	2.09									16.4	17.0	17.5	18.0	18.5	19.1	19.6	20.1	20.6	21.1	21.6	22.2	22.7	23.2	23.7	
3.95	8.35	3.60	8.00	2.11	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	
7.75	16.35	7.40	16.00	2.11	17.5	18.0	18.5	19.0	19.5	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	
5.35	11.35	5.00	11.00	2.12	23.6	24.1	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	
6.55	13.95	6.20	13.60	2.13	20.5	21.0	21.5	22.0	22.5	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	
4.55	9.75	4.20	9.40	2.14	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	
5.95	12.75	5.60	12.40	2.14	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	
7.35	15.75	7.00	15.40	2.14	18.3	18.8	19.3	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	
4.15	8.95	3.80	8.60	2.16	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	
5.15	11.35	4.80	11.00	2.20	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	
6.35	13.95	6.00	13.60	2.20	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	
7.15	15.75	6.80	15.40	2.20	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	
5.75	12.75	5.40	12.40	2.22	22.1	22.6	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	
7.35	16.35	7.00	16.00	2.22	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	
3.75	8.35	3.40	8.00	2.23	27.3	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	
4.35	9.75	4.00	9.40	2.24	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	
8.35	18.75	8.00	18.40	2.25		19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	
3.95	8.95	3.60	8.60	2.27	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	
6.15	13.95	5.80	13.60	2.27	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	
8.95	15.75	8.60	15.40	2.27	18.6	19.1	19.6	20.1	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2		

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																	Speed Ratio	Sheave Datum Diameters									
B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP		Small Sheave	Large Sheave								
93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	1.92	* 4.00	8.00
38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	1.92	9.40	18.40
25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	1.95	6.20	12.40
32.6	33.1	33.6	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	1.95	6.80	13.60
31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	1.96	* 3.40	7.00
39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	50.7	51.2	1.96	* 3.60	7.40
38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	50.7	1.96	8.00	16.00
28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	1.96	8.00	16.00
37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	1.97	* 4.20	8.60
36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	1.97	4.60	9.40
34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	1.97	5.40	11.00
38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	2.01	3.80	8.00
32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	2.01	6.00	12.40
31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	2.01	6.80	13.60
29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	2.03	7.40	15.40
36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	2.05	* 4.40	9.40
34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	2.05	5.20	11.00
37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	2.06	* 4.00	8.60
38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	2.07	* 3.40	7.40	
32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	2.07	5.80	12.40
31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	2.07	6.40	13.60
25.7	26.2	26.7	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	2.09	8.60	18.40
23.7	24.2	24.7	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	2.09	9.40	20.00
38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	2.11	* 3.60	8.00
28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	2.11	7.40	16.00
34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	2.12	5.00	11.00
31.6	32.1	32.6	33.1	33.6	34.1	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	2.13	6.20	13.60
36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	2.14	* 4.20	9.40
33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	2.14	5.60	12.40
29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	2.14	7.00	15.40
37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	2.16	* 3.80	8.60
34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	2.20	4.80	11.00
31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	2.20	6.00	13.60
29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	2.20	6.80	15.40
33.2	33.7	34.2	34.7	35.2	35.7	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	2.22	5.40	12.40
29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	2.22	7.00	16.00
38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	2.23	* 3.40	8.00
36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	2.24	* 4.00	9.40
26.1	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	2.25	8.00	18.40
37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	2.27	* 3.60	8.60
31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	2.27	5.80	13.60
29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	2.27	6.60	15.40
24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.5	34.0	34.5	35.0	35.5	36.0	36.5	2.27	8.60	20.00
35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	2.29	4.60	11.00
29.1	29.6	30.1	30.6	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	2.29	6.80	16.00
33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	2.30	5.20	12.40
29.9	30.4	31.0	31.5	32.0	32.5	33.0	33.5	34.0																			

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																						
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B						
4.35	8.35	4.00	8.00		118	119	120	122	123	124	125	126	127	128	130	131	132	133	134	135	136	137	138	139	140	141	
4.35	8.35	4.00	8.00	1.92			51.4		53.4				55.4				57.4				59.4				61.4		
9.75	18.75	9.40	18.40	1.92	37.8	38.3	38.8		39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.4	47.9	48.4	48.9	49.4
6.55	12.75	6.20	12.40	1.95	45.2	45.7	46.2		47.2	47.7	48.2	48.7	49.2	49.7	50.2	51.2	51.7	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.7	56.2	56.7
7.15	13.95	6.80	13.60	1.95	43.7	44.2	44.7		45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.3
3.75	7.35	3.40	7.00	1.96			52.7		54.7				56.7				58.7				60.7				62.7		
3.95	7.75	3.60	7.40	1.96			52.2		54.2				56.2				58.2				60.2				62.2		
8.35	16.35	8.00	16.00	1.96	40.9	41.4	41.9		42.9	43.4	43.9	44.4	44.9	45.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.4	52.9
4.55	8.95	4.20	8.60	1.97			50.8		52.8				54.8				56.8				58.8				60.8		
4.95	9.75	4.60	9.40	1.97	48.8	49.3	49.8		50.8	51.3	51.8	52.3	52.8	53.3	53.9	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4
5.75	11.35	5.40	11.00	1.97	46.9	47.4	47.9		48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.5	57.0	57.5	58.0	58.5
4.15	8.35	3.80	8.00	2.01			51.6		53.6				55.6				57.6				59.6				61.6		
6.35	12.75	6.00	12.40	2.01	45.3	45.8	46.3		47.3	47.8	48.3	48.8	49.3	49.8	50.3	51.3	51.8	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9
6.95	13.95	6.60	13.60	2.01	43.9	44.4	44.9		45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4
7.75	15.75	7.40	15.40	2.03	41.8	42.3	42.8		43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3
4.75	9.75	4.40	9.40	2.05			50.0		52.0				54.0				56.0				58.0				60.0		
5.55	11.35	5.20	11.00	2.05	47.1	47.6	48.1		49.1	49.6	50.1	50.6	51.1	51.6	52.1	53.1	53.6	54.1	54.6	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6
4.35	8.95	4.00	8.60	2.06			51.0		53.0				55.0				57.0				59.0				61.0		
3.75	7.75	3.40	7.40	2.07			52.4		54.4				56.4				58.4				60.4				62.4		
6.15	12.75	5.80	12.40	2.07	45.5	46.0	46.5		47.5	48.0	48.5	49.0	49.5	50.0	50.5	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0
6.75	13.95	6.40	13.60	2.07	44.0	44.5	45.0		46.1	46.6	47.1	47.6	48.1	48.6	49.1	50.1	50.6	51.1	51.6	52.1	52.6	53.1	53.6	54.1	54.6	55.1	55.6
8.95	18.75	8.60	18.40	2.09	38.4	38.9	39.4		40.4	40.9	41.4	41.9	42.4	42.9	43.4	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.5	50.0
9.75	20.35	9.40	20.00	2.09	36.4	36.9	37.4		38.4	38.9	39.5	40.0	40.5	41.0	41.5	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0
3.95	8.35	3.60	8.00	2.11			51.7		53.7				55.7				57.7				59.7				61.8		
7.75	16.35	7.40	16.00	2.11	41.3	41.8	42.3		43.3	43.8	44.3	44.8	45.3	45.8	46.3	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3	51.8	52.3	52.8
5.35	11.35	5.00	11.00	2.12	47.2	47.7	48.2		49.2	49.7	50.2	50.7	51.2	51.7	52.2	53.2	53.7	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8
6.55	13.95	6.20	13.60	2.13	44.2	44.7	45.2		46.2	46.7	47.2	47.7	48.2	48.7	49.2	50.2	50.7	51.2	51.7	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.7
4.55	9.75	4.20	9.40	2.14			50.2		52.2				54.2				56.2				58.2				60.2		
5.95	12.75	5.60	12.40	2.14	45.6	46.1	46.6		47.6	48.1	48.6	49.1	49.6	50.1	50.6	51.7	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.2
7.35	15.75	7.00	15.40	2.14	42.1	42.6	43.1		44.1	44.6	45.1	45.6	46.1	46.6	47.1	48.1	48.6	49.1	49.6	50.1	50.6	51.1	51.6	52.1	52.6	53.1	53.6
4.15	8.95	3.80	8.60	2.16			51.1		53.1				55.1				57.1				59.1				61.1		
5.15	11.35	4.80	11.00	2.20	47.4	47.9	48.4		49.4	49.9	50.4	50.9	51.4	51.9	52.4	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9
6.35	13.95	6.00	13.60	2.20	44.3	44.8	45.3		46.4	46.9	47.4	47.9	48.4	48.9	49.4	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9
7.15	15.75	6.80	15.40	2.20	42.2	42.7	43.3		44.3	44.8	45.3	45.8	46.3	46.8	47.3	48.3	48.8	49.3	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8
5.75	12.75	5.40	12.40	2.22	45.8	46.3	46.8		47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.3	55.8	56.3	56.8	57.3
7.35	16.35	7.00	16.00	2.22	41.6	42.1	42.6		43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.6	48.1	48.6	49.1	49.6	50.1	50.6	51.1	51.6	52.1	52.6	53.1
3.75	8.35	3.40	8.00	2.23			51.9		53.9				55.9				57.9				59.9				61.9		
4.35	9.75	4.00	9.40	2.24			50.3		52.3				54.3				56.3				58.3				60.3		
8.35	18.75	8.00	18.40	2.25	38.8	39.3	39.8		40.8	41.3	41.8	42.3	42.8	43.4	43.9	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4
3.95	8.95	3.60	8.60	2.27			51.3		53.3				55.3				57.3				59.3				61.3		
6.15	13.95	5.80	13.60	2.27	44.5	45.0	45.5		46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0
6.95	15.75	6.60	15.40	2.27	42.4	42.9	43.4		44.4	44.9	45.4	45.9	46.4	46.9	47.4	48.4	48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9
8.95	20.35	8.60	20.00	2.27	37.0	37.5	38.0		39.0	39.5	40.0	40.5	41.0	41.5	42.1	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6
4.95	11.35	4.60	11.00	2.29	47.5	48.0	48.5		49.5	50.0	50.5	51.0	51.5	52.0	52.6	53.6	54.1	54.6	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.1
7.15	16.35	6.80	16.00	2.29	41.7	42.2	42.7		43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3
5.55	12.75	5.20	12.40	2.30	45.9	46.4	46.9		47.9	48.4	48.9	49.4	49.9	50.4	50.9	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5
6.75	15.75	6.40	15.40	2.33	42.5	43.0	43.5		44.5	45.1	45.6	46.1	46.6	47.1	47.6	48.6	49.1	49.6	50.1	50.6	51.1	51.6	52.1	52.6	53.1	53.6	54.1
5.95	13.95	5.60	13.60	2.34	44.6	45.1	45.6		46.6	47.2	47.7	48.2	48.7	49.2	49.7	50.7	51.2	51.7	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.7	56.2
4.15	9.75	3.80	9.40	2.35			50.5		52.5				54.5				56.5				58.5				60.5		
6.95	16.35	6.60	16.00	2.35	41.9	42.4	42.9		43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.4
5.35	12.75	5.00	12.40	2.38	46.1	46.6	47.1		48.1	48.6	49.1	49.6	50.1	50.6	51.1	52.1	52.6	53.1	53.6	54.1	54.6	55.1	55.6	56.1	56.6	57.1	57.6
3.75	8.95	3.40	8.60	2.39			51.4		53.4				55.4				57.4				59.4				61.4		
4.75	11.35	4.40	11.00																								

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters						
B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		Small Sheave	Large Sheave					
142	143	144	145	146	147	148	149	150	151	152	153	154	156	157	158	160	161	162	164	165	166	167	168	169	1.92	4.00	8.00
49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.9	57.4	57.9	58.9	59.4	59.9	60.9	61.4	61.9	62.4	62.9	63.4	1.92	9.40	18.40
57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2	64.2	64.7	65.2	66.2	66.7	67.2	68.2	68.7	69.2	69.7	70.2	70.7	1.95	6.20	12.40
55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.8	63.3	63.8	64.8	65.3	65.8	66.8	67.3	67.8	68.3	68.8	69.3	1.95	6.80	13.60
		64.7						67.7							71.7			73.7							1.96	3.40	7.00
		64.2						67.2							71.2			73.2							1.96	3.60	7.40
		62.8						65.8							69.8			71.8							1.97	4.20	8.60
52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.9	60.4	60.9	61.9	62.4	62.9	63.9	64.4	64.9	65.4	65.9	66.4	1.97	4.60	9.40
60.9	61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	66.9	67.9	68.4	68.9	69.9	70.4	70.9	71.9	72.4	72.9	73.4	73.9	74.4	1.97	5.40	11.00
59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	66.0	66.5	67.0	68.0	68.5	69.0	70.0	70.5	71.0	71.5	72.0	72.5	1.97	3.80	8.00
57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4	64.4	64.9	65.4	66.4	66.9	67.4	68.4	68.9	69.4	69.9	70.4	70.9	2.01	6.00	12.40
55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.9	63.4	63.9	64.9	65.4	65.9	66.9	67.4	67.9	68.4	68.9	69.4	2.01	6.60	13.60
53.8	54.3	54.8	55.3	55.8	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.9	61.4	61.9	62.9	63.4	63.9	64.9	65.4	65.9	66.4	66.9	67.4	2.03	7.40	15.40
		62.0						65.0							69.0			71.0							2.05	4.40	9.40
59.1	59.6	60.1	60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	66.1	66.6	67.1	68.1	68.6	69.1	70.1	70.6	71.1	71.6	72.1	72.6	2.05	5.20	11.00
		63.0						66.0							70.0			72.0							2.06	4.00	8.60
		64.4						67.4							71.4			73.4							2.07	3.40	7.40
57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	64.5	65.0	65.5	66.5	67.0	67.5	68.5	69.0	69.5	70.0	70.5	71.0	2.07	5.80	12.40
56.1	56.6	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	63.1	63.6	64.1	65.1	65.6	66.1	67.1	67.6	68.1	68.6	69.1	69.6	2.07	6.40	13.60
50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.5	58.0	58.5	59.5	60.0	60.5	61.5	62.0	62.5	63.0	63.5	64.0	2.09	8.60	18.40
48.5	49.0	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.6	55.6	56.1	56.6	57.6	58.1	58.6	59.6	60.1	60.6	61.1	61.6	62.1	2.09	9.40	20.00
		63.8						66.8							70.8			72.8							2.11	3.60	8.00
53.3	53.8	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	60.4	60.9	61.4	62.4	62.9	63.4	64.4	64.9	65.4	65.9	66.4	66.9	2.11	7.40	16.00
59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	66.3	66.8	67.3	68.3	68.8	69.3	70.3	70.8	71.3	71.8	72.3	72.8	2.12	5.00	11.00
56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	63.2	63.7	64.2	65.2	65.7	66.2	67.2	67.7	68.2	68.7	69.3	69.8	2.13	6.20	13.60
		62.2						65.2							69.2			71.2							2.14	4.20	9.40
57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2	63.7	64.7	65.2	65.7	66.7	67.2	67.7	68.7	69.2	69.7	70.2	70.7	71.2	2.14	5.60	12.40
54.1	54.6	55.1	55.6	56.1	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	61.2	61.7	62.2	63.2	63.7	64.2	65.2	65.7	66.2	66.7	67.2	67.7	2.14	7.00	15.40
		63.1						66.1							70.1			72.1							2.16	3.80	8.60
59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	66.4	66.9	67.4	68.4	68.9	69.4	70.4	70.9	71.4	71.9	72.4	72.9	2.20	4.80	11.00
56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	63.4	63.9	64.4	65.4	65.9	66.4	67.4	67.9	68.4	68.9	69.4	69.9	2.20	6.00	13.60
54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	61.3	61.8	62.3	63.3	63.8	64.3	65.3	65.8	66.3	66.8	67.3	67.8	2.20	6.80	15.40
57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.8	65.3	65.8	66.8	67.3	67.8	68.8	69.3	69.8	70.3	70.8	71.3	2.22	5.40	12.40
53.6	54.1	54.7	55.2	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.7	61.2	61.7	62.7	63.2	63.7	64.7	65.2	65.7	66.2	66.7	67.2	2.22	7.00	16.00
		63.9						66.9							70.9			72.9							2.23	3.40	8.00
50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.9	58.4	58.9	59.9	60.4	60.9	61.9	62.4	63.0	63.5	64.0	64.5	2.24	4.00	9.40
		63.3						66.3							70.3			72.3							2.27	3.60	8.60
56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.5	64.0	64.5	65.5	66.0	66.5	67.6	68.1	68.6	69.1	69.6	70.1	2.27	5.80	13.60
54.4	54.9	55.4	55.9	56.4	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.5	62.0	62.5	63.5	64.0	64.5	65.5	66.0	66.5	67.0	67.5	68.0	2.27	6.60	15.40
49.1	49.6	50.1	50.6	51.1	51.6	52.1	52.6	53.1	53.6	54.1	54.6	55.1	56.1	56.6	57.5	58.2	58.7	59.6	60.2	60.7	61.2	61.7	62.2	62.7	2.27	8.60	20.00
59.6	60.1	60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	65.6	66.6	67.1	67.6	68.6	69.1	69.6	70.6	71.1	71.6	72.1	72.6	73.1	2.29	4.60	11.00
53.8	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.8	61.3	61.8	62.8	63.3	63.8	64.8	65.3	65.8	66.3	66.8	67.3	2.29	6.80	16.00
58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	64.0	65.0	65.5	66.0	67.0	67.5	68.0	69.0	69.5	70.0	70.5	71.0	71.5	2.30	5.20	12.40
54.6	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.6	62.1	62.6	63.6	64.1	64.6	65.6	66.1	66.6	67.1	67.6	68.1	2.33	6.40	15.40
56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.7	64.2	64.7	65.7	66.2	66.7	67.7	68.2	68.7	69.2	69.7	70.2	2.34	5.60	13.60
		62.5						65.5							69.5			71.5							2.35	3.80	9.40
53.9	54.4	54.9	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	61.0	61.5	62.0	63.0	63.5	64.0	65.0	65.5	66.0	66.5	67.0	67.5	2.35	6.60	16.00
58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	65.1	65.6	66.1	67.1	67.6	68.1	69.1	69.6	70.1	70.6	71.1	71.6	2.38	5.00	12.40
		63.4						66.4							70.4			72.4							2.39	3.40	8.60
		60.7						63.7							67.7			69.7							2.39	4.40	11.00
54.7	55.2	55.7	56.2	56.7	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.8	62.3	62.8	63.8	64.3	64.8	65.8	66.3	66.8	67.3	67.8	68.3	2.40	6.20	15.40
51.3	51.8	52.3	52.9	53.4	53.9	54.4	54.9	55.4	55.9</																		

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B	B	B BX BP	B	B	B	B	B BX	B	B	B	B	B	B	B BX BP	B	B	B	B			
4.35	8.35	4.00	8.00	1.92			77.9																			
9.75	18.75	9.40	18.40	1.92	63.9	64.9	65.4	65.9	66.4	67.4	67.9	68.9	69.9	70.9	71.4	71.9	72.4	72.9	73.9	74.4	74.9	76.4	77.4	78.4	78.9	79.4
6.55	12.75	6.20	12.40	1.95	71.2	72.2	72.7	73.2	73.7	74.7	75.2	76.2	77.2	78.2	78.7	79.2	79.7	80.2	81.2	81.7	82.2	83.7	84.7	85.7	86.2	86.7
7.15	13.95	6.80	13.60	1.95	69.8	70.8	71.3	71.8	72.3	73.3	73.8	74.8	75.8	76.8	77.3	77.8	78.3	78.8	79.8	80.3	80.8	82.3	83.3	84.3	84.8	85.3
3.75	7.75	3.40	7.40	1.96			79.2																			
3.95	7.75	3.60	7.40	1.96			78.7																			
8.35	16.35	8.00	16.00	1.96	66.9	67.9	68.4	68.9	69.4	70.4	70.9	71.9	72.9	73.9	74.4	74.9	75.4	75.9	76.9	77.4	77.9	79.4	80.5	81.5	82.0	82.5
4.55	8.95	4.20	8.60	1.97			77.3																			
4.95	9.75	4.60	9.40	1.97	74.9	75.9	76.4	76.9	77.4	78.4	78.9	79.9	80.9	81.9	82.4	82.9	83.4	83.9	84.9	85.4	85.9	87.4	88.4	89.4	90.4	
5.75	11.35	5.40	11.00	1.97	73.0	74.0	74.5	75.0	75.5	76.5	77.0	78.0	79.0	80.0	80.5	81.0	81.5	82.0	83.0	83.5	84.0	85.5	86.5	87.5	88.0	88.5
4.15	8.35	3.80	8.00	2.01			78.1																			
6.35	12.75	6.00	12.40	2.01	71.4	72.4	72.9	73.4	73.9	74.9	75.4	76.4	77.4	78.4	78.9	79.4	79.9	80.4	81.4	81.9	82.4	83.9	84.9	85.9	86.4	86.9
6.95	13.95	6.60	13.60	2.01	69.9	70.9	71.4	71.9	72.5	73.5	74.0	75.0	76.0	77.0	77.5	78.0	78.5	79.0	80.0	80.5	81.0	82.5	83.5	84.5	85.0	85.5
7.75	15.75	7.40	15.40	2.03	67.9	68.9	69.4	69.9	70.4	71.4	71.9	72.9	73.9	74.9	75.4	75.9	76.4	76.9	77.9	78.4	78.9	80.4	81.4	82.4	82.9	83.4
4.75	9.75	4.40	9.40	2.05			76.5																			
5.55	11.35	5.20	11.00	2.05	73.1	74.1	74.6	75.1	75.6	76.6	77.1	78.1	79.1	80.1	80.6	81.1	81.6	82.1	83.1	83.6	84.1	85.6	86.6	87.6	88.1	88.6
4.35	8.95	4.00	8.60	2.06			77.5																			
3.75	7.75	3.40	7.40	2.07			78.9																			
6.15	12.75	5.80	12.40	2.07	71.5	72.5	73.0	73.5	74.0	75.0	75.5	76.5	77.5	78.5	79.0	79.5	80.0	80.5	81.5	82.0	82.5	84.0	85.0	86.0	86.5	87.0
6.75	13.95	6.40	13.60	2.07	70.1	71.1	71.6	72.1	72.6	73.6	74.1	75.1	76.1	77.1	77.6	78.1	78.6	79.1	80.1	80.6	81.1	82.6	83.6	84.6	85.1	85.6
8.95	18.75	8.60	18.40	2.09	64.5	65.5	66.0	66.5	67.0	68.0	68.5	69.5	70.5	71.5	72.0	72.5	73.0	73.5	74.5	75.0	75.5	77.0	78.0	79.0	79.5	80.0
9.75	20.35	9.40	20.00	2.09	62.6	63.6	64.1	64.6	65.1	66.1	66.6	67.6	68.6	69.6	70.1	70.6	71.1	71.6	72.6	73.1	73.6	75.1	76.1	77.1	77.6	78.1
3.95	8.35	3.60	8.00	2.11			78.3																			
7.75	16.35	7.40	16.00	2.11	67.4	68.4	68.9	69.4	69.9	70.9	71.4	72.4	73.4	74.4	74.9	75.4	75.9	76.4	77.4	77.9	78.4	79.9	80.9	81.9	82.4	82.9
5.35	11.35	5.00	11.00	2.12	73.3	74.3	74.8	75.3	75.8	76.8	77.3	78.3	79.3	80.3	80.8	81.3	81.8	82.3	83.3	83.8	84.3	85.8	86.8	87.8	88.3	88.8
6.55	13.95	6.20	13.60	2.13	70.3	71.3	71.8	72.3	72.8	73.8	74.3	75.3	76.3	77.3	77.8	78.3	78.8	79.3	80.3	80.8	81.3	82.8	83.8	84.8	85.3	85.8
4.55	9.75	4.20	9.40	2.14			76.7																			
5.95	12.75	5.60	12.40	2.14	71.7	72.7	73.2	73.7	74.2	75.2	75.7	76.7	77.7	78.7	79.2	79.7	80.2	80.7	81.7	82.2	82.7	84.2	85.2	86.2	86.7	87.2
7.35	15.75	7.00	15.40	2.14	68.2	69.2	69.7	70.2	70.7	71.7	72.2	73.2	74.2	75.2	75.7	76.2	76.7	77.2	78.2	78.7	79.2	80.7	81.7	82.7	83.2	83.7
4.15	8.95	3.80	8.60	2.16			77.6																			
5.15	11.35	4.80	11.00	2.20	73.4	74.4	74.9	75.4	75.9	76.9	77.4	78.4	79.4	80.4	80.9	81.4	81.9	82.4	83.4	83.9	84.4	85.9	86.9	87.9	88.4	88.9
6.35	13.95	6.00	13.60	2.20	70.4	71.4	71.9	72.4	72.9	73.9	74.4	75.4	76.4	77.4	77.9	78.4	78.9	79.4	80.4	80.9	81.4	82.9	83.9	84.9	85.4	85.9
7.15	15.75	6.80	15.40	2.20	68.3	69.3	69.8	70.3	70.8	71.8	72.3	73.3	74.3	75.3	75.8	76.3	76.8	77.3	78.3	78.8	79.3	80.8	81.8	82.8	83.4	83.9
5.75	12.75	5.40	12.40	2.22	71.8	72.8	73.3	73.8	74.3	75.3	75.8	76.8	77.8	78.8	79.3	79.8	80.3	80.8	81.8	82.3	82.8	84.3	85.3	86.3	86.8	87.3
7.35	16.35	7.00	16.00	2.22	67.7	68.7	69.2	69.7	70.2	71.2	71.7	72.7	73.7	74.7	75.2	75.7	76.2	76.7	77.7	78.2	78.7	80.2	81.2	82.2	82.7	83.2
3.75	8.35	3.40	8.00	2.23			78.4																			
4.35	9.75	4.00	9.40	2.24			76.8																			
8.35	18.75	8.00	18.40	2.25	65.0	66.0	66.5	67.0	67.5	68.5	69.0	70.0	71.0	72.0	72.5	73.0	73.5	74.0	75.0	75.5	76.0	77.5	78.5	79.5	80.0	80.5
3.95	8.95	3.60	8.60	2.27			77.8																			
6.15	13.95	5.80	13.60	2.27	70.6	71.6	72.1	72.6	73.1	74.1	74.6	75.6	76.6	77.6	78.1	78.6	79.1	79.6	80.6	81.1	81.6	83.1	84.1	85.1	85.6	86.1
8.95	15.75	8.60	15.40	2.27	68.5	69.5	70.0	70.5	71.0	72.0	72.5	73.5	74.5	75.5	76.0	76.5	77.0	77.5	78.5	79.0	79.5	81.0	82.0	83.0	83.5	84.0
8.95	20.35	8.60	20.00	2.27	63.2	64.2	64.7	65.2	65.7	66.7	67.2	68.2	69.2	70.2	70.7	71.2	71.7	72.2	73.2	73.7	74.2	75.7	76.7	77.7	78.2	78.7
4.95	11.35	4.60	11.00	2.29	73.6	74.6	75.1	75.6	76.1	77.1	77.6	78.6	79.6	80.6	81.1	81.6	82.1	82.6	83.6	84.1	84.6	86.1	87.1	88.1	88.6	89.1
7.15	16.35	6.80	16.00	2.29	67.8	68.8	69.3	69.8	70.3	71.3	71.8	72.8	73.8	74.8	75.3	75.8	76.3	76.8	77.8	78.3	78.8	80.3	81.3	82.3	82.8	83.4
5.55	12.75	5.20	12.40	2.30	72.0	73.0	73.5	74.0	74.5	75.5	76.0	77.0	78.0	79.0	79.5	80.0	80.5	81.0	82.0	82.5	83.0	84.5	85.5	86.5	87.0	87.5
6.75	15.75	6.40	15.40	2.33	68.6	69.6	70.1	70.6	71.1	72.1	72.6	73.6	74.6	75.6	76.1	76.6	77.1	77.6	78.6	79.2	79.7	81.2	82.2	83.2	83.7	84.2
5.95	13.95	5.60	13.60	2.34	70.7	71.7	72.2	72.7	73.2	74.2	74.7	75.7	76.7	77.7	78.2	78.7	79.2	79.7	80.7	81.2	81.7	83.2	84.2	85.2	85.7	86.2
4.15	9.75	3.80	9.40	2.35			77.0																			
6.95	16.35	6.60	16.00	2.35	68.0	69.0	69.5	70.0	70.5	71.5	72.0	73.0	74.0	75.0	75.5	76.0	76.5	77.0	78.0	78.5	79.0	80.5	81.5	82.5	83.0	83.5
5.35	12.75	5.00	12.40	2.38	72.1	73.1	73.6	74.1	74.6	75.6	76.1	77.1	78.1	79.1	79.6	80.1	80.6	81.1	82.2	82.7	83.2	84.7	85.7	86.7	87.2	87.7
3.75	8.95	3.40	8.60	2.39			77.9																			
4.75	11.35	4.40	11.00	2.39			75.2																			
6.55	15.75	6.20	15.40	2.40	68.8	69.8	70.3	70.8	71.3	72.3	72.8	73.8	74.8	75.8	76.3	76.8	77.3	77.8	78.8	79.3	79.8	81.3	82.3	83.3	83.8	84.3
6.75	16.35	6.40	16.00	2.42	68.1	69.1	69.6	70.1	70.6	71.6	72.1	73.1	74.2	75.2	75.7	76.2	76.7	77.2	78.2	78.7	79.2	80.7	81.7	82.7	83.2	83.7
7.75	18.75	7.40	18.40	2.42	65.4	66.4	66.9	67.4	67																	

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters						
B	B BX	B	B BX	B	B	B	B	B	B	B	B BX	B	B	B	B	B	B	B BX	B		B	Small	Large				
204	205	206	210	212	215	217	218	220	221	223	225	228	230	234	235	236	237	240	248	253	255	265	270	276	1.92	4.00	8.00
80.9	81.4	81.9	83.9	84.2	85.7	86.7	87.2	88.2	88.7	89.7	90.7	92.2	93.2	95.2	95.7	96.2	96.7	98.2	102.2	104.7	105.7	110.7	113.2	116.2	1.92	9.40	18.40
88.2	88.7	89.2	91.2	91.5	93.0	94.0	94.5	95.5	96.0	97.0	98.0	99.5	100.5	102.5	103.0	103.5	104.0	105.5	109.5	112.0	113.0	118.0	120.5	123.5	1.95	6.20	12.40
86.8	87.3	87.8	89.8	90.1	91.6	92.6	93.1	94.1	94.6	95.6	96.6	98.1	99.1	101.1	101.6	102.1	102.6	104.1	108.1	110.6	111.6	116.6	119.1	122.1	1.95	6.80	13.60
	95.2	97.7									104.5										119.5		127.0		1.96	3.40	7.00
	94.7	97.2									104.0										119.0		126.5		1.96	3.60	7.40
84.0	84.5	85.0	87.0	87.2	88.7	89.7	90.2	91.2	91.7	92.7	93.7	95.2	96.2	98.2	98.7	99.2	99.7	101.2	105.2	107.7	108.7	113.7	116.2	119.2	1.96	8.00	16.00
	93.3	95.8									102.6										117.6		125.1		1.97	4.20	8.60
91.9	92.4	92.9	94.9	95.1	96.6	97.6	98.1	99.1	99.6	100.6	101.6	103.1	104.1	106.1	106.6	107.1	107.6	109.1	113.1	115.6	116.6	121.6	124.1	127.1	1.97	4.60	9.40
90.0	90.5	91.0	93.0	93.2	94.7	95.7	96.2	97.2	97.7	98.7	99.7	101.2	102.2	104.2	104.7	105.2	105.7	107.2	111.2	113.7	114.7	119.7	122.2	125.2	1.97	5.40	11.00
	94.1	96.6									103.4										118.4		125.9		2.01	3.80	8.00
88.4	88.9	89.4	91.4	91.6	93.1	94.1	94.6	95.6	96.1	97.1	98.1	99.6	100.6	102.6	103.1	103.6	104.1	105.7	109.7	112.2	113.2	118.2	120.7	123.7	2.01	6.00	12.40
87.0	87.5	88.0	90.0	90.2	91.7	92.7	93.2	94.2	94.7	95.7	96.7	98.2	99.2	101.2	101.7	102.2	102.7	104.2	108.2	110.7	111.7	116.7	119.2	122.2	2.01	6.60	13.60
84.9	85.4	85.9	87.9	88.2	89.7	90.7	91.2	92.2	92.7	93.7	94.7	96.2	97.2	99.2	99.7	100.2	100.7	102.2	106.2	108.7	109.7	114.7	117.2	120.2	2.03	7.40	15.40
	92.5	95.0									101.8										116.8		124.3		2.05	4.40	9.40
90.1	90.6	91.1	93.1	93.4	94.9	95.9	96.4	97.4	97.9	98.9	99.9	101.4	102.4	104.4	104.9	105.4	105.9	107.4	111.4	113.9	114.9	119.9	122.4	125.4	2.05	5.20	11.00
	93.5	96.0									102.7										117.7		125.2		2.06	4.00	8.60
	94.9	97.4									104.1										119.2		126.7		2.07	3.40	7.40
88.5	89.0	89.5	91.5	91.8	93.3	94.3	94.8	95.8	96.3	97.3	98.3	99.8	100.8	102.8	103.3	103.8	104.3	105.8	109.8	112.3	113.3	118.3	120.8	123.8	2.07	5.80	12.40
87.1	87.6	88.1	90.1	90.4	91.9	92.9	93.4	94.4	94.9	95.9	96.9	98.4	99.4	101.4	101.9	102.4	102.9	104.4	108.4	110.9	111.9	116.9	119.4	122.4	2.07	6.40	13.60
81.5	82.0	82.5	84.6	84.8	86.3	87.3	87.8	88.8	89.3	90.3	91.3	92.8	93.8	95.8	96.3	96.8	97.3	98.8	102.8	105.3	106.3	111.3	113.8	116.8	2.09	8.60	18.40
79.6	80.1	80.6	82.6	82.9	84.4	85.4	85.9	86.9	87.4	88.4	89.4	90.9	91.9	93.9	94.4	94.9	95.4	96.9	100.9	103.4	104.4	109.4	111.9	114.9	2.09	9.40	20.00
	94.3	96.8									103.5										118.5		126.0		2.11	3.60	8.00
84.4	84.9	85.4	87.4	87.7	89.2	90.2	90.7	91.7	92.2	93.2	94.2	95.7	96.7	98.7	99.2	99.7	100.2	101.7	105.7	108.2	109.2	114.2	116.7	119.7	2.11	7.40	16.00
90.3	90.8	91.3	93.3	93.5	95.0	96.0	96.5	97.5	98.0	99.0	100.0	101.5	102.5	104.5	105.0	105.5	106.0	107.5	111.5	114.0	115.0	120.0	122.5	125.5	2.12	5.00	11.00
87.3	87.8	88.3	90.3	90.5	92.0	93.0	93.5	94.5	95.0	96.0	97.0	98.5	99.5	101.5	102.0	102.5	103.0	104.5	108.5	111.0	112.0	117.0	119.5	122.5	2.13	6.20	13.60
	92.7	95.2									101.9										116.9		124.4		2.14	4.20	9.40
88.7	89.2	89.7	91.7	91.9	93.5	94.5	95.0	96.0	96.5	97.5	98.5	100.0	101.0	103.0	103.5	104.0	104.5	106.0	110.0	112.5	113.5	118.5	121.0	124.0	2.14	5.60	12.40
85.2	85.7	86.2	88.2	88.5	90.0	91.0	91.5	92.5	93.0	94.0	95.0	96.5	97.5	99.5	100.0	100.5	101.0	102.5	106.5	109.0	110.0	115.0	117.5	120.5	2.14	7.00	15.40
	93.6	96.1									102.9										117.9		125.4		2.16	3.80	8.60
90.4	90.9	91.4	93.4	93.7	95.2	96.2	96.7	97.7	98.2	99.2	100.2	101.7	102.7	104.7	105.2	105.7	106.2	107.7	111.7	114.2	115.2	120.2	122.7	125.7	2.20	4.80	11.00
87.4	87.9	88.4	90.4	90.7	92.2	93.2	93.7	94.7	95.2	96.2	97.2	98.7	99.7	101.7	102.2	102.7	103.2	104.7	108.7	111.2	112.2	117.2	119.7	122.7	2.20	6.00	13.60
85.4	85.9	86.4	88.4	88.6	90.1	91.1	91.6	92.6	93.1	94.1	95.1	96.6	97.6	99.6	100.1	100.6	101.1	102.6	106.6	109.1	110.1	115.1	117.6	120.6	2.20	6.80	15.40
88.9	89.4	89.9	91.9	92.1	93.6	94.6	95.1	96.1	96.6	97.6	98.6	100.1	101.1	103.1	103.6	104.1	104.6	106.1	110.1	112.6	113.6	118.6	121.1	124.1	2.22	5.40	12.40
84.7	85.2	85.7	87.7	88.0	89.5	90.5	91.0	92.0	92.5	93.5	94.5	96.0	97.0	99.0	99.5	100.0	100.5	102.0	106.0	108.5	109.5	114.5	117.0	120.0	2.22	7.00	16.00
	94.4	96.9									103.7										118.7		126.2		2.23	3.40	8.00
	92.8	95.3									102.1										117.1		124.6		2.24	4.00	9.40
82.0	82.5	83.0	85.0	85.3	86.8	87.8	88.3	89.3	89.8	90.8	91.8	93.3	94.3	96.3	96.8	97.3	97.8	99.3	103.3	105.8	106.8	111.8	114.3	117.3	2.25	8.00	18.40
	93.8	96.3									103.0										118.0		125.5		2.27	3.60	8.60
87.6	88.1	88.6	90.6	90.8	92.3	93.3	93.8	94.8	95.3	96.3	97.3	98.8	99.8	101.8	102.3	102.8	103.3	104.8	108.8	111.3	112.3	117.3	119.8	122.9	2.27	5.80	13.60
85.5	86.0	86.5	88.5	88.8	90.3	91.3	91.8	92.8	93.3	94.3	95.3	96.8	97.8	99.8	100.3	100.8	101.3	102.8	106.8	109.3	110.3	115.3	117.8	120.8	2.27	6.60	15.40
80.2	80.7	81.2	83.2	83.5	85.0	86.0	86.5	87.5	88.0	89.0	90.0	91.5	92.5	94.5	95.0	95.5	96.0	97.5	101.5	104.0	105.0	110.0	112.5	115.5	2.27	8.60	20.00
	90.6	91.1	91.6	93.6	93.8	95.3	96.3	96.8	97.8	98.3	99.3	100.3	101.8	102.8	104.8	105.3	105.8	106.3	107.9	111.9	114.4	115.4	120.4	122.9	2.29	4.60	11.00
84.9	85.4	85.9	87.9	88.1	89.6	90.6	91.1	92.1	92.6	93.6	94.6	96.1	97.1	99.1	99.6	100.1	100.6	102.1	106.1	108.6	109.6	114.6	117.2	120.2	2.29	6.80	16.00
89.0	89.5	90.0	92.0	92.3	93.8	94.8	95.3	96.3	96.8	97.8	98.8	100.3	101.3	103.3	103.8	104.3	104.8	106.3	110.3	112.8	113.8	118.8	121.3	124.3	2.30	5.20	12.40
85.7	86.2	86.7	88.7	88.9	90.4	91.4	91.9	92.9	93.4	94.4	95.4	96.9	97.9	99.9	100.4	100.9	101.4	102.9	106.9	109.4	110.4	115.4	117.9	120.9	2.33	6.40	15.40
87.7	88.2	88.7	90.7	91.0	92.5	93.5	94.0	95.0	95.5	96.5	97.5	99.0	100.0	102.0	102.5	103.0	103.5	105.0	109.0	111.5	112.5	117.5	120.0	123.0	2.34	5.60	13.60
	93.0	95.5									102.2										117.2		124.8		2.35	3.80	9.40
85.0	85.5	86.0	88.0	88.3	89.8	90.8	91.3	92.3	92.8	93.8	94.8	96.3	97.3	99.3	99.8	100.3	100.8	102.3	106.3	108.8	109.8	114.8	117.3	120.3	2.35	6.60	16.00
89.2	89.7	90.2	92.2	92.4	93.9	94.9	95.4	96.4	96.9	97.9	98.9	100.4	101.4	103.4	103.9</												

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance															
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B	B	B	B	B	B	B	B	B	B	B	B	B	B		
					279	280	285	290	292	293	300	310	315	330	340	345	355	360	394	433
4.35	8.35	4.00	8.00	1.92																
9.75	18.75	9.40	18.40	1.92	117.7	118.2	120.7	123.2	124.2	124.7	127.7	140.7	128.2	133.2	135.7	143.2	148.2			
6.55	12.75	6.20	12.40	1.95	125.0	125.5	128.0	130.5	131.5	132.0	135.5	140.5	143.0	150.5	155.5	158.0	163.0			
7.15	13.95	6.80	13.60	1.95	123.6	124.1	126.6	129.1	130.1	130.6	134.1	139.1	141.6	149.1	154.1	156.6	161.6			
3.75	7.35	3.40	7.00	1.96																
3.95	7.75	3.60	7.40	1.96																
8.35	16.35	8.00	16.00	1.96	120.7	121.2	123.7	126.2	127.2	127.7	131.2	136.2	138.7	146.2	151.2	153.7	158.8			
4.55	8.95	4.20	8.60	1.97																
4.95	9.75	4.60	9.40	1.97	128.6	129.1	131.6	134.1	135.1	135.6	139.1	144.1	146.6	154.1	159.1	161.6	166.6			
5.75	11.35	5.40	11.00	1.97	126.7	127.2	129.7	132.2	133.2	133.7	137.2	142.2	144.7	152.2	157.2	159.7	164.7			
4.15	8.35	3.80	8.00	2.01																
6.35	12.75	6.00	12.40	2.01	125.2	125.7	128.2	130.7	131.7	132.2	135.7	140.7	143.2	150.7	155.7	158.2	163.2			
6.95	13.95	6.60	13.60	2.01	123.7	124.2	126.7	129.2	130.2	130.7	134.2	139.2	141.7	149.2	154.2	156.7	161.7			
7.75	15.75	7.40	15.40	2.03	121.7	122.2	124.7	127.2	128.2	128.7	132.2	137.2	139.7	147.2	152.2	154.7	159.7			
4.75	9.75	4.40	9.40	2.05																
5.55	11.35	5.20	11.00	2.05	126.9	127.4	129.9	132.4	133.4	133.9	137.4	142.4	144.9	152.4	157.4	159.9	164.9			
4.35	8.95	4.00	8.60	2.06																
3.75	7.75	3.40	7.40	2.07																
6.15	12.75	5.80	12.40	2.07	125.3	125.8	128.3	130.8	131.8	132.3	135.8	140.8	143.3	150.8	155.8	158.3	163.3			
6.75	13.95	6.40	13.60	2.07	123.9	124.4	126.9	129.4	130.4	130.9	134.4	139.4	141.9	149.4	154.4	156.9	161.9			
8.95	18.75	8.60	18.40	2.09	118.3	118.8	121.3	123.8	124.8	125.3	128.8	133.8	136.3	143.8	148.8	151.3	156.3			
9.75	20.35	9.40	20.00	2.09	116.4	116.9	119.4	121.9	122.9	123.4	126.9	131.9	134.4	141.9	146.9	149.4	154.4			
3.95	8.35	3.60	8.00	2.11																
7.75	16.35	7.40	16.00	2.11	121.2	121.7	124.2	126.7	127.7	128.2	131.7	136.7	139.2	146.7	151.7	154.2	159.2			
5.35	11.35	5.00	11.00	2.12	127.0	127.5	130.0	132.5	133.5	134.0	137.5	142.5	145.0	152.5	157.5	160.0	165.0			
6.55	13.95	6.20	13.60	2.13	124.0	124.5	127.0	129.5	130.5	131.0	134.5	139.5	142.0	149.5	154.5	157.0	162.0			
4.55	9.75	4.20	9.40	2.14																
5.95	12.75	5.60	12.40	2.14	125.5	126.0	128.5	131.0	132.0	132.5	136.0	141.0	143.5	151.0	156.0	158.5	163.5			
7.35	15.75	7.00	15.40	2.14	122.0	122.5	125.0	127.5	128.5	129.0	132.5	137.5	140.0	147.5	152.5	155.0	160.0			
4.15	8.95	3.80	8.60	2.16																
5.15	11.35	4.80	11.00	2.20	127.2	127.7	130.2	132.7	133.7	134.2	137.7	142.7	145.2	152.7	157.7	160.2	165.2			
6.35	13.95	6.00	13.60	2.20	124.2	124.7	127.2	129.7	130.7	131.2	134.7	139.7	142.2	149.7	154.7	157.2	162.2			
7.15	15.75	6.80	15.40	2.20	122.1	122.6	125.1	127.6	128.6	129.1	132.6	137.6	140.1	147.6	152.6	155.1	160.1			
5.75	12.75	5.40	12.40	2.22	125.6	126.1	128.6	131.1	132.1	132.6	136.1	141.1	143.6	151.1	156.1	158.6	163.6			
7.35	16.35	7.00	16.00	2.22	121.5	122.0	124.5	127.0	128.0	128.5	132.0	137.0	139.5	147.0	152.0	154.5	159.5			
3.75	8.35	3.40	8.00	2.23																
4.35	9.75	4.00	9.40	2.24																
8.35	18.75	8.00	18.40	2.25	118.8	119.3	121.8	124.3	125.3	125.8	129.3	134.3	136.8	144.3	149.3	151.8	156.8			
3.95	8.95	3.60	8.60	2.27																
6.15	13.95	5.80	13.60	2.27	124.4	124.9	127.4	129.9	130.9	131.4	134.9	139.9	142.4	149.9	154.9	157.4	162.4			
6.95	15.75	6.60	15.40	2.27	122.3	122.8	125.3	127.8	128.8	129.3	132.8	137.8	140.3	147.8	152.8	155.3	160.3			
8.95	20.35	8.60	20.00	2.27	117.0	117.5	120.0	122.5	123.5	124.0	127.5	132.5	135.0	142.5	147.5	150.0	155.0			
4.95	11.35	4.60	11.00	2.29	127.4	127.9	130.4	132.9	133.9	134.4	137.9	142.9	145.4	152.9	157.9	160.4	165.4			
7.15	16.35	6.80	16.00	2.29	121.7	122.2	124.7	127.2	128.2	128.7	132.2	137.2	139.7	147.2	152.2	154.7	159.7			
5.55	12.75	5.20	12.40	2.30	125.8	126.3	128.8	131.3	132.3	132.8	136.3	141.3	143.8	151.3	156.3	158.8	163.8			
6.75	15.75	6.40	15.40	2.33	122.4	122.9	125.4	127.9	128.9	129.4	132.9	137.9	140.4	147.9	152.9	155.4	160.4			
5.95	13.95	5.60	13.60	2.34	124.5	125.0	127.5	130.0	131.0	131.5	135.0	140.0	142.5	150.0	155.0	157.5	162.5			
4.15	9.75	3.80	9.40	2.35																
6.95	16.35	6.60	16.00	2.35	121.8	122.3	124.8	127.3	128.3	128.8	132.3	137.3	139.8	147.3	152.3	154.8	159.8			
5.35	12.75	5.00	12.40	2.38	125.9	126.4	128.9	131.4	132.4	132.9	136.4	141.4	143.9	151.4	156.4	158.9	163.9			
3.75	8.95	3.40	8.60	2.39																
4.75	11.35	4.40	11.00	2.39																
6.55	15.75	6.20	15.40	2.40	122.6	123.1	125.6	128.1	129.1	129.6	133.1	138.1	140.6	148.1	153.1	155.6	160.6			
6.75	16.35	6.40	16.00	2.42	122.0	122.5	125.0	127.5	128.5	129.0	132.5	137.5	140.0	147.5	152.5	155.0	160.0			
7.75	18.75	7.40	18.40	2.42	119.3	119.8	122.3	124.8	125.8	126.3	129.8	134.8	137.3	144.8	149.8	152.3	157.3			
5.75	13.95	5.40	13.60	2.43	124.7	125.2	127.7	130.2	131.2	131.7	135.2	140.2	142.7	150.2	155.2	157.7	162.7			
8.35	20.35	8.00	20.00	2.44	117.5	118.0	120.5	123.0	124.0	124.5	128.0	133.0	135.5	143.0	148.0	150.5	155.5			
3.95	9.75	3.60	9.40	2.47																
5.15	12.75	4.80	12.40	2.48	126.1	126.6	129.1	131.6	132.6	133.1	136.6	141.6	144.1	151.6	156.6	159.1	164.1			
6.35	15.75	6.00	15.40	2.48	122.8	123.3	125.8	128.3	129.3	129.8	133.3	138.3	140.8	148.3	153.3	155.8	160.8			
4.55	11.35	4.20	11.00	2.49																
6.55	16.35	6.20	16.00	2.50	122.1	122.6	125.1	127.6	128.6	129.1	132.6	137.6	140.1	147.6	152.6	155.1	160.1			
5.55	13.95	5.20	13.60	2.51	124.8	125.3	127.8	130.3	131.3	131.8	135.3	140.3	142.8	150.3	155.3	157.8	162.8			
7.35	18.75	7.00	18.40	2.55	119.6	120.1	122.6	125.1	126.1	126.6	130.1	135.1	137.6	145.1	150.1	152.6	157.6			
6.15	15.75	5.80	15.40	2.56	122.9	123.4	125.9	128.4	129.4	129.9	133.4	138.4	140.9	148.4	153.4	155.9	160.9			
6.35	16.35	6.00	16.00	2.57	122.3	122.8	125.3	127.8	128.8	129.3	132.8	137.8	140.3	147.8	152.8	155.3	160.3			
4.95	12.75	4.60	12.40	2.58	126.2	126.7	129.2	131.7	132.7	133.2	136.7	141.7	144.2	151.7	156.7	159.2	164.2			
3.75	9.75	3.40	9.40	2.60																
9.75	25.35	9.40	25.00	2.60	112.4	112.9	115.4	117.9	118.9	119.4	122.9	127.9	130.4	137.9	142.9	145.4	150.4			
4.35	11.35	4.00	11.00	2.61																
5.35	13.95	5.00	13.60	2.61	125.0	125.5	128.0	130.5	131.5	132.0	135.5	140.5	143.0	150.5	155.5	158.0	163.0			
7.15	18.75	6.80	18.40	2.62	119.7	120.2	122.7	125.2	126.2	126.7	130.2	135.2	137.7	145.2	150.2	152.7	157.7			
7.75	20.35	7.40	20.00	2.63	118.0	118.5	121.0	123.5	124.5	125.0	128.5	133.5	136.0							

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																		
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX			
24	25	26	27		28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	
5.95	15.75	5.60	15.40	2.65																			
6.15	16.35	5.80	16.00	2.66																			
4.75	12.75	4.40	12.40	2.68																			
5.95	18.75	5.60	18.40	2.70																			
5.15	13.95	4.80	13.60	2.71																			
4.15	11.35	3.80	11.00	2.73													9.1	9.6	10.1	10.7	11.2		
5.75	15.75	5.40	15.40	2.74																			
5.95	16.35	5.60	16.00	2.75																			
7.35	20.35	7.00	20.00	2.77																			
6.75	18.75	6.40	18.40	2.78																			
4.55	12.75	4.20	12.40	2.80																			
4.95	13.95	4.60	13.60	2.82																			
8.95	25.35	8.60	25.00	2.83																			
5.55	15.75	5.20	15.40	2.84																			
5.75	16.35	5.40	16.00	2.84																			
7.15	20.35	6.80	20.00	2.85																			
6.55	18.75	6.20	18.40	2.86																			
3.95	11.35	3.60	11.00	2.87													9.2	9.7	10.3	10.8	11.3		
4.35	12.75	4.00	12.40	2.93																		9.6	
6.95	20.35	6.60	20.00	2.93																			
4.75	13.95	4.40	13.60	2.94																			
5.35	15.75	5.00	15.40	2.94																			
5.55	16.35	5.20	16.00	2.95																			
6.35	18.75	6.00	18.40	2.95																			
6.75	20.35	6.40	20.00	3.01																			
3.75	11.35	3.40	11.00	3.03													8.8	9.3	9.8	10.4	10.9	11.5	
8.35	25.35	8.00	25.00	3.04																			
6.15	18.75	5.80	18.40	3.05																			
5.15	15.75	4.80	15.40	3.06																			
5.35	16.35	5.00	16.00	3.06																			
4.15	12.75	3.80	12.40	3.07																		9.7	
4.55	13.95	4.20	13.60	3.07																			
6.55	20.35	6.20	20.00	3.11																			
9.75	30.35	9.40	30.00	3.11																			
5.95	18.75	5.60	18.40	3.15																			
5.15	16.35	4.80	16.00	3.17																			
4.95	15.75	4.60	15.40	3.18																			
6.35	20.35	6.00	20.00	3.20																			
4.35	13.95	4.00	13.60	3.21																			
3.95	12.75	3.60	12.40	3.23																		9.8	
5.75	18.75	5.40	18.40	3.26																			
7.75	25.35	7.40	25.00	3.27																			
4.95	16.35	4.60	16.00	3.30																			
6.15	20.35	5.80	20.00	3.31																			
4.75	15.75	4.40	15.40	3.32																			
4.15	13.95	3.80	13.60	3.36																			
5.55	18.75	5.20	18.40	3.38																			
8.95	30.35	8.60	30.00	3.39																			
3.75	12.75	3.40	12.40	3.40																			
5.95	20.35	5.60	20.00	3.42																		9.4	
4.75	16.35	4.40	16.00	3.44																		10.0	
7.35	25.35	7.00	25.00	3.45																			
4.55	15.75	4.20	15.40	3.46																			
5.35	18.75	5.00	18.40	3.50																			
3.95	13.95	3.60	13.60	3.53																			
5.75	20.35	5.40	20.00	3.54																			
7.15	25.35	6.80	25.00	3.55																			
4.55	16.35	4.20	16.00	3.59																			
4.35	15.75	4.00	15.40	3.62																			
8.35	30.35	8.00	30.00	3.63																			
5.15	18.75	4.80	18.40	3.64																			
6.95	25.35	6.60	25.00	3.65																			
5.55	20.35	5.20	20.00	3.67																			
3.75	13.95	3.40	13.60	3.72																			
4.35	16.35	4.00	16.00	3.75																			
6.75	25.35	6.40	25.00	3.76																			
4.95	18.75	4.60	18.40	3.79																			
4.15	15.75	3.80	15.40	3.80																			
5.35	20.35	5.00	20.00	3.80																			
6.55	25.35	6.20	25.00	3.87																			
7.75	30.35	7.40	30.00	3.92																			
9.75	38.35	9.40	38.00	3.93																			
4.15	16.35	3.80	16.00	3.94																			

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																							Speed Ratio	Sheave Datum Diameters				
B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		Small Sheave	Large Sheave			
68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92				
17.7	18.2	18.8	19.3	19.8	20.3	20.8	21.3	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	2.65	5.60	15.40	
17.0	17.5	18.1	18.6	19.1	19.6	20.1	20.6	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	2.66	5.80	16.00	
21.3	21.8	22.3	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.5	32.0	32.5	33.0	33.5	2.68	4.40	12.40	
14.6	15.1	15.6	16.2	16.7	17.2	17.8	18.3	18.8	19.4	19.9	20.4	20.9	21.4	22.0	22.5	23.0	23.5	24.0	24.6	25.1	25.6	26.1	26.6	27.0	2.70	6.60	18.40	
20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	2.71	4.80	13.60	
23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	2.73	3.80	11.00	
17.9	18.4	18.9	19.4	19.9	20.4	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	2.74	5.40	15.40	
17.1	17.7	18.2	18.7	19.2	19.7	20.3	20.8	21.3	21.8	22.3	22.8	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	28.0	28.5	29.0	29.5	2.75	5.60	16.00	
14.1	14.7	15.2	15.8	16.3	16.8	17.4	17.9	18.4	19.0	19.5	20.0	20.5	21.1	21.6	22.1	22.6	23.1	23.7	24.2	24.7	25.2	25.7	26.2	26.7	2.78	6.40	18.40	
21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	2.80	4.20	12.40	
20.1	20.6	21.1	21.6	22.1	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	2.82	4.60	13.60	
18.0	18.5	19.0	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.8	28.3	28.8	29.3	29.8	30.3	1.87	2.83	8.60	25.00
17.3	17.8	18.3	18.8	19.4	19.9	20.4	20.9	21.4	21.9	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	2.84	5.40	16.00	
14.3	14.8	15.4	15.9	16.4	17.0	17.5	18.0	18.6	19.1	19.6	20.1	20.7	21.2	21.7	22.2	22.8	23.3	23.8	24.3	24.8	25.3	25.9	26.4	26.9	2.86	6.20	18.40	
23.1	23.6	24.1	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	2.87	3.60	11.00	
21.6	22.1	22.6	23.1	23.6	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.3	33.8	2.93	4.00	12.40	
15.4	16.0	16.5	17.1	17.6	18.1	18.7	19.3	19.8	20.4	20.9	21.5	22.0	22.5	23.0	23.5	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	2.93	6.00	20.00	
20.2	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	2.94	4.40	13.60	
18.1	18.6	19.2	19.7	20.2	20.7	21.2	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	2.94	5.00	15.40	
17.4	17.9	18.5	19.0	19.5	20.0	20.5	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.8	2.95	5.20	16.00	
14.4	14.9	15.5	16.0	16.6	17.1	17.6	18.1	18.7	19.2	19.8	20.3	20.8	21.3	21.9	22.4	22.9	23.4	23.9	24.4	25.0	25.5	26.0	26.5	27.0	2.95	6.00	18.40	
23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	3.01	6.40	20.00	
14.5	15.1	15.6	16.1	16.7	17.2	17.8	18.3	18.8	19.4	19.9	20.4	20.9	21.5	22.0	22.5	23.0	23.5	24.1	24.6	25.1	25.6	26.1	26.6	27.2	3.05	5.80	18.40	
18.3	18.8	19.3	19.8	20.3	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.1	29.6	30.1	30.6	3.06	4.80	15.40	
17.5	18.1	18.6	19.1	19.6	20.2	20.7	21.2	21.7	22.2	22.7	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.4	27.9	28.4	28.9	29.4	29.9	3.06	5.00	16.00	
21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	3.07	3.80	12.40	
20.4	20.9	21.4	21.9	22.4	22.9	23.4	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.1	30.6	31.1	31.6	32.1	32.6	3.07	4.20	13.60	
14.7	15.2	15.8	16.3	16.9	17.4	18.0	18.5	19.1	19.6	20.1	20.7	21.2	21.7	22.2	22.8	23.3	23.8	24.3	24.9	25.4	25.9	26.4	26.9	27.4	3.11	6.20	20.00	
14.6	15.2	15.7	16.3	16.8	17.4	17.9	18.4	19.0	19.5	20.0	20.5	21.1	21.6	22.1	22.6	23.2	23.7	24.2	24.7	25.2	25.8	26.3	26.8	27.3	3.11	9.40	30.00	
17.7	18.2	18.7	19.2	19.8	20.3	20.8	21.3	21.8	22.4	22.9	23.4	23.9	24.4	24.9	25.4	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	3.17	4.80	16.00	
18.4	18.9	19.4	20.0	20.5	21.0	21.5	22.0	22.5	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	3.18	4.60	15.40	
20.5	21.0	21.5	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	3.21	4.00	13.60	
21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	3.23	3.60	12.40	
14.8	15.3	15.9	16.4	16.9	17.5	18.0	18.6	19.1	19.6	20.1	20.7	21.2	21.7	22.3	22.8	23.3	23.8	24.3	24.9	25.4	25.9	26.4	26.9	27.4	3.26	5.40	18.40	
17.8	18.3	18.9	19.4	19.9	20.4	20.9	21.5	22.0	22.5	23.0	23.5	24.0	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.7	29.2	29.7	30.2	3.30	4.60	16.00	
18.5	19.0	19.6	20.1	20.6	21.1	21.6	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.9	3.32	4.40	15.40	
20.6	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.4	31.9	32.4	32.9	3.36	3.80	13.60	
14.9	15.4	16.0	16.5	17.1	17.6	18.2	18.7	19.2	19.8	20.3	20.8	21.3	21.9	22.4	22.9	23.4	23.9	24.5	25.0	25.5	26.0	26.5	27.1	27.6	3.38	5.20	18.40	
22.0	22.5	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	3.40	3.40	12.40	
17.9	18.5	19.0	19.5	20.0	20.6	21.1	21.6	22.1	22.6	23.1	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.3	27.8	28.3	28.8	29.3	29.8	30.3	3.44	4.40	16.00	
18.7	19.2	19.7	20.2	20.7	21.3	21.8	22.3	22.8	23.3	23.8	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.5	29.0	29.5	30.0	30.5	31.0	3.46	4.20	15.40	
15.0	15.6	16.1	16.7	17.2	17.7	18.3	18.8	19.3	19.9	20.4	20.9	21.5	22.0	22.5	23.0	23.6	24.1	24.6	25.1	25.6	26.2	26.7	27.2	27.7	3.50	5.00	18.40	
20.8	21.3	21.8	22.3	22.8	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	3.53	3.60	13.60	
14.6	15.2	15.7	16.3	16.8	17.4	17.9	18.5	19.0	19.6	20.1	20.6	21.2	21.7	22.2	22.8	23.3	23.8	24.3	24.9	25.4	25.9	26.4	26.9	27.4	3.54	5.40	20.00	
18.1	18.6	19.1	19.6	20.2	20.7	21.2	21.7	22.2	22.8	23.3	23.8	24.3	24.8	25.3	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	30.0	30.5	3.59	4.20	16.00	
18.8	19.3	19.8	20.4	20.9	21.4	21.9	22.4	22.9	23.5	24.0	24.5	25.0																

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																							
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX
					BP 93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114		
5.95	15.75	5.60	15.40	2.65	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1		
6.15	16.35	5.80	16.00	2.66	29.8	30.3	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	40.0	40.5		
4.75	12.75	4.40	12.40	2.68	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5																
6.95	18.75	6.60	18.40	2.70	27.1	27.6	28.1	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8		
15.95	13.95	4.80	13.60	2.71	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2		
4.15	11.35	3.80	11.00	2.73	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1																
5.75	15.75	5.40	15.40	2.74	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.3	40.8	41.3		
5.95	16.35	5.60	16.00	2.75	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6		
7.35	20.35	7.00	20.00	2.77	25.4	25.9	26.4	26.9	27.4	27.9	28.4	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.1	33.6	34.1	34.6	35.1	35.6	36.1		
6.75	18.75	6.40	18.40	2.78	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9		
4.55	12.75	4.20	12.40	2.80	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6																
4.95	13.95	4.60	13.60	2.82	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4		
8.95	25.35	8.60	25.00	2.83	19.2	19.8	20.3	20.9	21.4	22.0	22.5	23.0	23.6	24.1	24.6	25.2	25.7	26.2	26.7	27.3	27.8	28.3	28.8	29.4	29.9	30.4		
5.55	15.75	5.20	15.40	2.84	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4		
5.75	16.35	5.40	16.00	2.84	30.1	30.6	31.1	31.6	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7		
7.15	20.35	6.80	20.00	2.85	25.5	26.0	26.5	27.0	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2		
6.55	18.75	6.20	18.40	2.86	27.4	27.9	28.4	28.9	29.4	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.6	36.1	36.6	37.1	37.6	38.1		
3.95	11.35	3.60	11.00	2.87	35.7	36.2	36.7	37.2	37.8	38.3	38.8	39.3																
4.35	12.75	4.00	12.40	2.93	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8																
6.95	20.35	6.60	20.00	2.93	25.6	26.1	26.7	27.2	27.7	28.2	28.7	29.2	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.4	34.9	35.4	35.9	36.4		
4.75	13.95	4.40	13.60	2.94	32.9	33.4	34.0	34.5	35.0	35.5	36.0	36.5																
5.35	15.75	5.00	15.40	2.94	30.9	31.4	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.6		
5.55	16.35	5.20	16.00	2.95	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9		
6.35	18.75	6.00	18.40	2.95	27.5	28.0	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2		
6.75	20.35	6.40	20.00	3.01	25.8	26.3	26.8	27.3	27.8	28.3	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5		
3.75	11.35	3.40	11.00	3.03	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4																
8.35	25.35	8.00	25.00	3.04	19.6	20.2	20.7	21.3	21.8	22.3	22.9	23.4	24.0	24.5	25.0	25.6	26.1	26.6	27.1	27.7	28.2	28.7	29.2	29.8	30.3	30.8		
15.95	18.75	5.80	18.40	3.05	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.9	37.4	37.9	38.4		
5.15	15.75	4.80	15.40	3.06	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7		
5.35	16.35	5.00	16.00	3.06	30.4	30.9	31.4	31.9	32.4	32.9	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0		
4.15	12.75	3.80	12.40	3.07	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9																
4.55	13.95	4.20	13.60	3.07	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6																
6.55	20.35	6.20	20.00	3.11	25.9	26.4	26.9	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.7	36.2	36.7		
9.75	30.35	9.40	30.00	3.11																								
5.95	18.75	5.60	18.40	3.15	27.8	28.3	28.8	29.3	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5		
5.15	16.35	4.80	16.00	3.17	30.5	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.2	38.7	39.2	39.7	40.2	40.7	41.2		
4.95	15.75	4.60	15.40	3.18	31.2	31.7	32.2	32.7	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8		
6.35	20.35	6.00	20.00	3.20	26.0	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.8	34.3	34.8	35.3	35.8	36.3	36.8		
4.35	13.95	4.00	13.60	3.21	33.2	33.7	34.2	34.7	35.2	35.8	36.3	36.8																
3.95	12.75	3.60	12.40	3.23	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1																
5.75	18.75	5.40	18.40	3.26	27.9	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.2	38.7		
7.75	25.35	7.40	25.00	3.27	20.0	20.5	21.1	21.6	22.2	22.7	23.3	23.8	24.3	24.9	25.4	25.9	26.5	27.0	27.5	28.1	28.6	29.1	29.6	30.2	30.7	31.2		
4.95	16.35	4.60	16.00	3.30	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3		
6.15	20.35	5.80	20.00	3.31	26.2	26.7	27.2	27.7	28.2	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	37.0		
4.75	15.75	4.40	15.40	3.32	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9																
4.15	13.95	3.80	13.60	3.36	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9																
5.55	18.75	5.20	18.40	3.38	28.1	28.6	29.1	29.6	30.1	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.8	36.3	36.8	37.3	37.8	38.3	38.8		
8.95	30.35	8.60	30.00	3.39																								
3.75	12.75	3.40	12.40	3.40	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2																
5.95	20.35	5.60	20.00	3.42	26.3	26.8	27.3	27.9	28.4	28.9	29.4	29.9	30.4	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.1	35.6	36.1	36.6	37.1		
4.75	16.35	4.40	16.00	3.44	30.8	31.3	31.8	32.4	32.9	33.4	33.9	34.4																
7.35	25.35	7.00	25.00</																									

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																								Speed Ratio	Sheave Datum Diameters		
BX	B	B	B	B	BX	B	B	B	BX	B	B	B	B	B	B	B	B	B	B	B	B	B	Small Sheave		Large Sheave		
115	116	117	118	119	120	122	123	124	125	126	127	128	130	131	132	133	134	135	136	137	138	139	140	141	2.85	5.60	15.40
41.6	42.1	42.6	43.1	43.6	44.1	45.1	45.6	46.1	46.6	47.2	47.7	48.2	49.2	49.7	50.2	50.7	51.2	51.7	52.2	52.7	53.2	53.7	54.2	54.7	2.86	5.80	16.00
41.0	41.5	42.0	42.5	43.0	43.5	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.5	49.0	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	2.68	4.40	12.40
45.0	45.5				47.5			49.5				51.6							54.1		55.6				2.70	6.60	18.40
38.3	38.8	39.3	39.8	40.3	40.8	41.8	42.4	42.9	43.4	43.9	44.4	44.9	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.4	2.71	4.80	13.60
43.7	44.2	44.7	45.2	45.7	46.2	47.2	47.7	48.2	48.7	49.3	49.8	50.3	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.3	55.8	56.3	56.8	2.74	3.80	11.00
46.6	47.1				49.1			51.1				53.2							55.7		57.2				2.73	5.40	15.40
41.8	42.3	42.8	43.3	43.8	44.3	45.3	45.8	46.3	46.8	47.3	47.8	48.3	49.3	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	2.75	5.60	16.00
41.1	41.6	42.1	42.6	43.1	43.6	44.6	45.1	45.6	46.1	46.6	47.1	47.7	48.7	49.2	49.7	50.2	50.7	51.2	51.7	52.2	52.7	53.2	53.7	54.2	2.75	7.00	20.00
36.6	37.1	37.6	38.1	38.6	39.2	40.2	40.7	41.2	41.7	42.2	42.7	43.2	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.8	48.3	48.8	49.3	49.8	2.77	6.40	18.40
38.5	39.0	39.5	40.0	40.5	41.0	42.0	42.5	43.0	43.5	44.0	44.5	45.0	46.0	46.5	47.0	47.5	48.0	48.6	49.1	49.6	50.1	50.6	51.1	51.6	2.80	4.20	12.40
45.2	45.7				47.7			49.7				51.7							54.2		55.7				2.82	4.60	13.60
43.9	44.4	44.9	45.4	45.9	46.4	47.4	47.9	48.4	48.9	49.4	49.9	50.4	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9	2.82	8.60	25.00
30.9	31.4	32.0	32.5	33.0	33.5	34.5	35.0	35.6	36.1	36.6	37.1	37.6	38.6	39.1	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	2.83	5.20	15.40
41.9	42.4	42.9	43.4	43.9	44.4	45.4	45.9	46.4	46.9	47.4	47.9	48.5	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	2.84	5.40	16.00
41.3	41.8	42.3	42.8	43.3	43.8	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.8	49.3	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	2.84	5.40	16.00
36.8	37.3	37.8	38.3	38.8	39.3	40.3	40.8	41.3	41.8	42.3	42.8	43.3	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	2.85	6.80	20.00
38.6	39.1	39.6	40.1	40.6	41.1	42.1	42.6	43.1	43.6	44.2	44.7	45.2	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	50.7	51.2	51.7	2.86	6.20	18.40
46.8	47.3				49.3			51.3				53.3							55.8		57.3				2.87	3.60	11.00
45.3	45.8				47.8			49.8				51.8							54.4		55.9				2.93	4.00	12.40
36.9	37.4	37.9	38.4	38.9	39.4	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.1	49.6	50.1	2.93	6.60	20.00
44.0	44.5				46.5			48.5				50.6							53.1		54.6				2.94	4.40	13.60
42.1	42.6	43.1	43.6	44.1	44.6	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.6	50.1	50.6	51.1	51.6	52.1	52.6	53.1	53.6	54.1	54.6	55.1	2.94	5.00	15.40
41.4	41.9	42.4	42.9	43.4	43.9	44.9	45.4	45.9	46.4	46.9	47.4	47.9	49.0	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	2.95	5.20	16.00
38.7	39.2	39.8	40.3	40.8	41.3	42.3	42.8	43.3	43.8	44.3	44.8	45.3	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.4	50.9	51.4	51.9	2.95	6.00	18.40
37.0	37.5	38.1	38.6	39.1	39.6	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.6	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	3.01	6.40	20.00
46.9	47.4				49.4			51.4				53.5							56.0		57.5				3.03	3.40	11.00
31.3	31.8	32.4	32.9	33.4	33.9	34.9	35.5	36.0	36.5	37.0	37.5	38.0	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.7	44.2	44.7	3.04	8.00	25.00
38.9	39.4	39.9	40.4	40.9	41.4	42.4	42.9	43.4	43.9	44.4	44.9	45.5	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5	51.0	51.5	52.0	3.05	5.80	18.40
42.2	42.7	43.2	43.7	44.2	44.7	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.3	3.06	4.80	15.40
41.5	42.0	42.6	43.1	43.6	44.1	45.1	45.6	46.1	46.6	47.1	47.6	48.1	49.1	49.6	50.1	50.6	51.1	51.6	52.1	52.6	53.1	53.6	54.1	54.6	3.06	5.00	16.00
45.5	46.0				48.0			50.0				52.0							54.5		56.0				3.07	3.80	12.40
44.2	44.7				46.7			48.7				50.7							53.2		54.7				3.07	4.20	13.60
25.3	25.9	26.4	27.0	27.5	28.0	29.1	29.6	30.2	30.7	31.2	31.8	32.3	33.4	33.9	34.4	34.9	35.4	36.0	36.5	37.0	37.5	38.1	38.6	39.1	3.11	9.40	30.00
30.9	30.9	40.0	40.5	41.1	41.6	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6	51.1	51.7	52.2	3.15	5.60	18.40
41.7	42.2	42.7	43.2	43.7	44.2	45.2	45.7	46.2	46.7	47.2	47.7	48.2	49.2	49.7	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	3.17	4.80	16.00
42.3	42.9	43.4	43.9	44.4	44.9	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	3.18	4.60	15.40
37.3	37.8	38.3	38.8	39.4	39.9	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.9	45.4	45.9	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5	3.20	6.00	20.00
44.3	44.8				46.8			48.8				50.9							53.4		54.9				3.21	4.00	13.60
45.6	46.1				48.1			50.1				52.1							54.7		56.2				3.23	3.60	12.40
39.2	39.7	40.2	40.7	41.2	41.7	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3	51.8	52.3	3.26	5.40	18.40
31.7	32.2	32.8	33.3	33.8	34.3	35.4	35.9	36.4	36.9	37.4	37.9	38.4	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.1	43.6	44.1	44.6	45.1	3.27	7.40	25.00
41.8	42.3	42.8	43.3	43.8	44.4	45.4	45.9	46.4	46.9	47.4	47.9	48.4	49.4	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	3.30	4.60	16.00
37.5	38.0	38.5	39.0	39.5	40.0	41.0	41.5	42.0	42.5	43.0	43.6	44.1	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6	3.31	5.80	20.00
42.5	43.0				45.0			47.0				49.0							51.6		53.1				3.32	4.40	15.40
44.5	45.0				47.0			49.0				51.0							53.5		55.0				3.36	3.80	13.60
39.3	39.8	40.3	40.8	41.3	41.8	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.4	3.38	5.20	18.40
25.8	26.4	26.9	27.5	28.0	28.6	29.6	30.2	30.7	31.2	31.8	32.3	32.8	33.9	34.4	34.9	35.5	36.0	36.5	37.0	37.5	38.1	38.6	39.1	39.6	3.39	8.60	30.00
45.8	46.3				48.3			50.3				52.3							54.8		56.3				3.40	3.40	12.40
37.6	38.1	38.6	39.1	39.6	40.1	41.2	41.7	42.2	42.7	43.2	43.7	44.2	45.2	45.7	46.2	46.7	47.2	47.7	48.3	48.8	49.3	49.8	50.3	50.8	3.42	5.60	20.00
42.0	42.5				44.5			46.5				48.5							51.0		52.6				3.44	4.40	16.00
32.0	32.5	33.0	33.6	34.1	34.6	35.6	36.1	36.7	37.2	37.7	38.2	38.7	39.7	40.3	4												

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B	B	B BX BP	B	B	B	B	B	B	B	B	B	B	B BX BP	B	B	B					
					142	143	144	145	146	147	148	149	150	151	152	153	154	156	157	158	160	161	162	164	165	166
5.95	15.75	5.60	15.40	2.65	55.2	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	62.2	62.7	63.2	64.2	64.7	65.2	66.2	66.7	67.2
6.15	16.35	5.80	16.00	2.66	54.5	55.0	55.5	56.0	56.5	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.6	62.1	62.6	63.6	64.1	64.6	65.6	66.1	66.6
4.75	12.75	4.40	12.40	2.68			59.6						62.6						66.6							
6.95	18.75	6.60	18.40	2.70	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.5	56.0	56.5	57.0	57.5	58.0	59.0	59.5	60.0	61.0	61.5	62.0	63.0	63.5	64.0
5.15	13.95	4.80	13.60	2.71	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	64.3	64.8	65.3	66.3	66.8	67.3	68.3	68.8	69.3
4.15	11.35	3.80	11.00	2.73			61.2						64.2						68.2							
5.75	15.75	5.40	15.40	2.74	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.9	59.4	59.9	60.4	60.9	61.4	62.4	62.9	63.4	64.4	64.9	65.4	66.4	66.9	67.4
5.95	16.35	5.60	16.00	2.75	54.7	55.2	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.7	62.2	62.7	63.7	64.2	64.7	65.7	66.2	66.7
7.35	20.35	7.00	20.00	2.77	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.3	55.8	56.3	57.3	57.8	58.3	59.3	59.8	60.3	61.3	61.9	62.4
6.75	18.75	6.40	18.40	2.78	52.1	52.6	53.1	53.6	54.1	54.6	55.1	55.6	56.1	56.6	57.1	57.6	58.1	59.1	59.6	60.1	61.1	61.6	62.1	63.1	63.6	64.1
4.55	12.75	4.20	12.40	2.80			59.7						62.7						66.7							
4.95	13.95	4.60	13.60	2.82	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4	64.4	64.9	65.5	66.0	66.5	67.0	67.5	68.0	68.5
8.95	25.35	8.60	25.00	2.85	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.9	52.4	52.9	53.9	54.4	54.9	55.9	56.4	56.9
5.55	15.75	5.20	15.40	2.84	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.5	63.0	63.5	64.5	65.0	65.5	66.5	67.0	67.5
5.75	16.35	5.40	16.00	2.84	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.4	58.9	59.4	59.9	60.4	60.9	61.9	62.4	62.9	63.9	64.4	64.9	65.9	66.4	66.9
7.15	20.35	6.80	20.00	2.85	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.5	55.0	55.5	56.0	56.5	57.5	58.0	58.5	59.5	60.0	60.5	61.5	62.0	62.5
6.55	18.75	6.20	18.40	2.86	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.7	56.2	56.8	57.3	57.8	58.3	59.3	59.8	60.3	61.3	61.8	62.3	63.3	63.8	64.3
3.95	11.35	3.60	11.00	2.87			61.3						64.3						68.3							
4.35	12.75	4.00	12.40	2.93			59.9						62.9						66.9							
6.95	20.35	6.60	20.00	2.93	50.6	51.1	51.6	52.1	52.6	53.1	53.6	54.1	54.6	55.1	55.6	56.1	56.6	57.6	58.1	58.6	59.6	60.1	60.6	61.6	62.1	62.6
4.75	13.95	4.40	13.60	2.94			58.6						61.6						65.6							
5.35	15.75	5.00	15.40	2.94	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.1	59.7	60.2	60.7	61.2	61.7	62.7	63.2	63.7	64.7	65.2	65.7	66.7	67.2	67.7
5.55	16.35	5.20	16.00	2.95	55.0	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	62.0	62.5	63.0	64.0	64.5	65.0	66.0	66.5	67.0
6.35	18.75	6.00	18.40	2.96	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	59.4	59.9	60.4	61.4	61.9	62.4	63.4	63.9	64.4
3.75	20.35	3.40	20.00	3.01	50.7	51.2	51.7	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.8	56.3	56.8	57.8	58.3	58.8	59.8	60.3	60.8	61.8	62.3	62.8
6.75	11.35	6.40	11.00	3.03			61.5						64.5						68.5							
8.35	25.35	8.00	25.00	3.04	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.8	50.3	50.8	51.3	52.3	52.8	53.3	54.3	54.8	55.3	56.3	56.8	57.4
6.15	18.75	5.80	18.40	3.05	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.1	58.6	59.6	60.1	60.6	61.6	62.1	62.6	63.6	64.1	64.6
5.15	15.75	4.80	15.40	3.06	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.8	63.3	63.8	64.8	65.3	65.8	66.8	67.3	67.8
5.35	16.35	5.00	16.00	3.06	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.2	59.7	60.2	60.7	61.2	62.2	62.7	63.2	64.2	64.7	65.2	66.2	66.7	67.2
4.15	12.75	3.80	12.40	3.07			60.0						63.0						67.0							
4.55	13.95	4.20	13.60	3.07			58.7						61.7						65.8							
6.55	20.35	6.20	20.00	3.11	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.9	58.4	58.9	59.9	60.4	60.9	61.9	62.4	62.9
9.75	30.35	9.40	30.00	3.11	39.6	40.1	40.6	41.2	41.7	42.2	42.7	43.2	43.7	44.3	44.8	45.3	45.8	46.8	47.3	47.8	48.9	49.4	49.9	50.9	51.4	51.9
5.95	18.75	5.60	18.40	3.15	52.7	53.2	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.7	60.2	60.7	61.7	62.2	62.7	63.7	64.2	64.7
5.15	16.35	4.80	16.00	3.17	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	62.3	62.8	63.3	64.3	64.8	65.3	66.3	66.8	67.3
4.95	15.75	4.60	15.40	3.18	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.5	61.0	61.5	62.0	63.0	63.5	64.0	65.0	65.5	66.5	67.0	67.5	68.0
6.35	20.35	6.00	20.00	3.20	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	58.1	58.6	59.1	60.1	60.6	61.6	62.1	62.6	63.1
4.35	13.95	4.00	13.60	3.21			58.9						61.9						65.9							
3.95	12.75	3.60	12.40	3.23			60.2						63.2						67.2							
5.75	18.75	5.40	18.40	3.26	52.8	53.3	53.8	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.9	60.4	60.9	61.9	62.4	62.9	63.9	64.4	64.9
7.75	25.35	7.40	25.00	3.27	45.6	46.1	46.6	47.1	47.6	48.1	48.7	49.2	49.7	50.2	50.7	51.2	51.7	52.7	53.2	53.7	54.7	55.3	55.8	56.8	57.3	57.8
4.95	16.35	4.60	16.00	3.30	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.5	61.0	61.5	62.5	63.0	63.5	64.5	65.0	65.5	66.5	67.0	67.5
6.15	20.35	5.80	20.00	3.31	51.1	51.6	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.2	58.2	58.7	59.2	60.2	60.7	61.2	62.2	62.7	63.2
4.75	15.75	4.40	15.40	3.32			57.1						60.1						64.1							
4.15	13.95	3.80	13.60	3.36			59.0						62.0						66.1							
5.55	18.75	5.20	18.40	3.38	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	60.0	60.5	61.0	62.0	62.5	63.0	64.0	64.5	65.0
8.95	30.35	8.60	30.00	3.39	40.1	40.7	41.2	41.7	42.2	42.7	43.3	43.8	44.3	44.8	45.3	45.8	46.3	47.4	47.9	48.4	49.4	49.9	50.4	51.5	52.0	52.5
3.75	12.75	3.40	12.40	3.40			60.3						63.3						67.3							
5.95	20.35	5.60	20.00	3.42	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.3	55.8	56.3	56.8	57.3	58.3	58.8	59.4	60.4	60.9	61.4	62.4	62.9	63.4
4.75	16.35	4.40	16.00	3.44			56.6						59.6						63.6							
7.35	25.35	7.00	25.00	3.45	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	50.0	50.5	51.0	51.5	52.0	53.0	53.5	54.0	55.0	55.5	56.0	57.1	57.6	

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																					Speed Ratio	Sheave Datum Diameters						
B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		Small Sheave	Large Sheave					
167	168	169	170	172	173	174	175	177	178	180	182	184	185	186	187	188	190	191	192	195	197	199	200	201	2.65	5.60	15.40	
67.7	68.2	68.7	69.2	70.2	70.7	71.2	71.7	72.7	73.2	74.2	75.2	76.2	76.8	77.3	77.8	78.3	79.3	79.8	80.3	81.8	82.3	83.8	84.8	85.8	86.3	2.66	5.80	16.00
67.1	67.6	68.1	68.6	69.6	70.1	70.6	71.1	72.1	72.6	73.6	74.6	75.6	76.1	76.6	77.1	77.6	78.6	79.1	79.6	81.1	82.1	83.1	83.6	84.1	2.68	4.40	12.40	
64.5	65.0	65.5	66.0	67.0	67.5	68.0	68.5	69.5	70.0	71.0	72.0	73.0	73.5	74.0	74.5	75.0	76.0	76.5	77.0	78.5	79.5	80.5	81.1	81.6	2.70	6.60	18.40	
69.8	70.3	70.8	71.3	72.3	72.8	73.3	73.8	74.8	75.3	76.3	77.3	78.3	78.8	79.3	79.8	80.3	81.3	81.8	82.3	83.8	84.8	85.8	86.3	86.8	2.71	4.80	13.60	
67.9	68.4	68.9	69.4	70.4	70.9	71.4	71.9	72.9	73.4	74.4	75.4	76.4	76.9	77.4	77.9	78.4	79.4	79.9	80.4	81.9	82.9	83.9	84.4	84.9	2.73	3.80	11.00	
67.2	67.7	68.2	68.7	69.7	70.2	70.7	71.2	72.2	72.7	73.8	74.8	75.8	76.3	76.8	77.3	77.8	78.8	79.3	79.8	81.3	82.3	83.3	83.8	84.3	2.75	5.60	16.00	
62.9	63.4	63.9	64.4	65.4	65.9	66.4	66.9	67.9	68.4	69.4	70.4	71.4	71.9	72.4	72.9	73.4	74.4	74.9	75.4	76.9	77.9	78.9	79.4	79.9	2.77	7.00	20.00	
64.6	65.1	65.6	66.1	67.2	67.7	68.2	68.7	69.7	70.2	71.2	72.2	73.2	73.7	74.2	74.7	75.2	76.2	76.7	77.2	78.7	79.7	80.7	81.2	81.7	2.80	4.20	12.40	
70.0	70.5	71.0	71.5	72.5	73.0	73.5	74.0	75.0	75.5	76.5	77.5	78.5	79.0	79.5	80.0	80.5	81.5	82.0	82.5	84.0	85.0	86.0	86.5	87.0	2.82	4.60	13.60	
57.4	57.9	58.4	58.9	59.9	60.5	61.0	61.5	62.5	63.0	64.0	65.0	66.0	66.5	67.0	67.5	68.0	69.0	69.5	70.0	71.5	72.5	73.6	74.1	74.6	2.83	8.60	25.00	
68.0	68.5	69.0	69.5	70.5	71.0	71.5	72.0	73.0	73.5	74.5	75.5	76.6	77.1	77.6	78.1	78.6	79.6	80.1	80.6	82.1	83.1	84.1	84.6	85.1	2.84	5.20	15.40	
67.4	67.9	68.4	68.9	69.9	70.4	70.9	71.4	72.4	72.9	73.9	74.9	75.9	76.4	76.9	77.4	77.9	78.9	79.4	79.9	81.4	82.4	83.4	83.9	84.4	2.84	5.40	16.00	
63.0	63.5	64.0	64.5	65.5	66.0	66.5	67.0	68.0	68.5	69.5	70.5	71.5	72.0	72.6	73.1	73.6	74.6	75.1	75.6	77.1	78.1	79.1	79.6	80.1	2.85	6.80	20.00	
64.8	65.3	65.8	66.3	67.3	67.8	68.3	68.8	69.8	70.3	71.3	72.3	73.3	73.8	74.3	74.8	75.3	76.3	76.8	77.3	78.8	79.8	80.8	81.4	81.9	2.86	6.20	18.40	
63.2	63.7	64.2	64.7	65.7	66.2	66.7	67.2	68.2	68.7	69.7	70.7	71.7	72.2	72.7	73.2	73.7	74.7	75.2	75.7	77.2	78.2	79.2	79.7	80.2	2.87	3.60	11.00	
68.2	68.7	69.2	69.7	70.7	71.2	71.7	72.2	73.2	73.7	74.7	75.7	76.7	77.2	77.7	78.2	78.7	79.7	80.2	80.7	82.2	83.2	84.2	84.7	85.2	2.94	4.40	13.60	
67.5	68.0	68.5	69.0	70.0	70.5	71.0	71.5	72.5	73.0	74.1	75.1	76.1	76.6	77.1	77.6	78.1	79.1	79.6	80.1	81.6	82.6	83.6	84.1	84.6	2.95	5.20	16.00	
64.9	65.4	65.9	66.4	67.5	68.0	68.5	69.0	70.0	70.5	71.5	72.5	73.5	74.0	74.5	75.0	75.5	76.5	77.0	77.5	79.0	80.0	81.0	81.5	82.0	2.95	6.00	18.40	
63.3	63.8	64.3	64.8	65.8	66.3	66.8	67.3	68.3	68.8	69.8	70.8	71.8	72.3	72.8	73.4	73.9	74.9	75.4	75.9	77.4	78.4	79.4	79.9	80.4	3.01	6.40	20.00	
57.9	58.4	58.9	59.4	60.4	60.9	61.4	61.9	62.9	63.4	64.4	65.4	66.4	66.9	67.4	67.9	68.5	69.5	70.0	70.5	72.0	73.0	74.0	74.5	75.0	3.04	8.00	25.00	
65.1	65.6	66.1	66.6	67.6	68.1	68.6	69.1	70.1	70.6	71.6	72.6	73.6	74.1	74.6	75.1	75.6	76.6	77.1	77.6	79.1	80.1	81.1	81.7	82.2	3.05	5.80	18.40	
68.3	68.8	69.3	69.8	70.8	71.3	71.8	72.3	73.3	73.8	74.8	75.8	76.8	77.4	77.9	78.4	78.9	79.9	80.4	80.9	82.4	83.4	84.4	84.9	85.4	3.06	4.80	15.40	
67.7	68.2	68.7	69.2	70.2	70.7	71.2	71.7	72.7	73.2	74.2	75.2	76.2	76.7	77.2	77.7	78.2	79.2	79.7	80.2	81.7	82.7	83.7	84.2	84.7	3.06	5.00	16.00	
63.4	63.9	64.4	64.9	65.9	66.4	66.9	67.4	68.4	68.9	69.9	70.9	71.9	72.4	72.9	73.4	73.9	74.9	75.4	75.9	77.4	78.4	79.4	79.9	80.4	3.07	3.80	12.40	
68.5	69.0	69.5	70.0	71.0	71.5	72.0	72.5	73.5	74.0	75.0	76.0	77.0	77.5	78.0	78.5	79.0	80.0	80.5	81.0	82.5	83.5	84.5	85.0	85.5	3.18	4.60	15.40	
63.6	64.1	64.6	65.1	66.1	66.6	67.1	67.6	68.6	69.1	70.1	71.1	72.1	72.6	73.1	73.6	74.1	75.2	75.7	76.2	77.7	78.7	79.7	80.2	80.7	3.20	6.00	20.00	
65.4	65.9	66.4	66.9	67.9	68.4	68.9	69.4	70.4	70.9	71.9	72.9	73.9	74.4	74.9	75.4	75.9	76.9	77.4	77.9	79.4	80.4	81.4	81.9	82.5	3.26	5.40	18.40	
58.3	58.8	59.3	59.8	60.8	61.3	61.8	62.3	63.3	63.8	64.9	65.9	66.9	67.4	67.9	68.4	68.9	69.9	70.4	70.9	72.4	73.4	74.4	74.9	75.4	3.27	7.40	25.00	
68.0	68.5	69.0	69.5	70.5	71.0	71.5	72.0	73.0	73.5	74.5	75.5	76.5	77.0	77.5	78.0	78.5	79.5	80.0	80.5	82.0	83.0	84.0	84.5	85.0	3.30	4.60	16.00	
63.7	64.2	64.7	65.3	66.3	66.8	67.3	67.8	68.8	69.3	70.3	71.3	72.3	72.8	73.3	73.8	74.3	75.3	75.8	76.3	77.8	78.8	79.8	80.3	80.8	3.31	5.80	20.00	
65.5	66.0	66.5	67.0	68.0	68.5	69.0	69.6	70.6	71.1	72.1	73.1	74.1	74.6	75.1	75.6	76.1	77.1	77.6	78.1	79.6	80.6	81.6	82.1	82.6	3.38	5.20	18.40	
53.0	53.5	54.0	54.5	55.5	56.1	56.6	57.1	58.6	59.6	60.6	61.6	62.2	62.7	63.2	63.7	64.7	65.2	65.7	66.2	68.2	69.2	69.8	70.3	70.8	3.39	8.60	30.00	
63.9	64.4	64.9	65.4	66.4	66.9	67.4	67.9	68.9	69.4	70.4	71.4	72.4	72.9	73.4	73.9	74.4	75.5	76.0	76.5	78.0	79.0	80.0	80.5	81.0	3.40	3.40	12.40	
58.6	59.1	59.6	60.1	61.1	61.6	62.1	62.6	63.6	64.1	65.1	66.1	67.2	67.7	68.2	68.7	69.2	70.2	70.7	71.2	72.7	73.7	74.7	75.2	75.7	3.42	5.60	20.00	
65.7	66.2	66.7	67.2	68.2	68.7	69.2	69.7	70.7	71.2	72.2	73.2	74.2	74.7	75.2	75.7	76.2	77.2	77.7	78.2	82.8	83.8	84.8	85.3	85.8	3.44	4.40	16.00	
64.0	64.5	65.0	65.5	66.6	67.1	67.6	68.1	69.1	69.6	70.6	71.6	72.6	73.1	73.6	74.1	74.6	75.6	76.1	76.6	78.1	79.1	80.1	80.6	81.1	3.45	7.00	25.00	
58.7	59.2	59.7	60.2	61.2	61.7	62.2	62.7	63.7	64.3	65.3	66.3	67.3	67.8	68.3	68.8	69.3	70.3	70.8	71.3	72.9	73.9	74.9	75.4	75.9	3.46	4.20	15.40	
65.8	66.3	66.8	67.3	68.3	68.8	69.3	69.8	70.9	71.4	72.4	73.4	74.4	74.9	75.4	75.9	76.4	77.4	77.9	78.4	79.9	80.9	81.9	82.4	82.9	3.50	5.00	18.40	
58.9	59.4	59.9	60.4	61.4	61.9	62.4	62.9	63.9	64.4	65.4	66.4	67.5	68.0	68.5	69.0	69.5	70.5	71.0	71.5	73.0	74.0	75.0	75.5	76.0	3.54	3.60	13.60	
64.2	64.7	65.2	65.7	66.7	67.2	67.7	68.2	69.2	69.7	70.7	71.7	72.7	73.2	73.7	74.2	74.7	75.7	76.2	76.8	78.3	79.3	80.3	80.8	81.3	3.55	6.80	25.00	
59.0	59.5	60.0	60.5	61.5	62.0	62.5	63.1	64.1	64.6	65.6	66.6	67.6	68.1	68.6	69.1	69.6	70.6	71.1	71.6	73.1	74.2	75.2	75.7	76.2	3.59	4.20	16.00	
66.0	66.5	67.0	67.5	68.5	69.0	69.5	70.0	71.0	71.5	72.5	73.5	74.5	75.0	75.5	76.0	76.5	77.5	78.0	78.5	80.0	81.0	82.0	82.5	83.0	3.62	4.00	15.40	
64.3	64.8	65.3	65.8	66.8	67.3	67.8	68.4	69.4	69.9	70.9	71.9	72.9	73.4	73.9	74.4	74.9	75.9	76.4	76.9	78.4	79.4	80.4	80.9	81.4	3.76	4.00	16.00	
59.1	59.7	60.2	60.7	61.7	62.2	62.7	63.2	64.2	64.7	65.7	66.7	67.7	68.2	68.7	69.2	69.7	70.7	71.2	71.7	73.2	74.3	75.3	75.8	76.3	3.76	6.40	25.00	
53.8	54.3	54.9	55.4	56.4	56.9	57.4	57.9	58.9	59.4	60.5	61.5	62.5	63.0	63.5	64.0	64.5	65.5	66.1	66.6	68.1	69.1	70.1	70.6	71.1	3.79	4.60	18.40	
44.9	45.4	45.9	46.5	47.5	48.0	48.6	49.1	50.1	5																			

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B BX																					
204	205	206	210		212	215	217	218	220	221	223	225	228	230	234	235	236	237	240	248	253	255				
5.95	15.75	5.60	15.40	2.65	86.3	86.8	87.3	89.3	89.5	91.0	92.0	92.5	93.5	94.0	95.0	96.0	97.5	98.5	100.5	101.0	101.5	102.0	103.5	107.5	110.0	111.0
6.15	16.35	5.80	16.00	2.66	85.6	86.1	86.6	88.6	88.9	90.4	91.4	91.9	92.9	93.4	94.4	95.4	96.9	97.9	99.9	100.4	100.9	101.4	102.9	106.9	109.4	110.4
4.75	12.75	4.40	12.40	2.68	89.1	89.1	89.1	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
6.95	18.75	6.60	18.40	2.70	83.1	83.6	84.1	86.1	86.3	87.8	88.8	89.3	90.3	90.8	91.8	92.8	94.3	95.3	97.3	97.8	98.3	98.8	100.3	104.3	106.9	107.9
5.15	13.95	4.80	13.60	2.71	88.3	88.8	89.3	91.3	91.6	93.1	94.1	94.6	95.6	96.1	97.1	98.1	99.6	100.6	102.6	103.1	103.6	104.1	105.6	109.6	112.1	113.1
4.15	11.35	3.80	11.00	2.73	91.7	91.7	91.7	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
5.75	15.75	5.40	15.40	2.74	86.4	86.9	87.4	89.4	89.7	91.2	92.2	92.7	93.7	94.2	95.2	96.2	97.7	98.7	100.7	101.2	101.7	102.2	103.7	107.7	110.2	111.2
5.95	16.35	5.60	16.00	2.75	85.8	86.3	86.8	88.8	89.0	90.5	91.5	92.0	93.0	93.5	94.5	95.5	97.0	98.0	100.1	100.6	101.1	101.6	103.1	107.1	109.6	110.6
7.35	20.35	7.00	20.00	2.77	81.4	81.9	82.4	84.4	84.7	86.2	87.2	87.7	88.7	89.2	90.2	91.2	92.7	93.7	95.7	96.2	96.7	97.2	98.7	102.7	105.2	106.2
6.75	18.75	6.40	18.40	2.78	83.2	83.7	84.2	86.2	86.5	88.0	89.0	89.5	90.5	91.0	92.0	93.0	94.5	95.5	97.5	98.0	98.5	99.0	100.5	104.5	107.0	108.0
4.55	12.75	4.20	12.40	2.80	90.3	90.3	90.3	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
4.95	13.95	4.60	13.60	2.82	88.5	89.0	89.5	91.5	91.7	93.2	94.2	94.7	95.8	96.3	97.3	98.3	99.8	100.8	102.8	103.3	103.8	104.3	105.8	109.8	112.3	113.3
8.95	25.35	8.60	25.00	2.83	76.1	76.6	77.1	79.1	79.3	80.8	81.8	82.4	83.4	83.9	84.9	85.9	87.4	88.4	90.4	90.9	91.4	91.9	93.4	97.4	99.9	100.9
5.55	15.75	5.20	15.40	2.84	86.6	87.1	87.6	89.6	89.8	91.3	92.3	92.8	93.8	94.3	95.3	96.3	97.8	98.8	100.8	101.3	101.8	102.3	103.8	107.8	110.3	111.3
5.75	16.35	5.40	16.00	2.84	85.9	86.4	86.9	88.9	89.2	90.7	91.7	92.2	93.2	93.7	94.7	95.7	97.2	98.2	100.2	100.7	101.2	101.7	103.2	107.2	109.7	110.7
7.15	20.35	6.80	20.00	2.85	81.6	82.1	82.6	84.6	84.8	86.3	87.4	87.9	88.9	89.4	90.4	91.4	92.9	93.9	95.9	96.4	96.9	97.4	98.9	102.9	105.4	106.4
6.55	18.75	6.20	18.40	2.86	83.4	83.9	84.4	86.4	86.6	88.1	89.1	89.6	90.6	91.1	92.1	93.1	94.6	95.6	97.6	98.1	98.6	99.1	100.6	104.6	107.1	108.1
3.95	11.35	3.60	11.00	2.87	91.9	91.9	91.9	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
4.35	12.75	4.00	12.40	2.89	90.4	90.4	90.4	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
6.95	20.35	6.60	20.00	2.93	81.7	82.2	82.7	84.7	85.0	86.5	87.5	88.0	89.0	89.5	90.5	91.5	93.0	94.0	96.0	96.5	97.0	97.5	99.0	103.0	105.5	106.5
4.75	13.95	4.40	13.60	2.94	89.1	89.1	89.1	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
5.35	15.75	5.00	15.40	2.94	86.7	87.2	87.7	89.7	90.0	91.5	92.5	93.0	94.0	94.5	95.5	96.5	98.0	99.0	101.0	101.5	102.0	102.5	104.0	108.0	110.5	111.5
5.55	16.35	5.20	16.00	2.95	86.1	86.6	87.1	89.1	89.3	90.8	91.8	92.3	93.3	93.8	94.8	95.8	97.3	98.3	100.3	100.8	101.3	101.8	103.3	107.3	109.8	110.8
6.35	18.75	6.00	18.40	2.95	83.5	84.0	84.5	86.5	86.8	88.3	89.3	89.8	90.8	91.3	92.3	93.3	94.8	95.8	97.8	98.3	98.8	99.3	100.8	104.8	107.3	108.3
6.75	20.35	6.40	20.00	3.01	81.9	82.4	82.9	84.9	85.1	86.6	87.6	88.2	89.2	89.7	90.7	91.7	93.2	94.2	96.2	96.7	97.2	97.7	99.2	103.2	105.7	106.7
3.75	11.35	3.40	11.00	3.03	92.0	92.0	92.0	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5
8.35	25.35	8.00	25.00	3.04	76.5	77.0	77.5	79.5	79.8	81.3	82.3	82.8	83.8	84.3	85.3	86.3	87.8	88.8	90.8	91.3	91.8	92.3	93.8	97.8	100.3	101.3
6.15	18.75	5.80	18.40	3.05	83.7	84.2	84.7	86.7	86.9	88.4	89.4	89.9	90.9	91.4	92.4	93.4	94.9	95.9	97.9	98.4	98.9	99.4	100.9	104.9	107.4	108.4
5.15	15.75	4.80	15.40	3.06	86.9	87.4	87.9	89.9	90.1	91.6	92.6	93.1	94.1	94.6	95.6	96.6	98.1	99.1	101.1	101.6	102.1	102.6	104.1	108.1	110.6	111.6
5.35	16.35	5.00	16.00	3.06	86.2	86.7	87.2	89.2	89.5	91.0	92.0	92.5	93.5	94.0	95.0	96.0	97.5	98.5	100.5	101.0	101.5	102.0	103.5	107.5	110.0	111.0
4.15	12.75	3.80	12.40	3.07	90.6	90.6	90.6	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
4.55	13.95	4.20	13.60	3.07	89.3	89.3	89.3	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8
6.55	20.35	6.20	20.00	3.11	82.0	82.5	83.0	85.0	85.3	86.8	87.8	88.3	89.3	89.8	90.8	91.8	93.3	94.3	96.3	96.8	97.3	97.8	99.3	103.3	105.8	106.8
9.75	30.35	9.40	30.00	3.11	71.2	71.7	72.2	74.2	74.5	76.0	77.0	77.5	78.5	79.0	80.0	81.0	82.6	83.6	85.6	86.1	86.6	87.1	88.6	92.6	95.1	96.1
5.95	18.75	5.60	18.40	3.15	83.8	84.3	84.8	86.8	87.1	88.6	89.6	90.1	91.1	91.6	92.6	93.6	95.1	96.1	98.1	98.6	99.1	99.6	101.1	105.1	107.6	108.6
5.15	15.35	4.80	15.00	3.17	86.4	86.9	87.4	89.4	89.6	91.1	92.1	92.6	93.6	94.1	95.1	96.2	97.7	98.7	100.7	101.2	101.7	102.2	103.7	107.7	110.2	111.2
4.95	15.75	4.60	15.40	3.18	87.0	87.5	88.0	90.0	90.3	91.8	92.8	93.3	94.3	94.8	95.8	96.8	98.3	99.3	101.3	101.8	102.3	102.8	104.3	108.3	110.8	111.8
6.35	20.35	6.00	20.00	3.20	82.2	82.7	83.2	85.2	85.4	86.9	88.0	88.5	89.5	90.0	91.0	92.0	93.5	94.5	96.5	97.0	97.5	98.0	99.5	103.5	106.0	107.0
4.35	13.95	4.00	13.60	3.21	89.4	89.4	89.4	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
3.95	12.75	3.60	12.40	3.23	90.7	90.7	90.7	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
5.75	18.75	5.40	18.40	3.26	84.0	84.5	85.0	87.0	87.2	88.7	89.7	90.2	91.2	91.7	92.7	93.7	95.2	96.2	98.2	98.7	99.2	99.7	101.2	105.2	107.7	108.7
7.75	25.35	7.40	25.00	3.27	76.9	77.5	78.0	80.0	80.2	81.7	82.7	83.2	84.2	84.7	85.8	86.8	88.3	89.3	91.3	91.8	92.3	92.8	94.3	98.3	100.8	101.8
4.95	16.35	4.60	16.00	3.30	86.5	87.0	87.5	89.5	89.8	91.3	92.3	92.8	93.8	94.3	95.3	96.3	97.8	98.8	100.8	101.3	101.8	102.3	103.8	107.8	110.3	111.3
6.15	20.35	5.80	20.00	3.31	82.3	82.8	83.3	85.3	85.6	87.1	88.1	88.6	89.6	90.1	91.1	92.1	93.6	94.6	96.6	97.1	97.6	98.1	99.6	103.6	106.1	107.1
4.75	15.75	4.40	15.40	3.32	87.7	87.7	87.7	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2
4.15	13.95	3.80	13.60	3.36	89.6	89.6	89.6	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1
5.55	18.75	5.20	18.40	3.38	84.1	84.6	85.1	87.1	87.4	88.9	89.9	90.4	91.4	91.9	9											

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																			
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX	B BX		
24	25	26	27		28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45		
4.75	18.75	* 4.40	18.40	4.14																				
5.15	20.35	* 4.80	20.00	3.95																				
3.95	15.75	* 3.60	15.40	3.99																				
6.35	25.35	6.00	25.00	3.99																				
4.95	20.35	* 4.60	20.00	4.11																				
4.55	18.75	* 4.20	18.40	4.12																				
6.15	25.35	5.80	25.00	4.12																				
7.35	30.35	7.00	30.00	4.13																				
3.95	16.35	* 3.60	16.00	4.14																				
3.75	15.75	* 3.40	15.40	4.20																				
7.15	30.35	6.80	30.00	4.24																				
5.95	25.35	5.60	25.00	4.26																				
4.75	20.35	* 4.40	20.00	4.28																				
8.95	38.35	* 8.60	38.00	4.28																				
4.35	18.75	* 4.00	18.40	4.31																				
3.75	16.35	* 3.40	16.00	4.36																				
6.95	30.35	6.60	30.00	4.37																				
5.75	25.35	5.40	25.00	4.41																				
4.55	20.35	* 4.20	20.00	4.47																				
6.75	30.35	6.40	30.00	4.50																				
4.15	18.75	* 3.80	18.40	4.52																				
5.55	25.35	5.20	25.00	4.57																				
8.35	38.35	8.00	38.00	4.59																				
6.55	30.35	6.20	30.00	4.63																				
4.35	20.35	* 4.00	20.00	4.68																				
5.35	25.35	5.00	25.00	4.74																				
3.95	18.75	* 3.60	18.40	4.75																				
6.35	30.35	6.00	30.00	4.76																				
4.15	20.35	* 3.80	20.00	4.90																				
5.15	25.35	4.80	25.00	4.92																				
6.15	30.35	5.80	30.00	4.93																				
7.75	38.35	7.40	38.00	4.95																				
3.75	18.75	* 3.40	18.40	5.00																				
5.95	30.35	5.60	30.00	5.10																				
4.95	25.35	4.60	25.00	5.12																				
3.95	20.35	* 3.60	20.00	5.15																				
7.35	38.35	7.00	38.00	5.22																				
5.75	30.35	5.40	30.00	5.28																				
4.75	25.35	* 4.40	25.00	5.34																				
7.15	38.35	6.80	38.00	5.36																				
3.75	20.35	* 3.40	20.00	5.43																				
5.55	30.35	5.20	30.00	5.47																				
6.95	38.35	6.60	38.00	5.52																				
4.55	25.35	* 4.20	25.00	5.57																				
5.35	30.35	5.00	30.00	5.67																				
6.75	38.35	6.40	38.00	5.68																				
4.35	25.35	* 4.00	25.00	5.83																				
6.55	38.35	6.20	38.00	5.85																				
5.15	30.35	4.80	30.00	5.89																				
6.35	38.35	6.00	38.00	6.04																				
4.15	25.35	* 3.80	25.00	6.11																				
4.95	30.35	4.60	30.00	6.13																				
6.15	38.35	5.80	38.00	6.24																				
4.75	30.35	* 4.40	30.00	6.39																				
3.95	25.35	* 3.60	25.00	6.42																				
5.95	38.35	5.60	38.00	6.45																				
4.55	30.35	* 4.20	30.00	6.67																				
5.75	38.35	5.40	38.00	6.67																				
3.75	25.35	* 3.40	25.00	6.76																				
5.55	38.35	5.20	38.00	6.91																				
4.35	30.35	* 4.00	30.00	6.98																				
5.35	38.35	5.00	38.00	7.17																				
4.15	30.35	* 3.80	30.00	7.31																				
5.15	38.35	4.80	38.00	7.45																				
3.95	30.35	* 3.60	30.00	7.68																				
4.95	38.35	4.60	38.00	7.75																				
4.75	38.35	* 4.40	38.00	8.07																				
3.75	30.35	* 3.40	30.00	8.09																				
4.55	38.35	* 4.20	38.00	8.43																				
4.35	38.35	* 4.00	38.00	8.82																				
4.15	38.35	* 3.80	38.00	9.24																				
3.95	38.35	* 3.60	38.00	9.71																				
3.75	38.35	* 3.40	38.00	10.23																				

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters																	
B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		Small Sheave	Large Sheave																
BX	BX	BX	BX	BX	BX	BX	BX	BX	BX	BX	BX	BX	BX	BX	BX	BX	BX	BX	BX																			
BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP																			
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	13.1	13.7	14.2	14.8	15.4	15.9	16.5	17.1	17.7	18.3	18.9	19.5	20.1	20.7	21.3	3.95	4.40	18.40	
						11.4	12.0	12.6			13.1	13.7	14.2	14.8	15.3	15.9	16.4	16.9	17.5	18.0	18.5	19.1	19.6	20.1	20.7	21.3	21.9	22.5	23.1	23.7	24.3	3.95	4.80	20.00				
																				13.2	13.8	14.4	14.9	15.5	16.1	16.6	17.2	17.8	18.4	19.0	19.6	20.2	20.8	21.4	4.11	4.60	20.00	
																				13.3	13.9	14.5	15.1	15.7	16.3	16.9	17.5	18.1	18.7	19.3	19.9	20.5	21.1	21.7	22.3	4.12	4.20	18.40
																				13.4	14.0	14.6	15.2	15.8	16.4	17.0	17.6	18.2	18.8	19.4	20.0	20.6	21.2	21.8	22.4	4.12	5.80	25.00
																				13.5	14.1	14.7	15.3	15.9	16.5	17.1	17.7	18.3	18.9	19.5	20.1	20.7	21.3	21.9	22.5	4.13	7.00	30.00
																				13.6	14.2	14.8	15.4	16.0	16.6	17.2	17.8	18.4	19.0	19.6	20.2	20.8	21.4	22.0	22.6	4.14	3.60	16.00
																				13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	4.20	3.40	15.40
																				13.8	14.4	15.0	15.6	16.2	16.8	17.4	18.0	18.6	19.2	19.8	20.4	21.0	21.6	22.2	22.8	4.24	6.80	30.00
																				13.9	14.5	15.1	15.7	16.3	16.9	17.5	18.1	18.7	19.3	19.9	20.5	21.1	21.7	22.3	22.9	4.26	5.60	25.00
																				14.0	14.6	15.2	15.8	16.4	17.0	17.6	18.2	18.8	19.4	20.0	20.6	21.2	21.8	22.4	23.0	4.28	4.40	20.00
																				14.1	14.7	15.3	15.9	16.5	17.1	17.7	18.3	18.9	19.5	20.1	20.7	21.3	21.9	22.5	23.1	4.28	8.60	38.00
																				14.2	14.8	15.4	16.0	16.6	17.2	17.8	18.4	19.0	19.6	20.2	20.8	21.4	22.0	22.6	23.2	4.31	4.00	18.40
																				14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	4.37	3.40	16.00
																				14.4	15.0	15.6	16.2	16.8	17.4	18.0	18.6	19.2	19.8	20.4	21.0	21.6	22.2	22.8	23.4	4.41	6.60	30.00
																				14.5	15.1	15.7	16.3	16.9	17.5	18.1	18.7	19.3	19.9	20.5	21.1	21.7	22.3	22.9	23.5	4.47	5.40	25.00
																				14.6	15.2	15.8	16.4	17.0	17.6	18.2	18.8	19.4	20.0	20.6	21.2	21.8	22.4	23.0	23.6	4.50	4.20	20.00
																				14.7	15.3	15.9	16.5	17.1	17.7	18.3	18.9	19.5	20.1	20.7	21.3	21.9	22.5	23.1	23.7	4.52	3.80	18.40
																				14.8	15.4	16.0	16.6	17.2	17.8	18.4	19.0	19.6	20.2	20.8	21.4	22.0	22.6	23.2	23.8	4.57	5.20	25.00
																				14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	4.59	8.00	38.00
																				15.0	15.6	16.2	16.8	17.4	18.0	18.6	19.2	19.8	20.4	21.0	21.6	22.2	22.8	23.4	24.0	4.63	6.20	30.00
																				15.1	15.7	16.3	16.9	17.5	18.1	18.7	19.3	19.9	20.5	21.1	21.7	22.3	22.9	23.5	24.1	4.68	4.00	20.00
																				15.2	15.8	16.4	17.0	17.6	18.2	18.8	19.4	20.0	20.6	21.2	21.8	22.4	23.0	23.6	24.2	4.74	5.00	25.00
																				15.3	15.9	16.5	17.1	17.7	18.3	18.9	19.5	20.1	20.7	21.3	21.9	22.5	23.1	23.7	24.3	4.75	3.60	18.40
																				15.4	16.0	16.6	17.2	17.8	18.4	19.0	19.6	20.2	20.8	21.4	22.0	22.6	23.2	23.8	24.4	4.78	6.00	30.00
																				15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	4.90	3.80	20.00
																				15.6	16.2	16.8	17.4	18.0	18.6	19.2	19.8	20.4	21.0	21.6	22.2	22.8	23.4	24.0	24.6	4.92	4.80	25.00
																				15.7	16.3	16.9	17.5	18.1	18.7	19.3	19.9	20.5	21.1	21.7	22.3	22.9	23.5	24.1	24.7	4.93	5.80	30.00
																				15.8	16.4	17.0	17.6	18.2	18.8	19.4	20.0	20.6	21.2	21.8	22.4	23.0	23.6	24.2	24.8	4.95	7.40	38.00
																				15.9	16.5	17.1	17.7	18.3	18.9	19.5	20.1	20.7	21.3	21.9	22.5	23.1	23.7	24.3	24.9	5.00	3.40	18.40
																				16.0	16.6	17.2	17.8	18.4	19.0	19.6	20.2	20.8	21.4	22.0	22.6	23.2	23.8	24.4	25.0	5.10	5.60	30.00
																				16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	5.12	4.60	25.00
																				16.2	16.8	17.4	18.0	18.6	19.2	19.8	20.4	21.0	21.6	22.2	22.8	23.4	24.0	24.6	25.2	5.15	3.60	20.00
																				16.3	16.9	17.5	18.1	18.7	19.3	19.9	20.5	21.1	21.7	22.3	22.9	23.5	24.1	24.7	25.3	5.22	7.00	38.00
																				16.4	17.0	17.6	18.2	18.8	19.4	20.0	20.6	21.2	21.8	22.4	23.0	23.6	24.2	24.8	25.4	5.28	5.40	30.00
																				16.5	17.1	17.7	18.3	18.9	19.5	20.1	20.7	21.3	21.9	22.5	23.1	23.7	24.3	24.9	25.5	5.34	4.40	25.00
																				16.6	17.2	17.8	18.4	19.0	19.6	20.2	20.8	21.4	22.0	22.6	23.2	23.8	24.4	25.0	25.6	5.36	6.80	38.00
																				16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	5.43	3.40	20.00
																				16.8	17.4	18.0	18.6	19.2	19.8	20.4	21.0	21.6	22.2	22.8	23.4	24.0	24.6	25.2	25.8	5.47	5.20	30.00
																				16.9	17.5	18.1	18.7	19.3	19.9	20.5	21.1	21.7	22.3	22.9	23.5	24.1	24.7	25.3	25.9	5.52	6.60	38.00
																				17.0	17.6	18.2	18.8	19.4	20.0	20.6	21.2	21.8	22.4	23.0	23.6	24.2	24.8	25.4	26.0	5.57	4.20	25.00
																				17.1	17.7	18.3	18.9	19.5	20.1	20.7	21.3	21										

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters						
B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP	B BX BP		Small Sheave	Large Sheave					
28.6	29.1	29.7	30.2	30.7	31.2	31.7	32.2													3.95	4.40	18.40					
28.8	27.4	27.9	28.4	28.9	29.4	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.7	38.2	38.7	39.2	3.95	4.80	20.00
31.9	32.4	32.9	33.5	34.0	34.5	35.0	35.5														3.99	3.60	15.40				
20.8	21.4	22.0	22.5	23.1	23.6	24.2	24.7	25.2	25.8	26.3	26.9	27.4	27.9	28.5	29.0	29.5	30.0	30.6	31.1	31.6	32.1	32.7	33.2	33.7	3.99	6.00	25.00
27.0	27.5	28.0	28.5	29.1	29.6	30.1	30.6	31.1	31.6	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.3	36.8	37.3	37.8	38.3	38.8	39.3	4.11	4.60	20.00
28.8	29.3	29.8	30.3	30.8	31.3	31.9	32.4														4.12	4.20	18.40				
21.0	21.5	22.1	22.6	23.2	23.7	24.3	24.8	25.4	25.9	26.4	27.0	27.5	28.1	28.6	29.1	29.6	30.2	30.7	31.2	31.7	32.3	32.8	33.3	33.8	4.12	5.80	25.00
																					4.13	7.00	30.00				
31.4	31.9	32.4	32.9	33.4	33.9	34.4	35.0														4.14	3.60	16.00				
32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6														4.20	3.40	15.40				
																					4.24	6.80	30.00				
21.1	21.7	22.2	22.8	23.3	23.9	24.4	25.0	25.5	26.0	26.6	27.1	27.6	28.2	28.7	29.2	29.8	30.3	30.8	31.4	31.9	32.4	32.9	33.5	34.0	4.26	5.60	25.00
27.1	27.6	28.1	28.7	29.2	29.7	30.2	30.7														4.28	4.40	20.00				
28.9	29.4	29.9	30.5	31.0	31.5	32.0	32.5														4.28	8.60	38.00				
31.5	32.0	32.6	33.1	33.6	34.1	34.6	35.1														4.31	4.00	18.40				
																					4.36	3.40	16.00				
21.2	21.8	22.3	22.9	23.4	24.0	24.5	25.1	25.6	26.2	26.7	27.2	27.8	28.3	28.8	29.4	29.9	30.4	31.0	31.5	32.0	32.5	33.1	33.6	34.1	4.41	5.40	25.00
27.2	27.8	28.3	28.8	29.3	29.8	30.4	30.9														4.47	4.20	20.00				
																					4.50	6.40	30.00				
29.0	29.6	30.1	30.6	31.1	31.6	32.1	32.6														4.52	3.80	18.40				
21.3	21.9	22.5	23.0	23.6	24.1	24.7	25.2	25.8	26.3	26.8	27.4	27.9	28.4	29.0	29.5	30.0	30.6	31.1	31.6	32.1	32.7	33.2	33.7	34.2	4.57	5.20	25.00
																					4.59	8.00	38.00				
																					4.63	6.20	30.00				
27.4	27.9	28.4	28.9	29.5	30.0	30.5	31.0														4.68	4.00	20.00				
21.5	22.0	22.6	23.1	23.7	24.2	24.8	25.3	25.9	26.4	27.0	27.5	28.0	28.6	29.1	29.6	30.2	30.7	31.2	31.7	32.3	32.8	33.3	33.8	34.4	4.74	5.00	25.00
29.2	29.7	30.2	30.7	31.2	31.8	32.3	32.8														4.75	3.60	18.40				
																					4.78	6.00	30.00				
27.5	28.0	28.6	29.1	29.6	30.1	30.6	31.1														4.90	3.80	20.00				
21.6	22.1	22.7	23.3	23.8	24.4	24.9	25.5	26.0	26.5	27.1	27.6	28.2	28.7	29.2	29.8	30.3	30.8	31.4	31.9	32.4	32.9	33.5	34.0	34.5	4.92	4.80	25.00
																					4.93	5.80	30.00				
																					4.95	7.40	38.00				
29.3	29.8	30.3	30.9	31.4	31.9	32.4	32.9														5.00	3.40	18.40				
21.7	22.3	22.8	23.4	23.9	24.5	25.0	25.6	26.1	26.7	27.2	27.8	28.3	28.8	29.4	29.9	30.4	31.0	31.5	32.0	32.5	33.1	33.6	34.1	34.6	5.12	4.60	25.00
27.6	28.2	28.7	29.2	29.7	30.2	30.8	31.3														5.15	3.60	20.00				
																					5.22	7.00	38.00				
21.8	22.4	23.0	23.5	24.1	24.6	25.2	25.7														5.28	5.40	30.00				
																					5.34	4.40	25.00				
																					5.36	6.80	38.00				
27.8	28.3	28.8	29.3	29.9	30.4	30.9	31.4														5.43	3.40	20.00				
																					5.47	5.20	30.00				
																					5.52	6.60	38.00				
22.0	22.5	23.1	23.6	24.2	24.7	25.3	25.8														5.57	4.20	25.00				
																					5.67	5.00	30.00				
22.1	22.6	23.2	23.8	24.3	24.9	25.4	26.0														5.68	6.40	38.00				
																					5.83	4.00	25.00				
																					5.85	6.20	38.00				
																					5.89	4.80	30.00				
																					6.04	6.00	38.00				
22.2	22.8	23.3	23.9	24.4	25.0	25.5	26.1														6.11	3.80	25.00				
																					6.13	4.60	30.00				
																					6.24	5.80	38.00				
																					6.39	4.40	30.00				
22.3	22.9	23.5	24.0	24.6	25.1	25.7	26.2														6.42	3.60	25.00				
																					6.45	5.60	38.00				
																					6.67	4.20	30.00				
																					6.67	5.40	38.00				
22.4	23.0	23.6	24.1	24.7	25.2	25.8	26.3														6.76	3.40	25.00				
																					6.91	5.20	38.00				
																					6.98	4.00	30.00				
																					7.17	5.00	38.00				
																					7.31	3.80	30.00				
																					7.45	4.80	38.00				
																					7.68	3.60	30.00				
																					7.75	4.60	38.00				
																					8.07	4.40	38.00				
																					8.09	3.40	30.00				
																					8.43	4.20	38.00				
																					8.82	4.00	38.00				
																					9.24	3.80	38.00				
																					9.71	3.60	38.00				
																					10.23	3.40	38.00				

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																			
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B	B	B BX BP	B	B	B BX BP	B	B	B	B BX BP	B	B	B	B BX BP	B	B	B BX BP	B		
118	119	120	122		123	124	125	126	127	128	130	131	132	133	134	135	136	137	138	139	140	141		
4.75	18.75	4.40	18.40	3.95	42.4	42.4	44.4	46.5	49.0	50.5	52.5	55.7	59.9	64.2	68.5	72.8	77.1	81.4	85.7	90.0	94.3	98.6		
5.15	20.35	4.80	20.00	3.95	39.7	40.2	40.7	41.7	42.2	42.7	43.3	43.8	44.3	44.8	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3		
3.95	15.75	3.60	15.40	3.99	45.6	47.6	49.6	51.6	53.7	55.7	57.7	59.7	61.7	63.7	65.7	67.7	69.7	71.7	73.7	75.7	77.7	79.7		
6.35	25.35	6.00	25.00	3.99	34.2	34.7	35.3	36.3	36.8	37.3	37.9	38.4	38.9	39.4	40.4	40.9	41.5	42.0	42.5	43.0	43.5	44.0		
4.95	20.35	4.60	20.00	4.11	39.8	40.3	40.9	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	46.4	46.9	47.5	48.0	48.5	49.0	49.5		
4.55	18.75	4.20	18.40	4.12	42.6	44.6	46.6	48.6	50.6	52.6	54.6	56.6	58.6	60.6	62.6	64.6	66.6	68.6	70.6	72.6	74.6	76.6		
6.15	25.35	5.80	25.00	4.12	34.4	34.9	35.4	36.4	37.0	37.5	38.0	38.5	39.0	39.5	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.2		
7.35	30.35	7.00	30.00	4.13	28.5	29.0	29.6	30.7	31.2	31.7	32.3	32.8	33.3	33.9	34.9	35.5	36.0	36.5	37.0	37.6	38.1	38.6		
3.95	16.35	3.60	16.00	4.14	45.1	47.1	49.1	51.1	53.1	55.1	57.1	59.1	61.1	63.1	65.1	67.1	69.1	71.1	73.1	75.1	77.1	79.1		
3.75	15.75	3.40	15.40	4.20	45.7	47.8	49.8	51.8	53.8	55.8	57.8	59.8	61.8	63.8	65.8	67.8	69.8	71.8	73.8	75.8	77.8	79.8		
7.15	30.35	6.80	30.00	4.24	28.6	29.2	29.7	30.8	31.3	31.9	32.4	32.9	33.5	34.0	35.1	35.6	36.1	36.6	37.2	37.7	38.2	38.7		
5.95	25.35	5.60	25.00	4.26	34.5	35.0	35.5	36.6	37.1	37.6	38.1	38.6	39.2	39.7	40.7	41.2	41.7	42.2	42.8	43.3	43.8	44.3		
4.75	20.35	4.40	20.00	4.28	41.0	43.0	45.1	47.1	49.1	51.1	53.1	55.1	57.1	59.1	61.1	63.1	65.1	67.1	69.1	71.1	73.1	75.1		
8.95	38.35	8.60	38.00	4.28	28.9	29.4	29.9	31.0	31.6	32.1	32.7	33.2	33.7	34.3	35.3	35.9	36.4	36.9	37.4	38.0	38.5	39.0		
4.35	18.75	4.00	18.40	4.31	42.7	44.7	46.8	48.8	50.8	52.8	54.8	56.8	58.8	60.8	62.8	64.8	66.8	68.8	70.8	72.8	74.8	76.8		
3.75	16.35	3.40	16.00	4.36	45.2	47.2	49.3	51.3	53.3	55.3	57.3	59.3	61.3	63.3	65.3	67.3	69.3	71.3	73.3	75.3	77.3	79.3		
6.95	30.35	6.60	30.00	4.37	28.7	29.3	29.8	30.9	31.5	32.0	32.5	33.1	33.6	34.1	35.2	35.7	36.2	36.8	37.3	37.8	38.4	38.9		
5.75	25.35	5.40	25.00	4.41	34.6	35.1	35.7	36.7	37.2	37.7	38.3	38.8	39.3	39.8	40.8	41.4	41.9	42.4	42.9	43.4	43.9	44.4		
4.55	20.35	4.20	20.00	4.47	41.1	43.2	45.2	47.2	49.2	51.2	53.2	55.2	57.2	59.2	61.2	63.2	65.2	67.2	69.2	71.2	73.2	75.2		
6.75	30.35	6.40	30.00	4.50	28.9	29.4	30.0	31.0	31.6	32.1	32.7	33.2	33.7	34.3	35.3	35.9	36.4	36.9	37.4	38.0	38.5	39.0		
4.15	18.75	3.80	18.40	4.52	42.8	44.9	46.9	48.9	50.9	52.9	54.9	56.9	58.9	60.9	62.9	64.9	66.9	68.9	70.9	72.9	74.9	76.9		
5.55	25.35	5.20	25.00	4.57	34.8	35.3	35.8	36.8	37.4	37.9	38.4	38.9	39.4	39.9	41.0	41.5	42.0	42.5	43.0	43.6	44.1	44.6		
8.35	38.35	8.00	38.00	4.59	29.0	29.5	30.1	31.2	31.7	32.2	32.8	33.3	33.9	34.4	35.5	36.0	36.5	37.0	37.6	38.1	38.6	39.1		
6.55	30.35	6.20	30.00	4.63	34.9	35.4	35.9	37.0	37.5	38.0	38.5	39.1	39.6	40.1	41.1	41.6	42.1	42.7	43.2	43.7	44.2	44.7		
4.35	20.35	4.00	20.00	4.68	41.3	43.3	45.3	47.3	49.3	51.3	53.3	55.3	57.3	59.3	61.3	63.3	65.3	67.3	69.3	71.3	73.3	75.3		
6.35	25.35	6.00	25.00	4.74	29.1	29.6	30.2	31.3	31.8	32.4	32.9	33.4	34.0	34.5	35.6	36.1	36.6	37.2	37.7	38.2	38.8	39.3		
3.95	18.75	3.60	18.40	4.75	41.4	43.5	45.5	47.5	49.5	51.5	53.5	55.5	57.5	59.5	61.5	63.5	65.5	67.5	69.5	71.5	73.5	75.5		
6.35	30.35	6.00	30.00	4.78	29.1	29.7	30.2	31.3	31.8	32.4	32.9	33.4	34.0	34.5	35.6	36.1	36.6	37.2	37.7	38.2	38.8	39.3		
4.15	20.35	3.80	20.00	4.90	41.4	43.5	45.5	47.5	49.5	51.5	53.5	55.5	57.5	59.5	61.5	63.5	65.5	67.5	69.5	71.5	73.5	75.5		
5.15	25.35	4.80	25.00	4.92	35.0	35.6	36.1	37.1	37.6	38.2	38.7	39.2	39.7	40.2	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.9		
6.15	30.35	5.80	30.00	4.93	29.2	29.8	30.3	31.4	32.0	32.5	33.0	33.6	34.1	34.6	35.7	36.2	36.8	37.3	37.8	38.4	38.9	39.4		
7.75	38.35	7.40	38.00	4.95	35.2	35.7	36.2	37.2	37.8	38.3	38.8	39.3	39.8	40.4	41.4	41.9	42.4	42.9	43.4	44.0	44.5	45.0		
3.75	18.75	3.40	18.40	5.00	43.1	45.2	47.2	49.2	51.2	53.2	55.2	57.2	59.2	61.2	63.2	65.2	67.2	69.2	71.2	73.2	75.2	77.2		
5.95	30.35	5.60	30.00	5.10	29.4	29.9	30.5	31.6	32.1	32.6	33.2	33.7	34.2	34.8	35.8	36.4	36.9	37.4	38.0	38.5	39.0	39.5		
4.95	25.35	4.60	25.00	5.12	35.2	35.7	36.2	37.2	37.8	38.3	38.8	39.3	39.8	40.4	41.4	41.9	42.4	42.9	43.4	44.0	44.5	45.0		
3.95	20.35	3.60	20.00	5.15	41.6	43.6	45.6	47.6	49.6	51.6	53.6	55.6	57.6	59.6	61.6	63.6	65.6	67.6	69.6	71.6	73.6	75.6		
7.35	38.35	7.00	38.00	5.22	29.5	30.0	30.6	31.7	32.2	32.8	33.3	33.8	34.4	34.9	36.0	36.5	37.0	37.6	38.1	38.6	39.1	39.7		
5.75	30.35	5.40	30.00	5.28	34.9	35.4	35.9	37.0	37.5	38.0	38.5	39.1	39.6	40.1	41.1	41.6	42.1	42.7	43.2	43.7	44.2	44.7		
4.75	25.35	4.40	25.00	5.34	41.7	43.7	45.7	47.7	49.7	51.7	53.7	55.7	57.7	59.7	61.7	63.7	65.7	67.7	69.7	71.7	73.7	75.7		
7.15	38.35	6.80	38.00	5.36	29.6	30.2	30.7	31.8	32.3	32.9	33.4	34.0	34.5	35.0	36.1	36.6	37.2	37.7	38.2	38.8	39.3	39.8		
3.75	20.35	3.40	20.00	5.43	41.7	43.7	45.7	47.7	49.7	51.7	53.7	55.7	57.7	59.7	61.7	63.7	65.7	67.7	69.7	71.7	73.7	75.7		
5.55	30.35	5.20	30.00	5.47	29.6	30.2	30.7	31.8	32.3	32.9	33.4	34.0	34.5	35.0	36.1	36.6	37.2	37.7	38.2	38.8	39.3	39.8		
6.95	38.35	6.60	38.00	5.52	34.9	35.4	35.9	37.0	37.5	38.0	38.5	39.1	39.6	40.1	41.1	41.6	42.1	42.7	43.2	43.7	44.2	44.7		
4.55	25.35	4.20	25.00	5.57	41.8	43.8	45.8	47.8	49.8	51.8	53.8	55.8	57.8	59.8	61.8	63.8	65.8	67.8	69.8	71.8	73.8	75.8		
5.35	30.35	5.00	30.00	5.67	29.7	30.3	30.8	31.9	32.5	33.0	33.6	34.1	34.6	35.2	36.2	36.8	37.3	37.8	38.4	38.9	39.4	39.9		
6.75	38.35	6.40	38.00	5.68	34.9	35.4	35.9	37.0	37.5	38.0	38.5	39.1	39.6	40.1	41.1	41.6	42.1	42.7	43.2	43.7	44.2	44.7		
4.35	25.35	4.00	25.00	5.83	41.9	43.9	45.9	47.9	49.9	51.9	53.9	55.9	57.9	59.9	61.9	63.9	65.9	67.9	69.9	71.9	73.9	75.9		
6.55	38.35	6.20	38.00	5.85	29.8	30.4	31.0	32.1	32.6	33.1	33.7	34.2	34.8	35.3	36.4	36.9	37.4	38.0	38.5	39.0	39.5	40.1		
5.15	30.35	4.80	30.00	5.89	34.9	35.4	35.9	37.0	37.5	38.0	38.5	39.1	39.6	40.1	41.1	41.6	42.1	42.7	43.2	43.7	44.2	44.7		
6.35	38.35	6.00	38.00	6.04	30.0	30.5	31.1	32.2	32.7	33.3	33.8	34.3	34.9	35.4	36.5	37.0	37.6	38.1	38.6	39.1	39.7	40.2		
4.15	25.35	3.80	25.00	6.11	41.9	43.9	45.9	47.9	49.9	51.9	53.9	55.9	57.9	59.9	61.9	63.9	65.9	67.9	69.9	71.9	73.9	75.9		
4.95	30.35	4.60	30.00	6.13	29.0	30.5	31.1	32.2	32.7	33.3	33.8	34.3	34.9	35.4	36.5	37.0	37.6	38.1	38.6	39.1	39.7	40.2		
6.15	38.35	5.80	38.00	6.24	34.9	35.4	35.9	37.0	37.5	38.0	38.5	39.1	39.6	40.1	41.1	41.6	42.1	42.7	43.2	43.7	44.2	44.7		
4.75	30.35	4.40	30.00	6.39	41.9	43.9	45.9	47.9	49.9	51.9	53.9	55.9	57.9	59.9	61.9	63.9	65.9	67.9	69.9	71.9	73.9	75.9		
3.9																								

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters						
B	B	B BX BP	B	B	B	B	B	B BX	B	B	B	B	B	B	B BX	B	B	B	B		B	Small Sheave	Large Sheave				
142	143	144	145	146	147	148	149	150	151	152	153	154	156	157	158	160	161	162	164	165	166	167	168	169	3.95	* 4.40	18.40
51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.9	59.4	60.1	60.9	61.5	62.0	63.0	63.5	64.0	64.5	65.0	65.5	3.95	* 4.80	20.00
46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.2	50.7	51.2	51.7	52.2	52.7	53.7	54.2	54.7	55.7	56.2	56.8	57.8	58.3	58.8	59.3	59.8	60.3	3.99	* 3.60	15.40
46.7	47.2	47.7	48.3	48.8	49.3	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.9	54.4	54.9	55.9	56.4	56.9	57.9	58.4	58.9	59.4	59.9	60.4	4.11	* 4.20	18.40
41.2	41.7	42.3	42.8	43.3	43.8	44.3	44.9	45.4	45.9	46.4	46.9	47.4	48.5	49.0	49.5	50.5	51.0	51.6	52.6	53.1	53.6	54.1	54.6	55.1	4.13	* 4.00	20.00
		57.2						60.2							62.2										4.28	* 4.40	20.00
41.4	41.9	42.4	42.9	43.4	44.0	44.5	45.0	45.5	46.0	46.5	47.1	47.6	48.6	49.1	49.6	50.7	51.2	51.7	52.7	53.2	53.7	54.3	54.8	55.3	4.24	* 3.40	15.40
46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.4	52.0	52.5	53.0	54.0	54.5	55.0	56.0	56.5	57.0	58.1	58.6	59.1	59.6	60.1	60.6	4.26	* 6.80	30.00
		53.2						56.2							60.2										4.28	* 4.40	20.00
31.8	32.4	33.0	33.5	34.1	34.6	35.2	35.7	36.3	36.8	37.4	37.9	38.5	39.5	40.1	40.6	41.7	42.2	42.7	43.8	44.3	44.9	45.4	45.9	46.5	4.28	* 4.00	18.40
		54.8						57.9							61.9										4.31	* 3.40	15.40
		57.3						60.3							64.4										4.36	* 4.00	18.40
41.5	42.0	42.5	43.1	43.6	44.1	44.6	45.1	45.6	46.2	46.7	47.2	47.7	48.7	49.3	49.8	50.8	51.3	51.8	52.9	53.4	53.9	54.4	54.9	55.4	4.37	* 6.60	30.00
47.0	47.5	48.0	48.5	49.0	49.6	50.1	50.6	51.1	51.6	52.1	52.6	53.1	54.1	54.6	55.2	56.2	56.7	57.2	58.2	58.7	59.2	59.7	60.2	60.7	4.41	* 5.40	25.00
		53.3						56.3							60.4										4.47	* 4.20	20.00
41.6	42.1	42.7	43.2	43.7	44.2	44.7	45.3	45.8	46.3	46.8	47.3	47.8	48.9	49.4	49.9	50.9	51.5	52.0	53.0	53.5	54.0	54.5	55.0	55.6	4.50	* 6.40	30.00
		55.0						58.0							62.0										4.52	* 3.80	18.40
47.1	47.6	48.2	48.7	49.2	49.7	50.2	50.7	51.2	51.7	52.2	52.7	53.3	54.3	54.8	55.3	56.3	56.8	57.3	58.3	58.8	59.4	59.9	60.4	60.9	4.57	* 5.20	25.00
32.2	32.8	33.3	33.9	34.5	35.0	35.6	36.1	36.7	37.2	37.8	38.3	38.8	39.9	40.5	41.0	42.1	42.6	43.1	44.2	44.7	45.3	45.8	46.3	46.8	4.69	* 8.00	38.00
41.8	42.3	42.8	43.3	43.8	44.4	44.9	45.4	45.9	46.4	47.0	47.5	48.0	49.0	49.5	50.0	51.1	51.6	52.1	53.1	53.6	54.2	54.7	55.2	55.7	4.63	* 6.20	30.00
		53.5						56.5							60.5										4.68	* 4.00	20.00
47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.9	51.4	51.9	52.4	52.9	53.4	54.4	54.9	55.4	56.4	57.0	57.5	58.5	59.0	59.5	60.0	60.5	61.0	4.78	* 5.00	25.00
		55.1						58.1							62.2										4.75	* 3.60	18.40
41.9	42.4	42.9	43.5	44.0	44.5	45.0	45.5	46.1	46.6	47.1	47.6	48.1	49.2	49.7	50.2	51.2	51.7	52.2	53.3	53.8	54.3	54.8	55.3	55.8	4.78	* 6.00	30.00
		53.6						56.6							60.7										4.90	* 3.80	20.00
47.4	47.9	48.4	48.9	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.6	55.1	55.6	56.6	57.1	57.6	58.6	59.1	59.6	60.1	60.7	61.2	4.92	* 4.80	25.00
42.0	42.6	43.1	43.6	44.1	44.6	45.2	45.7	46.2	46.7	47.2	47.7	48.3	49.3	49.8	50.3	51.4	51.9	52.4	53.4	53.9	54.4	54.9	55.5	56.0	4.93	* 5.80	30.00
32.6	33.1	33.7	34.3	34.8	35.4	35.9	36.5	37.0	37.6	38.1	38.7	39.2	40.3	40.8	41.4	42.5	43.0	43.5	44.6	45.1	45.7	46.2	46.7	47.2	4.95	* 7.40	38.00
		55.3						58.3							62.3										5.00	* 3.40	18.40
42.2	42.7	43.2	43.7	44.2	44.8	45.3	45.8	46.3	46.8	47.4	47.9	48.4	49.4	49.9	50.5	51.5	52.0	52.5	53.5	54.1	54.6	55.1	55.6	56.1	5.10	* 5.60	30.00
47.6	48.1	48.6	49.1	49.6	50.1	50.6	51.1	51.6	52.2	52.7	53.2	53.7	54.7	55.2	55.7	56.7	57.2	57.7	58.8	59.3	59.8	60.3	60.8	61.3	5.12	* 4.60	25.00
		53.7						56.8							60.8										5.15	* 3.60	20.00
32.8	33.4	34.0	34.5	35.1	35.6	36.2	36.7	37.3	37.8	38.4	38.9	39.5	40.6	41.1	41.6	42.7	43.2	43.8	44.9	45.4	45.9	46.4	47.0	47.5	5.22	* 7.00	38.00
42.3	42.8	43.3	43.9	44.4	44.9	45.4	45.9	46.5	47.0	47.5	48.0	48.5	49.6	50.1	50.6	51.6	52.1	52.7	53.7	54.2	54.7	55.2	55.7	56.2	5.28	* 5.40	30.00
		48.7						51.8							55.9										5.34	* 4.40	25.00
32.9	33.5	34.1	34.6	35.2	35.8	36.3	36.9	37.4	38.0	38.5	39.1	39.6	40.7	41.2	41.8	42.8	43.4	43.9	45.0	45.5	46.0	46.6	47.1	47.6	5.36	* 6.80	38.00
		53.9						56.9							61.0										5.43	* 3.40	20.00
42.4	43.0	43.5	44.0	44.5	45.0	45.6	46.1	46.6	47.1	47.6	48.1	48.7	49.7	50.2	50.7	51.8	52.3	52.8	53.8	54.3	54.8	55.4	55.9	56.4	5.47	* 5.20	30.00
33.1	33.6	34.2	34.8	35.3	35.9	36.4	37.0	37.5	38.1	38.6	39.2	39.7	40.8	41.4	41.9	43.0	43.5	44.0	45.1	45.6	46.2	46.7	47.2	47.8	5.52	* 6.60	38.00
		48.9						51.9							56.0										5.57	* 4.20	25.00
42.6	43.1	43.6	44.1	44.6	45.2	45.7	46.2	46.7	47.2	47.8	48.3	48.8	49.8	50.4	50.9	51.9	52.4	52.9	54.0	54.5	55.0	55.5	56.0	56.5	5.67	* 5.00	30.00
33.2	33.8	34.3	34.9	35.4	36.0	36.6	37.1	37.7	38.2	38.8	39.3	39.9	40.9	41.5	42.0	43.1	43.6	44.2	45.2	45.8	46.3	46.8	47.4	47.9	5.68	* 6.40	38.00
		49.0						52.1							56.1										5.83	* 4.00	25.00
33.3	33.9	34.4	35.0	35.6	36.1	36.7	37.2	37.8	38.3	38.9	39.4	40.0	41.1	41.6	42.1	43.2	43.8	44.3	45.4	45.9	46.4	47.0	47.5	48.0	5.85	* 6.20	38.00
42.7	43.2	43.7	44.3	44.8	45.3	45.8	46.3	46.9	47.4	47.9	48.4	48.9	50.0	50.5	51.0	52.0	52.6	53.1	54.1	54.6	55.1	55.6	56.1	56.7	5.89	* 4.80	30.00
33.4	34.0	34.6	35.1	35.7	36.3	36.8	37.4	37.9	38.5	39.0	39.6	40.1	41.2	41.7	42.3	43.4	43.9	44.4	45.5	46.0	46.6	47.1	47.6	48.2	6.04	* 8.00	38.00
		49.1						52.2							56.3										6.11	* 3.80	25.00
42.8	43.4	43.9	44.4	44.9	45.4	46.0	46.5	47.0	47.5	48.0	48.6	49.1	50.1	50.6	51.1	52.2	52.7	53.2	54.2	54.7	55.3	55.8	56.3	56.8	6.13	* 4.60	30.00
33.6	34.1	34.7	35.3	35.8	36.4	36.9	37.5	38.0	38.6	39.1	39.7	40.2	41.3	41.9	42.4	43.5	44.0	44.6	45.6	46.2	46.7	47.2	47.8	48.3	6.24	* 5.80	38.00
		44.0						47.1							51.3										6.39	* 4.40	30.00
		49.3						52.3							56.4										6.42	* 3.60	25.00
33.7	34.2	34.8	35.4	35.9	36.5	37.1	37.6	38.2	38.7	39.3	39.8	40.4	41.4	42.0	42.5	43.6	44.1	44.7	45.8	46.3	46.8	47.4	47.9	48.4	6.45	* 5.60	38.00
		44.1						47.3							51.4										6.67	* 4.20	30.00
33.8	34.4	34.9	35.5	36.1	36.6	37.2	37.7	38.3	38.8	39.4	39.9	40.5	41.6	42.1	42.7	43.7	44.3	44.8	45.9	46.4	47.0	47.5	48.0	48.6	6.67	* 5.40	38.00
		49.4						52.5																			

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																			
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	
4.75	18.75	4.40	18.40	3.95			69.1																	
5.15	20.35	4.80	20.00	3.95	66.0	67.0	67.5	68.0	68.5	69.5	70.0	71.0	72.0	73.0	73.5	74.0	74.5	75.0	76.0	76.5	77.0	78.0	79.6	
3.95	15.75	3.60	15.40	3.99			72.2																80.6	
6.35	25.35	6.00	25.00	3.99	60.8	61.8	62.3	62.8	63.3	64.4	64.9	65.9	66.9	67.9	68.4	68.9	69.4	69.9	70.9	71.4	71.9	73.4	74.4	
4.95	20.35	4.60	20.00	4.11	66.1	67.1	67.6	68.1	68.6	69.7	70.2	71.2	72.2	73.2	73.7	74.2	74.7	75.2	76.2	76.7	77.2	78.7	79.7	
4.55	18.75	4.20	18.40	4.12			69.3																80.3	
6.15	25.35	5.80	25.00	4.12	61.0	62.0	62.5	63.0	63.5	64.5	65.0	66.0	67.0	68.0	68.5	69.0	69.5	70.1	71.1	71.6	72.1	73.6	74.6	
7.35	30.35	7.00	30.00	4.13	55.6	56.7	57.2	57.7	58.2	59.2	59.7	60.7	61.8	62.8	63.3	63.8	64.3	64.8	65.8	66.3	66.8	68.4	69.4	
3.95	16.35	3.60	16.00	4.14			71.7																82.8	
3.75	15.75	3.40	15.40	4.20			72.4																83.4	
7.15	30.35	6.80	30.00	4.24	55.8	56.8	57.3	57.8	58.3	59.4	59.9	60.9	61.9	62.9	63.4	63.9	64.5	65.0	66.0	66.5	67.0	68.5	69.5	
5.95	25.35	5.60	25.00	4.26	61.1	62.1	62.6	63.1	63.6	64.6	65.1	66.2	67.2	68.2	68.7	69.2	69.7	70.2	71.2	71.7	72.2	73.7	74.7	
4.75	20.35	4.40	20.00	4.28			67.8																78.9	
8.95	38.35	8.60	38.00	4.28	47.0	48.0	48.6	49.1	49.6	50.7	51.2	52.2	53.3	54.3	54.8	55.3	55.9	56.4	57.4	57.9	58.4	60.0	61.0	
4.35	18.75	4.00	18.40	4.31			69.4																80.5	
3.75	16.35	3.40	16.00	4.36			71.9																82.9	
6.95	30.35	6.60	30.00	4.37	55.9	56.9	57.5	58.0	58.5	59.5	60.0	61.0	62.0	63.1	63.6	64.1	64.6	65.1	66.1	66.6	67.1	68.7	69.7	
5.75	25.35	5.40	25.00	4.41	61.2	62.3	62.8	63.3	63.8	64.8	65.3	66.3	67.3	68.3	68.8	69.3	69.8	70.3	71.3	71.9	72.4	73.9	74.9	
4.55	20.35	4.20	20.00	4.47			67.9																79.0	
6.75	30.35	6.40	30.00	4.50	56.1	57.1	57.6	58.1	58.6	59.6	60.2	61.2	62.2	63.2	63.7	64.2	64.7	65.2	66.3	66.8	67.3	68.8	69.8	
4.15	18.75	3.80	18.40	4.52			69.6																80.6	
5.55	25.35	5.20	25.00	4.57	61.4	62.4	62.9	63.4	63.9	64.9	65.4	66.4	67.5	68.5	69.0	69.5	70.0	70.5	71.5	72.0	72.5	74.0	75.0	
8.35	38.35	8.00	38.00	4.59	47.4	48.4	49.0	49.5	50.0	51.1	51.6	52.6	53.7	54.7	55.2	55.7	56.3	56.8	57.8	58.3	58.8	60.4	61.4	
6.55	30.35	6.20	30.00	4.63	56.2	57.2	57.7	58.2	58.8	59.8	60.3	61.3	62.3	63.3	63.9	64.4	64.9	65.4	66.4	66.9	67.4	68.9	70.0	
4.35	20.35	4.00	20.00	4.68			68.1																79.1	
5.35	25.35	5.00	25.00	4.74	61.5	62.5	63.0	63.5	64.1	65.1	65.6	66.6	67.6	68.6	69.1	69.6	70.1	70.6	71.6	72.1	72.6	74.2	75.2	
3.95	18.75	3.60	18.40	4.75			69.7																80.8	
6.35	30.35	6.00	30.00	4.78	56.3	57.4	57.9	58.4	58.9	59.9	60.4	61.5	62.5	63.5	64.0	64.5	65.0	65.5	66.5	67.0	67.6	69.1	70.1	
4.15	20.35	3.80	20.00	4.90			68.2																79.3	
5.15	25.35	4.80	25.00	4.92	61.7	62.7	63.2	63.7	64.2	65.2	65.7	66.7	67.7	68.8	69.3	69.8	70.3	70.8	71.8	72.3	72.8	74.3	75.3	
6.15	30.35	5.80	30.00	4.93	56.5	57.5	58.0	58.5	59.0	60.1	60.6	61.6	62.6	63.6	64.1	64.6	65.2	65.7	66.7	67.2	67.7	69.2	70.2	
7.75	38.35	7.40	38.00	4.95	47.8	48.8	49.4	49.9	50.4	51.5	52.0	53.0	54.1	55.1	55.6	56.1	56.7	57.2	58.2	58.7	59.3	60.8	61.8	
3.75	18.75	3.40	18.40	5.00			69.9																80.9	
5.95	30.35	5.60	30.00	5.10	56.6	57.6	58.2	58.7	59.2	60.2	60.7	61.7	62.8	63.8	64.3	64.8	65.3	65.8	66.8	67.3	67.8	69.4	70.4	
4.95	25.35	4.60	25.00	5.12	61.8	62.8	63.3	63.8	64.3	65.4	65.9	66.9	67.9	68.9	69.4	69.9	70.4	70.9	71.9	72.4	72.9	74.5	75.5	
3.95	20.35	3.60	20.00	5.15			68.4																79.4	
7.35	38.35	7.00	38.00	5.22	48.0	49.1	49.6	50.1	50.7	51.7	52.2	53.3	54.3	55.4	55.9	56.4	56.9	57.5	58.5	59.0	59.5	61.1	62.1	
5.75	30.35	5.40	30.00	5.28	56.8	57.8	58.3	58.8	59.3	60.3	60.8	61.0	62.9	63.9	64.4	64.9	65.4	65.9	67.0	67.5	68.0	69.5	70.5	
4.75	25.35	4.40	25.00	5.34			63.5																74.6	
7.15	38.35	6.80	38.00	5.36	48.2	49.2	49.7	50.3	50.8	51.8	52.4	53.4	54.5	55.5	56.0	56.5	57.1	57.6	58.6	59.1	59.7	61.2	62.2	
3.75	20.35	3.40	20.00	5.43			68.5																79.6	
5.55	30.35	5.20	30.00	5.47	56.9	57.9	58.4	58.9	59.5	60.5	61.0	62.0	63.0	64.0	64.6	65.1	65.6	66.1	67.1	67.6	68.1	69.6	70.7	
6.95	38.35	6.60	38.00	5.52	48.3	49.4	49.9	50.4	50.9	52.0	52.5	53.6	54.6	55.6	56.2	56.7	57.2	57.7	58.8	59.3	59.8	61.4	62.4	
4.55	25.35	4.20	25.00	5.57			63.6																74.7	
5.35	30.35	5.00	30.00	5.67	57.0	58.1	58.6	59.1	59.6	60.6	61.1	62.1	63.2	64.2	64.7	65.2	65.7	66.2	67.2	67.8	68.3	69.8	70.8	
6.75	38.35	6.40	38.00	5.68	48.4	49.5	50.0	50.5	51.1	52.1	52.6	53.7	54.7	55.8	56.3	56.8	57.3	57.9	58.9	59.4	59.9	61.5	62.5	
4.35	25.35	4.00	25.00	5.83			63.8																74.9	
6.55	38.35	6.20	38.00	5.85	48.6	49.6	50.1	50.7	51.2	52.2	52.8	53.8	54.9	55.9	56.4	57.0	57.5	58.0	59.0	59.5	60.1	61.6	62.7	
5.15	30.35	4.80	30.00	5.89	57.2	58.2	58.7	59.2	59.7	60.8	61.3	62.3	63.3	64.3	64.8	65.3	65.9	66.4	67.4	67.9	68.4	69.9	70.9	
6.35	38.35	6.00	38.00	6.04	48.7	49.7	50.3	50.8	51.3	52.4	52.9	54.0	55.0	56.0	56.6	57.1	57.6	58.1	59.2	59.7	60.2	61.8	62.8	
4.15	25.35	3.80	25.00	6.11			63.9																75.0	
4.95	30.35	4.60	30.00	6.13	57.3	58.3	58.8	59.4	59.9	60.9	61.4	62.4	63.4	64.5	65.0	65.5	66.0	66.5	67.5	68.0	68.5	70.1	71.1	
6.15	38.35	5.80	38.00	6.24	48.8	49.9	50.4	50.9	51.5	52.5	53.0	54.1	55.1	56.2	56.7	57.2	57.7	58.3	59.3	59.8	60.3	61.9	62.9	
4.75	30.35	4.40	30.00	6.39			63.9																70.2	
3.95	25.35	3.60	25.00	6.42			64.0																75.2	
5.95	38.35	5.60	38.00	6.45	49.0	50.0	50.5	51.1	51.6	52.6	53.2	54.2	55.3	56.3	56.8	57.4	57.9	58.4	59.4	60.0	60.5	62.0	63.1	
4.55	30.35	4.20	30.00	6.67			59.1																70.4	
5.75	38.35	5.40	38.00	6.67	49.1	50.1	50.7	51.2	51.7	52.8	53.3	54.4	55.4	56.4	57.0	57.5	58.0	58.5	59.6	60.1	60.6	62.2	63.2	
3.75	25.35	3.40	25.00	6.76			64.2																75.3	
5.55	38.35	5.20	38.00	6.91	49.2	50.3	50.8	51.3	51.9	52.9	53.4	54.5	55.5	56.6	57.1	57.6	58.1	58.7	59.7	60.2	60.7	62.3	63.3	
4.35	30.35	4.00	30.00	6.98			59.3																70.5	
5.35	38.35	5.00	38.00	7.17	49.3	50.4	50.9	51.5	52.0	53.0	53.6	54.6	55.7	56.7	57.2	57.8	58.3	58.8	59.8	60.4	60.9	62.4	63.5	
4.15	30.35	3.80																						

Heavy Duty V-Belt Drive Design Manual

Table No. B22

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																
Small Sheave	Large Sheave	Small Sheave	Large Sheave		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		
					BX																
4.75	18.75	4.40	18.40	3.95	279	280	285	290	292	293	300	310	315	330	340	345	355	360	394	433	472
5.15	20.35	4.80	20.00	3.95	119.9	120.4	122.9	125.4	126.4	126.9	132.1	135.5	138.0	145.5	150.5	153.0	158.0	160.5	177.5	197.0	216.5
3.95	15.75	3.60	15.40	3.99							135.1										
6.35	25.35	6.00	25.00	3.99	114.9	115.4	117.9	120.4	121.4	121.9	125.4	130.5	133.0	140.5	145.5	148.0	153.0	155.5	172.5	192.1	211.6
4.95	20.35	4.60	20.00	4.11	120.1	120.6	123.1	125.6	126.6	127.1	132.1	135.6	138.1	145.6	150.6	153.1	158.1	160.6	177.7	197.2	216.7
4.55	18.75	4.20	18.40	4.12							132.2										
6.15	25.35	5.80	25.00	4.12	115.1	115.6	118.1	120.6	121.6	122.1	125.6	130.6	133.1	140.6	145.6	148.1	153.2	155.7	172.7	192.2	211.7
7.35	30.35	7.00	30.00	4.13	110.0	110.5	113.0	115.5	116.5	117.0	120.5	125.5	128.1	135.6	140.6	143.1	148.1	150.7	167.7	187.2	206.8
3.95	16.35	3.60	16.00	4.14							134.6										
3.75	15.75	3.40	15.40	4.20							135.3										
7.15	30.35	6.80	30.00	4.24	110.1	110.6	113.2	115.7	116.7	117.2	120.7	125.7	128.2	135.8	140.8	143.3	148.3	150.8	167.8	187.4	206.9
5.95	25.35	5.60	25.00	4.26	115.2	115.7	118.2	120.7	121.7	122.2	125.7	130.8	133.3	140.8	145.8	148.3	153.3	155.8	172.8	192.4	211.9
4.75	20.35	4.40	20.00	4.28							130.8										
8.95	38.35	8.60	38.00	4.28	102.0	102.5	105.0	107.5	108.6	109.1	112.6	117.6	120.2	127.7	132.7	135.3	140.3	142.8	159.9	179.4	199.0
4.35	18.75	4.00	18.40	4.31							132.4										
3.75	16.35	3.40	16.00	4.36							134.8										
6.95	30.35	6.60	30.00	4.37	110.3	110.8	113.3	115.8	116.8	117.3	120.8	125.9	128.4	135.9	140.9	143.4	148.4	151.0	168.0	187.5	207.1
5.75	25.35	5.40	25.00	4.41	115.4	115.9	118.4	120.9	121.9	122.4	125.9	130.9	133.4	140.9	145.9	148.5	153.5	156.0	173.0	192.5	212.0
4.55	20.35	4.20	20.00	4.47							130.9										
6.75	30.35	6.40	30.00	4.50	110.4	110.9	113.4	116.0	117.0	117.5	121.0	126.0	128.5	136.0	141.1	143.6	148.6	151.1	168.1	187.7	207.2
4.15	18.75	3.80	18.40	4.52							132.5										
5.55	25.35	5.20	25.00	4.57	115.5	116.0	118.5	121.0	122.0	122.5	126.0	131.1	133.6	141.1	146.1	148.6	153.6	156.1	173.1	192.7	212.2
8.35	38.35	8.00	38.00	4.59	102.4	102.9	105.5	108.0	109.0	109.5	113.0	118.1	120.6	128.1	133.2	135.7	140.7	143.2	160.3	179.9	199.5
6.55	30.35	6.20	30.00	4.63	110.6	111.1	113.6	116.1	117.1	117.6	121.1	126.2	128.7	136.2	141.2	143.7	148.7	151.3	168.3	187.8	207.4
4.35	20.35	4.00	20.00	4.68							131.1										
5.35	25.35	5.00	25.00	4.74	115.7	116.2	118.7	121.2	122.2	122.7	126.2	131.2	133.7	141.2	146.2	148.8	153.8	156.3	173.3	192.8	212.4
3.95	18.75	3.60	18.40	4.75							132.7										
6.35	30.35	6.00	30.00	4.78	110.7	111.2	113.7	116.3	117.3	117.8	121.3	126.3	128.8	136.3	141.4	143.9	148.9	151.4	168.4	188.0	207.5
4.15	20.35	3.80	20.00	4.90							131.2										
5.15	25.35	4.80	25.00	4.92	115.8	116.3	118.8	121.3	122.3	122.8	126.3	131.4	133.9	141.4	146.4	148.9	153.9	156.4	173.5	193.0	212.5
6.15	30.35	5.80	30.00	4.93	110.9	111.4	113.9	116.4	117.4	117.9	121.4	126.5	129.0	136.5	141.5	144.0	149.0	151.5	168.6	188.1	207.7
7.75	38.35	7.40	38.00	4.95	102.9	103.4	105.9	108.4	109.4	109.9	113.5	118.5	121.0	128.6	133.6	136.1	141.2	143.7	160.8	180.3	199.9
3.75	18.75	3.40	18.40	5.00							132.8										
5.95	30.35	5.60	30.00	5.10	111.0	111.5	114.0	116.6	117.6	118.1	121.6	126.6	129.1	136.6	141.7	144.2	149.2	151.7	168.7	188.3	207.8
4.95	25.35	4.60	25.00	5.12	116.0	116.5	119.0	121.5	122.5	123.0	126.5	131.5	134.0	141.5	146.5	149.1	154.1	156.6	173.6	193.1	212.7
3.95	20.35	3.60	20.00	5.15							131.4										
7.35	38.35	7.00	38.00	5.22	103.1	103.6	106.2	108.7	109.7	110.2	113.7	118.8	121.3	128.9	133.9	136.4	141.5	144.0	161.1	180.6	200.2
5.75	30.35	5.40	30.00	5.28	111.2	111.7	114.2	116.7	117.7	118.2	121.7	126.7	129.3	136.8	141.8	144.3	149.3	151.8	168.9	188.4	208.0
4.75	25.35	4.40	25.00	5.34							128.6										
7.15	38.35	6.80	38.00	5.35	103.3	103.8	106.3	108.8	109.9	110.4	113.9	118.9	121.5	129.0	134.1	136.6	141.6	144.1	161.2	180.8	200.4
3.75	20.35	3.40	20.00	5.43							131.5										
5.55	30.35	5.20	30.00	5.47	111.3	111.8	114.3	116.8	117.9	118.4	121.9	126.9	129.4	136.9	142.0	144.5	149.5	152.0	169.0	188.6	208.1
6.95	38.35	6.60	38.00	5.52	103.4	103.9	106.5	109.0	110.0	110.5	114.0	119.1	121.6	129.2	134.2	136.7	141.8	144.3	161.4	180.9	200.5
4.55	25.35	4.20	25.00	5.57							126.8										
5.35	30.35	5.00	30.00	5.67	111.5	112.0	114.5	117.0	118.0	118.5	122.0	127.0	129.6	137.1	142.1	144.6	149.6	152.1	169.2	188.7	208.3
6.75	38.35	6.40	38.00	5.68	103.6	104.1	106.6	109.1	110.1	110.6	114.2	119.2	121.8	129.3	134.3	136.9	141.9	144.4	161.5	181.1	200.7
4.35	25.35	4.00	25.00	5.83							126.9										
6.55	38.35	6.20	38.00	5.85	103.7	104.2	106.7	109.3	110.3	110.8	114.3	119.4	121.9	129.5	134.5	137.0	142.0	144.6	161.7	181.2	200.8
5.15	30.35	4.80	30.00	5.89	111.6	112.1	114.6	117.1	118.1	118.6	122.2	127.2	129.7	137.2	142.3	144.8	149.8	152.3	169.3	188.9	208.4
6.35	38.35	6.00	38.00	6.04	103.9	104.4	106.9	109.4	110.4	110.9	114.5	119.5	122.0	129.6	134.6	137.2	142.2	144.7	161.8	181.4	201.0
4.15	25.35	3.80	25.00	6.11							127.1										
4.95	30.35	4.60	30.00	6.13	111.8	112.3	114.8	117.3	118.3	118.8	122.3	127.3	129.9	137.4	142.4	144.9	149.9	152.4	169.5	189.0	208.6
6.15	38.35	5.80	38.00	6.24	104.0	104.5	107.0	109.6	110.6	111.1	114.6	119.7	122.2	129.7	134.8	137.3	142.3	144.9	161.9	181.5	201.1
4.75	30.35	4.40	30.00	6.39							122.5										
3.95	25.35	3.60	25.00	6.42							127.2										
5.95	38.35	5.60	38.00	6.45	104.1	104.7	107.2	109.7	110.7	111.2	114.9	119.8	122.3	129.9	134.9	137.5	142.5	145.0	162.1	181.7	201.3
4.55	30.35	4.20	30.00	6.67							122.6										
5.75	38.35	5.40	38.00	6.67	104.3	104.8	107.3	109.9	110.9	111.4	115.1	120.0	122.5	130.0	135.1	137.6	142.6	145.1	162.2	181.8	201.4
3.75	25.35	3.40	25.00	6.76							127.4										
5.55	38.35	5.20	38.00	6.91	104.4	104.9	107.5	110.0	111.0	111.5	115.0	120.1	122.6	130.2	135.2	137.7	142.8	145.3	162.4	182.0	201.6
4.35	30.35	4.00	30.00	6.98							122.8										
5.35	38.35	5.00	38.00	7.17	104.6	105.1	107.6	110.1	111.2	111.7	115.2	120.2	122.8	130.3	135.4	137.9	142.9	145.4	162.5	182.1	201.7
4.15	30.35	3.80	30.00	7.31							122.9										
5.15	38.35	4.80	38.00	7.45	104.7	105.2	107.8	110.3	111.3	111.8	115.3	120.4	122.9	130.5	135.5	138.0</					

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Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																							Sheave Datum Diameters		
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	Speed Ratio	Small Large	
71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93		Sheave	Sheave
				31.1																			1.00	* 5.00	* 5.00
				30.2																			1.00	* 5.60	* 5.60
				29.5																			1.00	* 6.00	* 6.00
				28.0																			1.00	* 7.00	* 7.00
				27.2																			1.00	* 7.50	* 7.50
				26.4																			1.00	* 8.00	* 8.00
				25.6																			1.00	* 8.50	* 8.50
22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	1.00	9.00	9.00
21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	1.00	10.00	10.00
20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	1.00	10.50	10.50
19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	1.00	11.00	11.00
18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	1.00	12.00	12.00
16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	1.00	13.00	13.00
		16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	1.00	14.00	14.00
																							1.00	16.00	16.00
22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	1.05	9.00	9.50
21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	1.05	9.50	10.00
20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	1.05	10.00	10.50
20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	1.05	10.50	11.00
				26.8																			1.06	* 7.50	* 8.00
				26.0																			1.06	* 8.00	* 8.50
				25.2																			1.06	* 8.50	* 9.00
				24.4																			1.07	* 5.60	* 6.00
				23.6																			1.07	* 7.00	* 7.50
15.7	16.2	16.7	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	1.07	13.00	14.00
17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	1.08	12.00	13.00
18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	1.09	11.00	12.00
21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	1.10	9.50	10.50
20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	1.10	10.00	11.00
				30.6																			1.11	* 5.00	* 5.60
				29.8																			1.11	* 8.50	* 9.50
				29.0																			1.12	9.00	10.00
				28.2																			1.12	16.00	18.00
				27.4																			1.13	* 7.50	* 8.50
				26.6																			1.14	* 7.00	* 8.00
19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	1.14	10.50	12.00
20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	1.14	14.00	16.00
21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	1.15	9.50	11.00
16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	1.16	* 6.00	* 7.00
				24.4																			1.16	9.00	10.50
				23.6																			1.16	12.00	14.00
				22.8																			1.17	* 8.50	* 10.00
				22.0																			1.18	* 8.00	* 9.50
18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	1.18	11.00	13.00
				28.7																			1.19	* 5.00	* 6.00
				28.0																			1.19	* 7.50	* 9.00
19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	1.19	10.00	12.00
21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	1.20	* 7.00	* 8.50
				24.0																			1.21	9.00	11.00
				23.2																			1.22	* 8.50	* 10.50
				22.4																			1.22	13.00	16.00
				21.6																			1.23	* 5.60	* 7.00
				20.8																			1.23	* 6.00	* 7.50
18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	1.23	10.50	13.00
				24.8																			1.24	* 8.00	10.00
				24.0																			1.24	16.00	20.00
				23.2																			1.25	* 7.50	* 9.50
20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	1.25	9.50	12.00
17.2	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	1.26	11.00	14.00
				26.4																			1.27	* 7.00	* 9.00
				25.6																			1.28	* 8.50	* 11.00
				24.8																			1.28	14.00	18.00
18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	1.29	10.00	13.00
				24.4																			1.30	* 8.00	* 10.50

Key to Horsepower Correction Factor

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																						
Small Sheave	Large Sheave	Small Sheave	Large Sheave		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C			
5.40	5.40	* 5.00	* 5.00	1.00			41.6																				
6.00	6.00	* 5.60	* 5.60	1.00			40.7																				
6.40	6.40	* 6.00	* 6.00	1.00			40.0																				
7.40	7.40	* 7.00	* 7.00	1.00			38.5																				
7.90	7.90	* 7.50	* 7.50	1.00			37.7																				
8.40	8.40	* 8.00	* 8.00	1.00			36.9																				
8.90	8.90	* 8.50	* 8.50	1.00			36.1																				
9.40	9.40	* 9.00	* 9.00	1.00	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3
9.90	9.90	* 9.50	* 9.50	1.00	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5
10.40	10.40	* 10.00	* 10.00	1.00	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7
10.90	10.90	* 10.50	* 10.50	1.00	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0
11.40	11.40	* 11.00	* 11.00	1.00	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2
12.40	12.40	* 12.00	* 12.00	1.00	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6
13.40	13.40	* 13.00	* 13.00	1.00	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0
14.40	14.40	* 14.00	* 14.00	1.00	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5
15.40	15.40	* 15.00	* 15.00	1.00	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3
9.40	9.90	* 9.00	* 9.50	1.05	33.5	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9
9.90	10.40	* 9.50	* 10.00	1.05	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1
10.40	10.90	* 10.00	* 10.50	1.05	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3
10.90	11.40	* 10.50	* 11.00	1.05	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6
7.90	8.40	* 7.50	* 8.00	1.06			37.3																				
8.40	8.90	* 8.00	* 8.50	1.06			36.5																				
8.90	9.40	* 8.50	* 9.00	1.06			35.7																				
6.00	6.40	* 5.60	* 6.00	1.07			40.3																				
7.40	7.90	* 7.00	* 7.50	1.07			38.1																				
13.40	14.40	* 13.00	* 14.00	1.07	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2
12.40	13.40	* 12.00	* 13.00	1.08	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8
11.40	12.40	* 11.00	* 12.00	1.09	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4
9.90	10.90	* 9.50	* 10.50	1.10	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7
10.40	11.40	* 10.00	* 11.00	1.10	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0
5.40	6.00	* 5.00	* 5.60	1.11			41.1																				
8.90	9.90	* 8.50	* 9.50	1.11			35.3																				
9.40	10.40	* 9.00	* 10.00	1.11	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5
8.40	9.40	* 8.00	* 9.00	1.12			36.1																				
16.40	18.40	* 16.00	* 18.00	1.12	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7
7.90	8.90	* 7.50	* 8.50	1.12			35.9																				
7.40	8.40	* 7.00	* 8.00	1.14			37.7																				
10.90	12.40	* 10.50	* 12.00	1.14	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8
14.40	16.40	* 14.00	* 16.00	1.14	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9
9.90	11.40	* 9.50	* 11.00	1.15	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3
6.40	7.40	* 6.00	* 7.00	1.16			39.2																				
9.40	10.90	* 9.00	* 10.50	1.16	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1
12.40	14.40	* 12.00	* 14.00	1.16	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0
8.90	10.40	* 8.50	* 10.00	1.17			34.9																				
8.40	9.90	* 8.00	* 9.50	1.18			35.7																				
11.40	13.40	* 11.00	* 13.00	1.18	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6
5.40	6.40	* 5.00	* 6.00	1.19			40.8																				
7.90	9.40	* 7.50	* 9.00	1.19			36.5																				
10.40	12.40	* 10.00	* 12.00	1.19	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2
7.40	8.90	* 7.00	* 8.50	1.20			37.3																				
9.40	11.40	* 9.00	* 11.00	1.21	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7
8.90	10.90	* 8.50	* 10.50	1.22			34.5																				
13.40	16.40	* 13.00	* 16.00	1.22	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6
6.00	7.40	* 5.60	* 7.00	1.23			39.5																				
6.40	7.90	* 6.00	* 7.50	1.23			38.8																				
10.90	13.40	* 10.50	* 13.00	1.23	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0
8.40	10.40	* 8.00	* 10.00	1.24			35.3			</																	

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																			
Small Sheave	Large Sheave	Small Sheave	Large Sheave		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	
5.40	5.40	* 5.00	* 5.00	1.00																				
6.00	6.00	* 5.60	* 5.60	1.00																				
6.40	6.40	* 6.00	* 6.00	1.00																				
7.40	7.40	* 7.00	* 7.00	1.00																				
7.90	7.90	* 7.50	* 7.50	1.00																				
8.40	8.40	* 8.00	* 8.00	1.00																				
8.90	8.90	* 8.50	* 8.50	1.00																				
9.40	9.40	* 9.00	* 9.00	1.00																				
9.90	9.90	* 9.50	* 9.50	1.00	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8	65.3	65.8	66.3	66.8	
10.40	10.40	* 10.00	* 10.00	1.00	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5	66.0	
10.90	10.90	* 10.50	* 10.50	1.00	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2	63.7	64.2	64.7	65.2	
11.40	11.40	* 11.00	* 11.00	1.00	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	64.0	64.5	
12.40	12.40	* 12.00	* 12.00	1.00	54.7	55.2	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7	62.2	62.7	63.2	63.7	
13.40	13.40	* 13.00	* 13.00	1.00	53.1	53.6	54.1	54.6	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	
14.40	14.40	* 14.00	* 14.00	1.00	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	
15.40	15.40	* 15.00	* 15.00	1.00	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	
9.40	9.90	* 9.00	* 9.50	1.05	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.3	55.8	
9.90	10.40	* 9.50	* 10.00	1.05	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4	62.9	63.4	63.9	64.4	64.9	65.4	65.9	66.4	
10.40	10.90	* 10.00	* 10.50	1.05	56.6	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	64.6	65.1	65.6	
10.90	11.40	* 10.50	* 11.00	1.05	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3	64.8	
7.90	8.40	* 7.50	* 8.00	1.06	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6	62.1	62.6	63.1	63.6	64.1	
8.40	8.90	* 8.00	* 8.50	1.06																				
8.90	9.40	* 8.50	* 9.00	1.06																				
6.00	6.40	* 5.60	* 6.00	1.07																				
7.40	7.90	* 7.00	* 7.50	1.07																				
13.40	14.40	* 13.00	* 14.00	1.07																				
12.40	13.40	* 12.00	* 13.00	1.08	50.7	51.2	51.7	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2		
11.40	12.40	* 11.00	* 12.00	1.09	52.3	52.8	53.3	53.8	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8		
9.90	10.90	* 9.50	* 10.50	1.10	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4		
10.40	11.40	* 10.00	* 11.00	1.10	53.2	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.2	59.7	60.2	60.7	61.2	61.7		
5.40	6.00	* 5.00	* 5.60	1.11	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	64.0		
8.90	9.90	* 8.50	* 9.50	1.11																				
9.40	10.40	* 9.00	* 10.00	1.11																				
8.40	9.40	* 8.00	* 9.00	1.12	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5	64.0	64.5	65.0	65.5		
16.40	18.40	* 16.00	* 18.00	1.12	60.1																			
7.90	8.90	* 7.50	* 8.50	1.13	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	50.7	51.2	51.7	52.2	52.7	53.2	53.7		
7.40	8.40	* 7.00	* 8.00	1.14																				
10.90	12.40	* 10.50	* 12.00	1.14																				
14.40	16.40	* 14.00	* 16.00	1.14	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8		
9.90	11.40	* 9.50	* 11.00	1.15	48.4	48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9		
6.40	7.40	* 6.00	* 7.00	1.16	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8	63.3	63.8	64.3		
9.40	10.90	* 9.00	* 10.50	1.16																				
12.40	14.40	* 12.00	* 14.00	1.16																				
8.90	10.40	* 8.50	* 10.00	1.17	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0		
8.40	9.90	* 8.00	* 9.50	1.18																				
11.40	13.40	* 11.00	* 13.00	1.18																				
5.40	6.40	* 5.00	* 6.00	1.19	53.1	53.6	54.1	54.6	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.1	59.6	60.1	60.6	61.1	61.6		
7.90	9.40	* 7.50	* 9.00	1.19																				
10.40	12.40	* 10.00	* 12.00	1.19																				
7.40	8.90	* 7.00	* 8.50	1.20	54.3	54.8	55.3	55.8	56.3	56.8	57.3	57.8	58.3	58.8	59.3	59.8	60.3	60.8	61.3	61.8	62.3	62.8		
9.40	11.40	* 9.00	* 11.00	1.21	48.4	48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9		
8.90	10.90	* 8.50	* 10.50	1.22																				
13.40	16.40	* 13.00	* 16.00	1.22																				
6.00	7.40	* 5.60	* 7.00	1.23	49.2	49.7	50.2	50.7	51.2	51.7	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.2	57.7		
6.40	7.90	* 6.00	* 7.50	1.23																				
10.90	13.40	* 10.50	* 13.00	1.23																				
8.40	10.40	* 8.00	* 10.00	1.24	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0		
16.40	20.40	* 16.00	* 20.00	1.24																				
7.90	9.90	* 7.50	* 9.50	1.25	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6	51.1	51.6	52.1		
9.90	12.40	* 9.50	* 12.00	1.25																				
11.40	14.40	* 11.00	* 14.00	1.26	55.0	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5	63.0	63.5		
7.40	9.40	* 7.00	* 9.00	1.27																				
8.90	11.40	* 8.50	* 11.00	1.28																				
14.40	18.40	* 14.00	* 18.00	1.28																				
10.40	13.40	* 10.00	* 13.00	1.29	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.3		
8.40	10.90	* 8.00	* 10.50	1.30	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.4	57.9	58.4	58.9	59.4	59.9	60.4	60.9	61.4	61.9	62.4		

Key to Horsepower Correction Factor: 0.7 0.8 0.9 1.0 1.

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters			
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		Small Sheave	Large Sheave		
167	168	169	170	173	175	176	177	178	180	181	182	183	184	185	187	188	189	190	193	195	197	198	1.00	* 5.00 * 5.00
				80.1					83.6						87.1				88.6	91.1			1.00	* 5.60 * 5.60
				79.2					82.7						86.2				87.7	90.2			1.00	* 6.00 * 6.00
				78.5					82.0						85.5				87.0	89.5			1.00	* 7.00 * 7.00
				77.0					80.5						84.0				85.5	88.0			1.00	* 7.50 * 7.50
				76.2					79.7						83.2				84.7	87.2			1.00	* 8.00 * 8.00
				75.4					78.9						82.4				83.9	86.4			1.00	* 8.50 * 8.50
				74.6					78.1						81.6				83.1	85.6			1.00	* 9.00 * 9.00
70.8	71.3	71.8	72.3	73.8	74.8	75.3	75.8	76.3	77.3	77.8	78.3	78.8	79.3	79.8	80.0	80.5	81.0	81.5	83.0	84.0	85.0	85.5	1.00	9.50 9.50
69.2	69.7	70.2	70.7	72.2	73.2	73.7	74.2	74.7	75.7	76.2	76.7	77.2	77.7	78.2	79.2	79.7	80.2	80.7	82.2	83.2	84.2	84.7	1.00	10.00 10.00
68.5	69.0	69.5	70.0	71.5	72.5	73.0	73.5	74.0	75.0	75.5	76.0	76.5	77.0	77.5	78.5	79.0	79.5	80.0	81.5	82.5	83.5	84.0	1.00	10.50 10.50
67.7	68.2	68.7	69.2	70.7	71.7	72.2	72.7	73.2	74.2	74.7	75.2	75.7	76.2	76.7	77.7	78.2	78.7	79.2	80.7	81.7	82.7	83.2	1.00	11.00 11.00
66.1	66.6	67.1	67.6	69.1	70.1	70.6	71.1	71.6	72.6	73.1	73.6	74.1	74.6	75.1	76.1	76.6	77.1	77.6	79.1	80.1	81.1	81.6	1.00	12.00 12.00
64.5	65.0	65.5	66.0	67.5	68.5	69.0	69.5	70.0	71.0	71.5	72.0	72.5	73.0	73.5	74.5	75.0	75.5	76.0	77.5	78.5	79.5	80.0	1.00	13.00 13.00
63.0	63.5	64.0	64.5	66.0	67.0	67.5	68.0	68.5	69.5	70.0	70.5	71.0	71.5	72.0	73.0	73.5	74.0	74.5	76.0	77.0	78.0	78.5	1.00	14.00 14.00
59.8	60.3	60.8	61.3	62.8	63.8	64.3	64.8	65.3	66.3	66.8	67.3	67.8	68.3	68.8	69.8	70.3	70.8	71.3	72.8	73.8	74.8	75.3	1.00	16.00 16.00
70.4	70.9	71.4	71.9	73.4	74.4	74.9	75.4	75.9	76.9	77.4	77.9	78.4	78.9	79.4	80.4	80.9	81.4	81.9	83.4	84.4	85.4	85.9	1.05	9.00 9.50
69.6	70.1	70.6	71.1	72.6	73.6	74.1	74.6	75.1	76.1	76.6	77.1	77.6	78.1	78.6	79.6	80.1	80.6	81.1	82.6	83.6	84.6	85.1	1.05	9.50 10.00
68.8	69.3	69.8	70.3	71.8	72.8	73.3	73.8	74.3	75.3	75.8	76.3	76.8	77.3	77.8	78.8	79.3	79.8	80.3	81.8	82.8	83.8	84.3	1.05	10.00 10.50
68.1	68.6	69.1	69.6	71.1	72.1	72.6	73.1	73.6	74.6	75.1	75.6	76.1	76.6	77.1	78.1	78.6	79.1	79.6	81.1	82.1	83.1	83.6	1.05	10.50 11.00
				75.8					79.3						82.8				84.3	86.8			1.06	* 7.50 * 8.00
				75.0					78.5						82.0				83.5	86.0			1.06	* 8.00 * 8.50
				74.2					77.7						81.2				82.7	85.2			1.06	* 8.50 9.00
				73.4					76.9						80.4				81.9	84.4			1.07	* 5.60 * 6.00
				72.6					76.1						79.6				81.1	83.6			1.07	* 7.00 * 7.50
63.7	64.2	64.7	65.2	66.7	67.7	68.2	68.7	69.2	70.2	70.7	71.2	71.7	72.2	72.7	73.7	74.2	74.7	75.2	76.7	77.7	78.7	79.2	1.07	13.00 14.00
65.3	65.8	66.3	66.8	68.3	69.3	69.8	70.3	70.8	71.8	72.3	72.8	73.3	73.8	74.3	75.3	75.8	76.3	76.8	78.3	79.3	80.3	80.8	1.08	12.00 13.00
66.9	67.4	67.9	68.4	69.9	70.9	71.4	71.9	72.4	73.4	73.9	74.4	74.9	75.4	75.9	76.9	77.4	77.9	78.4	79.9	80.9	81.9	82.4	1.09	11.00 12.00
69.2	69.7	70.2	70.7	72.2	73.2	73.7	74.2	74.7	75.7	76.2	76.7	77.2	77.7	78.2	79.2	79.7	80.2	80.7	82.2	83.2	84.2	84.7	1.10	9.50 10.50
68.5	69.0	69.5	70.0	71.5	72.5	73.0	73.5	74.0	75.0	75.5	76.0	76.5	77.0	77.5	78.5	79.0	79.5	80.0	81.5	82.5	83.5	84.0	1.10	10.00 11.00
				79.6					83.1						86.6				88.1	90.6			1.11	* 5.00 * 5.60
				78.8					82.3						85.8				87.3	89.8			1.11	* 8.50 9.50
				78.0					81.5						85.0				86.5	89.0			1.11	* 7.00 * 7.50
70.0	70.5	71.0	71.5	73.0	74.0	74.5	75.0	75.5	76.5	77.0	77.5	78.0	78.5	79.0	80.0	80.5	81.0	81.5	83.0	84.0	85.0	85.5	1.11	9.00 10.00
58.2	58.7	59.2	59.7	61.2	62.2	62.7	63.2	63.7	64.7	65.2	65.7	66.2	66.7	67.2	68.2	68.7	69.2	69.7	71.2	72.2	73.2	73.7	1.12	* 8.00 9.00
				75.4					78.9						82.4				83.9	86.4			1.13	* 7.50 * 8.50
				76.2					79.7						83.2				84.7	87.2			1.14	* 7.00 * 8.00
67.3	67.8	68.3	68.8	70.3	71.3	71.8	72.3	72.8	73.8	74.3	74.8	75.3	75.8	76.3	77.3	77.8	78.3	78.8	80.3	81.3	82.3	82.8	1.14	10.50 12.00
61.4	61.9	62.4	62.9	64.4	65.4	65.9	66.4	66.9	67.9	68.4	68.9	69.4	69.9	70.4	71.4	71.9	72.4	72.9	74.4	75.4	76.4	76.9	1.14	14.00 16.00
68.8	69.3	69.8	70.3	71.8	72.8	73.3	73.8	74.3	75.3	75.8	76.3	76.8	77.3	77.8	78.8	79.3	79.8	80.3	81.8	82.8	83.8	84.3	1.15	9.50 11.00
				71.7					81.2						84.7				86.2	88.7			1.16	* 6.00 * 7.00
69.6	70.1	70.6	71.1	72.6	73.6	74.1	74.6	75.1	76.1	76.6	77.1	77.6	78.1	78.6	79.6	80.1	80.6	81.1	82.6	83.6	84.6	85.1	1.16	9.00 10.50
64.5	65.0	65.5	66.0	67.5	68.5	69.0	69.5	70.0	71.0	71.5	72.0	72.5	73.0	73.5	74.5	75.0	75.5	76.0	77.5	78.5	79.5	80.0	1.16	12.00 14.00
				73.4					76.9						80.4				81.9	84.4			1.17	* 8.50 10.00
				74.2					77.7						81.2				82.7	85.2			1.18	* 8.00 9.50
66.1	66.6	67.1	67.6	69.1	70.1	70.6	71.1	71.6	72.6	73.1	73.6	74.1	74.6	75.1	76.1	76.6	77.1	77.6	79.1	80.1	81.1	81.6	1.18	11.00 13.00
				74.6					78.1						81.6				83.1	85.6			1.19	* 5.00 * 6.00
67.7	68.2	68.7	69.2	70.7	71.7	72.2	72.7	73.2	74.2	74.7	75.2	75.7	76.2	76.7	77.7	78.2	78.7	79.2	80.7	81.7	82.7	83.2	1.19	10.00 12.00
				75.8					79.3						82.8				84.3	86.8			1.20	* 7.00 * 8.50
69.2	69.7	70.2	70.7	72.2	73.2	73.7	74.2	74.7	75.7	76.2	76.7	77.2	77.7	78.2	79.2	79.7	80.2	80.7	82.2	83.2	84.2	84.7	1.21	9.00 11.00
				73.0					76.5						80.0				81.5	84.0			1.22	* 8.50 10.50
62.2	62.7	63.2	63.7	65.2	66.2	66.7	67.2	67.7	68.7	69.2	69.7	70.2	70.7	71.2	72.2	72.7	73.2	73.7	75.2	76.2	77.2	77.7	1.22	13.00 16.00
				78.1					81.6						85.1				86.6	89.1			1.23	* 5.60 * 7.00
				77.3					80.8						84.3				85.8	88.3			1.23	* 6.00 * 7.50
66.5	67.0	67.5	68.0	69.5	70.5	71.0	71.5	72.0	73.0	73.5	74.0	74.5	75.0	75.5	76.5	77.0	77.5	78.0	79.5	80.5	81.5	82.0	1.23	10.50 13.00
				73.8					77.3						80.8				82.3	84.8			1.24	* 8.00 10.00
56.6	57.1	57.6	58.1	59.6	60.6	61.1	61.6	62.1	63.1	63.6	64.1	64.6	65.1	65.6	66.6	67.1	67.6	68.1	69.6	70.6	71.6	72.1	1.24	16.00 20.00
				74.6					78.1						81.6				83.1	85.6			1.25	* 7.50 9.50
68.1	68.6	69.1	69.6	71.1	72.1	72.6	73.1	73.6	74.6	75.1	75.6	76.1	76.6	77.1	78.1	78.6	79.1	79.6	81.1	82.1	83.1	83.6	1.25	9.50 12.00
65.3	65.8																							

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters				
C	CX	C	C	CX	C	C	C	C	C	C	C	C	C	C	CX	CP	C	C	C		Small Sheave	Large Sheave			
250	255	264	265	270	275	276	280	285	290	295	297	300	303	314	315	320	330	345	360	390	420	450	1.00	5.00	5.00
	120.1			127.6								142.6					157.6		172.6				1.00	5.60	5.60
	118.5			126.7								141.7					156.7		171.7				1.00	6.00	6.00
	117.0			126.0								141.0					156.0		171.0				1.00	7.00	7.00
	115.4			124.5								139.5					154.5		169.5				1.00	7.50	7.50
	114.6			123.7								138.7					153.7		168.7				1.00	8.00	8.00
111.3	113.8	118.3	118.8	121.3	123.8	124.3	126.3	128.8	131.3	133.8	134.8	136.3	137.8	143.3	143.8	146.3	151.3	158.8	166.3	181.3	196.3	211.3	1.00	9.00	9.00
110.5	113.0	117.5	118.0	120.5	123.0	123.5	125.5	128.0	130.5	133.0	134.0	135.5	137.0	142.5	143.0	145.5	150.5	158.0	165.5	180.5	195.5	210.5	1.00	9.50	9.50
109.7	112.2	116.7	117.2	119.7	122.2	122.7	124.7	127.2	129.7	132.2	133.2	134.7	136.2	141.7	142.2	144.7	149.7	157.2	164.7	179.7	194.7	209.7	1.00	10.00	10.00
109.0	111.5	116.0	116.5	119.0	121.5	122.0	124.0	126.5	129.0	131.5	132.5	134.0	135.5	141.0	141.5	144.0	149.0	156.5	164.0	179.0	194.0	209.0	1.00	10.50	10.50
108.2	110.7	115.2	115.7	118.2	120.7	121.2	123.2	125.7	128.2	130.7	131.7	133.2	134.7	140.2	140.7	143.2	148.2	155.7	163.2	178.2	193.2	208.2	1.00	11.00	11.00
106.6	109.1	113.6	114.1	116.6	119.1	119.6	121.6	124.1	126.6	129.1	130.1	131.6	133.1	138.6	139.1	141.6	146.6	154.1	161.6	176.6	191.6	206.6	1.00	12.00	12.00
105.0	107.5	112.0	112.5	115.0	117.5	118.0	120.0	122.5	125.0	127.5	128.5	130.0	131.5	137.0	137.5	140.0	145.0	152.5	160.0	175.0	190.0	205.0	1.00	13.00	13.00
103.5	106.0	110.5	111.0	113.5	116.0	116.5	118.5	121.0	123.5	126.0	127.0	128.5	130.0	135.5	136.0	138.5	143.5	151.0	158.5	173.5	188.5	203.5	1.00	14.00	14.00
100.3	102.8	107.3	107.8	110.3	112.8	113.3	115.3	117.8	120.3	122.8	123.8	125.3	126.8	132.3	132.8	135.3	140.3	147.8	155.3	170.3	185.3	200.3	1.00	16.00	16.00
110.9	113.4	117.9	118.4	120.9	123.4	123.9	125.9	128.4	130.9	133.4	134.4	135.9	137.4	142.9	143.4	145.9	150.9	158.4	165.9	180.9	195.9	210.9	1.05	9.00	9.50
110.1	112.6	117.1	117.6	120.1	122.6	123.1	125.1	127.6	130.1	132.6	133.6	135.1	136.6	142.1	142.6	145.1	150.1	157.6	165.1	180.1	195.1	210.1	1.05	9.50	10.00
109.3	111.8	116.3	116.8	119.3	121.8	122.3	124.3	126.8	129.3	131.8	132.8	134.3	135.8	141.3	141.8	144.3	149.3	156.8	164.3	179.3	194.3	209.3	1.05	10.00	10.50
108.6	111.1	115.6	116.1	118.6	121.1	121.6	123.6	126.1	128.6	131.1	132.1	133.6	135.1	140.6	141.1	143.6	148.6	156.1	163.6	178.6	193.6	208.6	1.05	10.50	11.00
	115.8			123.3								138.3					153.3		168.3				1.06	7.50	8.00
	115.0			122.5								137.5					152.5		167.5				1.06	8.00	8.50
	114.2			121.7								136.7					151.7		166.7				1.06	8.50	9.00
	113.8			121.3								136.3					151.3		166.3				1.07	5.60	6.00
	118.8			126.3								141.3					156.3		171.3				1.07	5.60	6.00
	116.6			124.1								139.1					154.1		169.1				1.07	7.00	7.50
104.2	106.7	111.2	111.7	114.2	116.7	117.2	119.2	121.7	124.2	126.7	127.7	129.2	130.7	136.2	136.7	139.2	144.2	151.7	159.2	174.2	189.2	204.2	1.07	13.00	14.00
105.8	108.3	112.8	113.3	115.8	118.3	118.8	120.8	123.3	125.8	128.3	129.3	130.8	132.3	137.8	138.3	140.8	145.8	153.3	160.8	175.8	190.8	205.8	1.08	12.00	13.00
107.4	109.9	114.4	114.9	117.4	119.9	120.4	122.4	124.9	127.4	129.9	130.9	132.4	133.9	139.4	139.9	142.4	147.4	154.9	162.4	177.4	192.4	207.4	1.09	11.00	12.00
109.7	112.2	116.7	117.2	119.7	122.2	122.7	124.7	127.2	129.7	132.2	133.2	134.7	136.2	141.7	142.2	144.7	149.7	157.2	164.7	179.7	194.7	209.7	1.10	9.50	10.50
109.0	111.5	116.0	116.5	119.0	121.5	122.0	124.0	126.5	129.0	131.5	132.5	134.0	135.5	141.0	141.5	144.0	149.0	156.5	164.0	179.0	194.0	209.0	1.10	10.00	11.00
	119.6			127.1								142.1					157.1		172.1				1.11	5.00	5.60
	113.8			121.3								136.3					151.3		166.3				1.11	8.50	9.50
110.5	113.0	117.5	118.0	120.5	123.0	123.5	125.5	128.0	130.5	133.0	134.0	135.5	137.0	142.5	143.0	145.5	150.5	158.0	165.5	180.5	195.5	210.5	1.11	9.00	10.00
	114.6			122.1								137.1					152.1		167.1				1.12	8.00	9.00
98.7	101.2	105.7	106.2	108.7	111.2	111.7	113.7	116.2	118.7	121.2	122.2	123.7	125.2	130.7	131.2	133.7	138.7	146.2	153.7	168.7	183.7	198.7	1.12	16.00	18.00
	115.4			122.9								137.9					152.9		167.9				1.13	7.50	8.50
	116.2			123.7								138.7					153.7		168.7				1.14	7.00	8.00
107.8	110.3	114.8	115.3	117.8	120.3	120.8	122.8	125.3	127.8	130.3	131.3	132.8	134.3	139.8	140.3	142.8	147.8	155.3	162.8	177.8	192.8	207.8	1.14	10.50	12.00
101.9	104.4	108.9	109.4	111.9	114.4	114.9	116.9	119.4	121.9	124.4	125.4	126.9	128.4	133.9	134.4	136.9	141.9	149.4	156.9	171.9	186.9	201.9	1.14	14.00	16.00
109.3	111.8	116.3	116.8	119.3	121.8	122.3	124.3	126.8	129.3	131.8	132.8	134.3	135.8	141.3	141.8	144.3	149.3	156.8	164.3	179.3	194.3	209.3	1.15	9.50	11.00
	117.7			125.2								140.2					155.2		170.2				1.16	6.00	7.00
110.1	112.6	117.1	117.6	120.1	122.6	123.1	125.1	127.6	130.1	132.6	133.6	135.1	136.6	142.1	142.6	145.1	150.1	157.6	165.1	180.1	195.1	210.1	1.16	9.00	10.50
105.0	107.5	112.0	112.5	115.0	117.5	118.0	120.0	122.5	125.0	127.5	128.5	130.0	131.5	137.0	137.5	140.0	145.0	152.5	160.0	175.0	190.0	205.0	1.16	12.00	14.00
	113.4			120.9								135.9					150.9		165.9				1.17	8.50	10.00
	114.2			121.7								136.7					151.7		166.7				1.18	8.00	9.50
106.6	109.1	113.6	114.1	116.6	119.1	119.6	121.6	124.1	126.6	129.1	130.1	131.6	133.1	138.6	139.1	141.6	146.6	154.1	161.6	176.6	191.6	206.6	1.18	11.00	13.00
	119.3			126.8								141.8					156.8		171.8				1.19	5.00	6.00
	115.0			122.5								137.5					152.5		167.5				1.19	7.50	9.00
108.2	110.7	115.2	115.7	118.2	120.7	121.2	123.2	125.7	128.2	130.7	131.7	133.2	134.7	140.2	140.7	143.2	148.2	155.7	163.2	178.2	193.2	208.2	1.19	10.00	12.00
	115.8			123.3								138.3					153.3		168.3				1.20	7.00	8.50
109.7	112.2	116.7	117.2	119.7	122.2	122.7	124.7	127.2	129.7	132.2	133.2	134.7	136.2	141.7	142.2	144.7	149.7	157.2	164.7	179.7	194.7	209.7	1.21	9.00	11.00
	113.0			120.5								135.5					150.5		165.5				1.22	8.50	10.50
102.7	105.2	109.7	110.2	112.7	115.2	115.7	117.7	120.2	122.7	125.2	126.2	127.7	129.2	134.7	135.2	137.7	142.7	150.2	157.7	172.7	187.7	202.7	1.22	13.00	16.00
	118.1			125.6								140.6					155.6		170.6				1.23	5.60	7.00
	117.3			124.8								139.8													

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																				
Small Sheave	Large Sheave	Small Sheave	Large Sheave		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	
6.40	8.40	* 6.00	* 8.00	1.31																					
6.00	7.90	* 5.60	* 7.50	1.32																					
7.90	10.40	* 7.50	10.00	1.32																					
9.40	12.40	9.00	12.00	1.32																					
10.90	14.40	10.50	14.00	1.32																					
12.40	16.40	* 12.00	16.00	1.32																					
7.40	9.90	* 7.00	9.50	1.34																					
9.90	13.40	9.50	13.00	1.35																					
8.40	11.40	* 8.00	11.00	1.36																					
5.40	7.40	* 5.00	* 7.00	1.37																					
13.40	18.40	* 13.00	18.00	1.37																					
7.90	10.90	* 7.50	10.50	1.38																					
10.40	14.40	10.00	14.00	1.38																					
6.40	8.90	* 6.00	* 8.50	1.39																					
8.90	12.40	* 8.50	12.00	1.39																					
6.00	8.40	* 5.60	* 8.00	1.40																					
7.40	10.40	* 7.00	10.00	1.41																					
14.40	20.40	14.00	20.00	1.42																					
9.40	13.40	9.00	13.00	1.43																					
7.90	11.40	* 7.50	11.00	1.44																					
11.40	16.40	11.00	16.00	1.44																					
9.90	14.40	9.50	14.00	1.45																					
5.40	7.90	* 5.00	* 7.50	1.46																					
6.40	9.40	6.00	9.00	1.47																					
7.40	10.90	* 7.00	10.50	1.47																					
6.00	8.90	* 5.60	* 8.50	1.48																					
8.40	12.40	* 8.00	12.00	1.48																					
12.40	18.40	12.00	18.00	1.48																					
16.40	24.40	16.00	24.00	1.49																					
10.90	16.40	10.50	16.00	1.50																					
8.90	13.40	* 8.50	13.00	1.51																					
13.40	20.40	13.00	20.00	1.52																					
9.40	14.40	9.00	14.00	1.53																					
7.40	11.40	* 7.00	11.00	1.54																					
6.40	9.90	* 6.00	9.50	1.55																					
5.40	8.40	* 5.00	* 8.00	1.56																					
6.00	9.40	5.60	9.00	1.57																					
7.90	12.40	* 7.50	12.00	1.57																					
10.40	16.40	10.00	16.00	1.58																					
8.40	13.40	* 8.00	13.00	1.60																					
11.40	18.40	11.00	18.00	1.61																					
8.90	14.40	* 8.50	14.00	1.62																					
6.40	10.40	* 6.00	10.00	1.63																					
5.40	8.90	* 5.00	* 8.50	1.65																					
6.00	9.90	* 5.60	9.50	1.65																					
12.40	20.40	12.00	20.00	1.65																					
9.90	16.40	9.50	16.00	1.66																					
16.40	27.40	16.00	27.00	1.67																					
7.40	12.40	* 7.00	12.00	1.68																					
10.90	18.40	10.50	18.00	1.69																					
14.40	24.40	14.00	24.00	1.69																					
6.40	10.90	* 6.00	10.50	1.70																					
7.90	13.40	* 7.50	13.00	1.70																					
8.40	14.40	* 8.00	14.00	1.71																					
6.00	10.40	* 5.60	10.00	1.73																					
5.40	9.40	* 5.00	9.00	1.74																					
9.40	16.40	9.00	16.00	1.74																					
10.40	18.40	10.00	18.00	1.77																					
6.40	11.40	* 6.00	11.00	1.78																					
11.40	20.40	11.00	20.00	1.79																					
7.40	13.40	* 7.00	13.00	1.81																					
6.00	10.90	* 5.60	10.50	1.82																					
7.90	14.40	* 7.50	14.00	1.82																					
13.40	24.40	13.00	24.00	1.82																					
5.40	9.90	* 5.00	9.50	1.83																					
8.90	16.40	* 8.50	16.00	1.84																					

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																							Speed Ratio	Sheave Datum Diameters	
C	C	C	C	CX	C	C	C	CX	C	C	C	C	C	C	C	C	C	C	CX	C	C	C		Small Sheave	Large Sheave
71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	1.31	* 6.00	* 8.00
				27.9	29.4	30.9	32.9	35.4															1.32	* 5.60	* 7.50
				28.6	30.1	31.6	33.6	36.1															1.32	* 7.50	10.00
				25.2	26.7	28.2	30.2	32.7															1.32	* 9.00	12.00
20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	1.32	10.50	14.00
17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.7	27.2	27.7	28.2	28.7	1.32	12.00	16.00
				16.0	17.3	17.8	18.3	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	1.34	* 7.00	9.50
				21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	1.35	* 9.50	13.00
				24.0	25.5	27.0	29.0	31.0															1.36	* 8.00	11.00
				29.5	31.0	32.5	34.5	37.0															1.37	* 5.00	* 7.00
				24.8	26.3	27.8	29.8	32.3															1.37	13.00	18.00
				20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	1.38	* 10.00	14.00
				22.8	24.3	25.8	27.8	30.3															1.39	* 6.00	* 8.50
				28.2	29.7	31.2	33.2	35.7															1.39	* 8.50	12.00
				25.6	27.1	28.6	30.6	33.1															1.40	* 5.60	* 8.00
				19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	1.41	* 7.00	10.00
				24.4	25.9	27.4	29.4	31.9															1.42	14.00	20.00
				15.5	16.0	16.6	17.1	17.6	18.1	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	1.43	9.00	13.00
				18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	22.9	23.4	23.9	24.4	24.9	25.4	25.9	26.4	26.9	27.4	1.43	29.1	30.6
				29.1	30.6	32.1	34.1	36.6															1.44	* 20.0	20.5
				27.1	28.6	30.1	32.1	34.6															1.44	* 26.1	26.6
				25.1	26.6	28.2	30.2	32.7															1.45	25.6	26.1
				27.8	29.3	30.8	32.8	35.3															1.45	28.4	28.9
				23.2	24.7	26.2	28.2	30.7															1.46	* 29.4	29.4
				17.1	17.6	18.1	18.6	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2					1.47	* 5.00	* 7.50
				15.9	16.4	16.9	17.4	17.9	18.4	18.9	19.4	19.9	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0	1.47	* 34.6	34.6
				18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	1.47	19.0	19.5
				26.7	28.2	29.7	31.7	33.7															1.48	27.0	27.8
				28.7	30.2	31.7	33.7	36.2															1.48	* 28.3	28.8
				27.4	28.9	30.4	32.4	34.9															1.48	* 29.9	29.9
				23.5	25.0	26.5	28.5	31.1															1.49	20.2	20.7
				16.3	16.8	17.3	17.8	18.3	18.8	19.3	19.8	20.3	20.8	21.3	21.8	22.3	22.8	23.3	23.8	24.3	24.8	25.4	1.50	20.7	21.2
				22.3	23.8	25.3	27.3	29.9															1.50	26.0	26.5
				21.1	22.6	24.1	26.1	28.6															1.51	27.0	27.0
				26.3	27.8	29.3	31.3	33.8															1.52	28.2	28.7
				28.3	29.8	31.3	33.3	35.8															1.52	29.3	29.8
				27.0	28.5	30.0	32.0	34.5															1.53	* 29.8	29.8
				16.6	17.1	17.6	18.1	18.6	19.1	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.7	24.2	24.7	25.2	25.7	1.53	20.2	20.7
				23.9	25.4	26.9	28.9	31.4															1.54	25.5	26.0
				16.6	17.2	17.7	18.2	18.7	19.2	19.7	20.2	20.7	21.2	21.7	22.2	22.8	23.3	23.8	24.3	24.8	25.3	25.8	1.54	26.0	26.5
				25.9	27.4	28.9	30.9	33.4															1.55	27.0	27.7
				22.7	24.2	25.7	27.7	30.2															1.55	28.3	28.8
				21.5	23.0	24.5	26.5	29.0															1.56	29.9	29.9
				26.6	28.1	29.6	31.6	34.1															1.56	30.2	30.7
				27.9	29.4	30.9	32.9	35.4															1.56	31.7	32.2
				17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.6	24.1	24.6	25.1	25.6	26.1	1.57	25.4	25.9
				16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.6	21.1	21.6	22.1	22.6	23.1	23.6	24.1	24.6	25.1	1.57	26.4	26.9
				25.5	27.0	28.5	30.5	33.0															1.57	27.4	27.4
				23.0	24.6	26.1	28.1	30.6															1.58	28.4	28.9
				26.2	27.7	29.2	31.2	33.7															1.58	29.4	29.4
				21.8	23.3	24.9	26.9	29.4															1.58	30.4	30.9
				27.5	29.0	30.5	32.5	35.0															1.59	31.1	31.6
				19.3	20.9	22.4	24.4	26.4															1.59	32.4	32.9
				27.5	29.0	30.5	32.5	35.0															1.60	33.4	33.9
				19.3	20.9	22.4	24.4	26.4															1.60	34.4	34.9
				27.5	29.0	30.5	32.5	35.0															1.61	35.4	35.9
				27.5	29.0	30.5	32.5	35.0															1.61	36.4	36.9
				27.5	29.0	30.5	32.5	35.0															1.62	37.4	37.9
				27.5	29.0	30.5	32.5	35.0															1.62	38.4	38.9
				27.5	29.0	30.5	32.5	35.0															1.63	39.4	39.9
				27.5	29.0	30.5	32.5	35.0															1.63	40.4	40.9
				27.5	29.0	30.5	32.5	35.0															1.64	41.4	41.9
				27.5	29.0	30.5	32.5	35.0															1.64	42.4	42.9
				27.5	29.0	30.5	32.5	35.0															1.65	43.4	43.9
				27.5	29.0	30.5	32.5	35.0															1.65	44.4	44.9
				27.5	29.0	30.5	32.5	35.0															1.66	45.4	45.9
				27.5	29.0	30.5	32.5	35.0															1.66	46.4	46.9
				27.5	29.0	30.5	32.5	35.0															1.67	47.4	47.9
				27.5	29.0	30.5	32.5	35.0															1.67	48.4	48.9
				27.5	29.0	30.5	32.5																		

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																								
Small Sheave	Large Sheave	Small Sheave	Large Sheave		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C							
					94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116		
6.40	8.40	* 6.00	* 8.00	1.31			38.4			40.4	40.9				42.9	43.4			44.9			46.4			47.9				
6.00	7.90	* 5.60	* 7.50	1.32			39.1			41.2	41.7				43.7	44.2			45.7			47.2			48.7				
7.90	10.40	* 7.50	* 10.00	1.32			35.7			37.7	38.2				40.2	40.7			42.2			43.7			45.2				
9.40	12.40	9.00	12.00	1.32	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9		
10.90	14.40	10.50	14.00	1.32	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2		
12.40	16.40	12.00	16.00	1.32	26.4	26.9	27.4	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4		
7.40	9.90	* 7.00	9.50	1.34			36.5			38.5	39.0				41.0	41.5			43.0			44.5			46.0				
9.90	13.40	9.50	13.00	1.35	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7		
8.40	11.40	* 8.00	11.00	1.36			34.5			36.5	37.0				39.0	39.5			41.0			42.5			44.0				
5.40	7.40	* 5.00	* 7.00	1.37			40.0			42.0	42.5				44.5	45.0			46.5			48.0			49.5				
13.40	18.40	13.00	18.00	1.37	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0		
7.90	10.90	* 7.50	10.50	1.38			35.3			37.3	37.8				39.8	40.3			41.8			43.3			44.8				
10.40	14.40	10.00	14.00	1.38	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.6		
6.40	8.90	* 6.00	* 8.50	1.39			38.0			40.0	40.5				42.5	43.0			44.5			46.0			47.5				
8.90	12.40	* 8.50	12.00	1.39			33.3			35.3	35.8				37.8	38.3			39.8			41.3			42.8				
6.00	8.40	* 5.60	* 8.00	1.40			38.8			40.8	41.3				43.3	43.8			45.3			46.8			48.3				
7.40	10.40	* 7.00	10.00	1.41			36.1			38.1	38.6				40.6	41.1			42.6			44.1			45.6				
14.40	20.40	14.00	20.00	1.42	21.5	22.0	22.5	23.1	23.6	24.1	24.6	25.1	25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6		
9.40	13.40	9.00	13.00	1.43	31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1		
7.90	11.40	* 7.50	11.00	1.44			34.9			36.9	37.4				39.4	39.9			41.4			42.9			44.4				
11.40	16.40	11.00	16.00	1.44	27.1	27.6	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.2		
9.90	14.40	9.50	14.00	1.45	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9		
5.40	7.90	* 5.00	* 7.50	1.46			39.6			41.6	42.1				44.1	44.6			46.1			47.6			49.1				
6.40	9.40	6.00	9.00	1.47			37.6			39.6	40.1				42.1	42.6			44.1			45.6			47.1				
7.40	10.90	* 7.00	10.50	1.47			35.7			37.7	38.2				40.2	40.7			42.2			43.7			45.2				
6.00	8.90	* 5.60	* 8.50	1.48			38.3			40.3	40.9				42.9	43.4			44.9			46.4			47.9				
8.40	12.40	* 8.00	12.00	1.48			33.7			35.7	36.2				38.2	38.7			40.2			41.7			43.2				
12.40	18.40	12.00	18.00	1.48	24.7	25.2	25.7	26.2	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.7	32.2	32.8	33.3	33.8	34.3	34.8	35.3	35.8		
16.40	24.40	16.00	24.00	1.49			27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5
10.90	16.40	10.50	16.00	1.50			32.5			34.5	35.0				37.0	37.5			39.0			40.5			42.0				
13.40	20.40	13.00	20.00	1.52	22.3	22.8	23.3	23.8	24.3	24.8	25.3	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3		
9.40	14.40	9.00	14.00	1.53	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3		
7.40	11.40	* 7.00	11.00	1.54			35.3			37.3	37.8				39.8	40.3			41.8			43.3			44.8				
6.40	9.40	* 6.00	9.50	1.55			37.2			39.2	39.7				41.7	42.2			43.7			45.2			46.7				
5.40	8.40	* 5.00	* 8.00	1.56			39.2			41.2	41.7				43.7	44.2			45.7			47.2			48.7				
6.00	9.40	5.60	9.00	1.57			37.9			39.9	40.4				42.4	42.9			44.5			46.0			47.5				
7.90	12.40	* 7.50	12.00	1.57			34.1			36.1	36.6				38.6	39.1			40.6			42.1			43.6				
10.40	16.40	10.00	16.00	1.58	27.9	28.4	28.9	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9		
8.40	13.40	* 8.00	13.00	1.60			32.9			34.9	35.4				37.4	37.9			39.4			40.9			42.4				
11.40	18.40	11.00	18.00	1.61	25.4	25.9	26.4	26.9	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5		
8.90	14.40	* 8.50	14.00	1.62			31.7			33.7	34.2				36.2	36.7			38.2			39.7			41.2				
6.40	10.40	* 6.00	10.00	1.63			36.8			38.8	39.3				41.3	41.8			43.3			44.8			46.3				
5.40	8.90	* 5.00	* 8.50	1.65			38.8			40.8	41.3				43.3	43.8			45.3			46.8			48.3				
6.00	9.90	* 5.60	9.50	1.65			37.5			39.5	40.0				42.0	42.5			44.0			45.5			47.1				
12.40	20.40	12.00	20.00	1.65	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.1	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.1		
9.90	16.40	9.50	16.00	1.66	28.2	28.7	29.2	29.7	30.2	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.3	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3		
16.40	27.40	16.00	27.00	1.67			27.0			29.0	29.5				31.5	32.0			33.5			35.5			37.5				
7.40	12.40	* 7.00	12.00	1.68			34.4			36.4	36.9				38.9	39.4			41.0			42.5			44.0				
10.90	18.40	10.50	18.00	1.69	25.8	26.3	26.8	27.3	27.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.9	33.4	33.9	34.4	34.9	35.4	35.9	36.4	36.9		
14.40	24.40	14.00	24.00	1.69			34.1			36.1	36.6				38.6	39.1			40.6			42.1			43.6				
6.40	10.90	* 6.00	10.50	1.70			36.4			38.4	38.9				40.9	41.4			42.9			44.4			45.9				
7.90	13.40	* 7.50	13.00	1.70			33.2			35.2	35.7				37.7	38.3			39.8			41.3			42.8				
8.40	14.40	* 8.00	14.00	1.71			32.0			34.0	34.5				36.5	37.0			38.6			40.1			41.6				
6.00	10.40	* 5.60	10.00	1.73			37.1			39.1	39.6				41.6	42.1			43.6			45.1			46.6				
5.40	9.40	* 5.00	9.00	1.74			38.4			40.4	40.9				42.9	43.4			44.9			46.4			47.9				
9.40	16.40	9.00	16.00	1.74	28.6	29.1	29.6																						

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																	Sheave Datum Diameters					
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	Speed Ratio	Small Sheave	Large Sheave		
117	118	119	120	121	122	123	124	125	126	127	128	130	131	132	133	134	135				136	137
			50.4			51.9					54.4				56.9				58.4	1.31	* 6.00	* 8.00
			51.2			52.7					55.2				57.7				59.2	1.32	* 5.60	* 7.50
			47.7			49.2					51.7				54.2				55.7	1.32	* 7.50	10.00
43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9
40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	47.2	47.7	48.2	48.7	49.2	49.7	50.2	50.7	51.2	51.7	52.2
37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4
			48.5			50.0					52.5				55.0				56.5	1.34	* 7.00	9.50
42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.7	49.2	49.7	50.2	50.7	51.2	51.7	52.2	52.7	53.2	53.8
			46.5			48.0					50.5				53.0				54.5	1.36	* 8.00	11.00
			52.0			53.5					56.0				58.5				60.0	1.37	* 5.00	* 7.00
35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0
			47.3			48.8					51.3				53.8				55.3	1.38	* 7.50	10.50
41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.6	48.1	48.6	49.1	49.6	50.1	50.6	51.1	51.6	52.1	52.6
			50.0			51.5					54.0				56.5				58.0	1.38	* 10.00	14.00
			45.3			46.8					49.3				51.8				53.3	1.39	* 8.50	12.00
			50.8			52.3					54.8				57.3				58.8	1.40	* 5.60	* 8.00
			48.1			49.6					52.1				54.6				56.1	1.41	* 7.00	10.00
33.1	33.6	34.1	34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6
42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	49.1	49.6	50.1	50.6	51.1	51.6	52.1	52.6	53.1	53.6	54.1
			46.9			48.4					50.9				53.4				54.9	1.44	* 7.50	11.00
38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2
41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.4	52.9
			51.6			53.1					55.6				58.1				59.6	1.46	* 5.00	* 7.50
			49.6			51.1					53.6				56.1				57.6	1.47	* 6.00	9.00
			47.7			49.2					51.7				54.2				55.7	1.47	* 7.00	10.50
			50.4			51.9					54.4				56.9				58.4	1.48	* 5.60	* 8.50
			45.7			47.2					49.7				52.2				53.7	1.48	* 8.00	12.00
36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8
28.3	28.8	29.3	29.8	30.3	30.8	31.3	31.8	32.3	32.8	33.3	33.8	34.8	35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8
39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.6	44.1	44.6	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6
			44.5			46.0					48.5				51.0				52.5	1.51	* 8.50	13.00
33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4
41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	48.3	48.8	49.3	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3
			47.3			48.8					51.3				53.8				55.3	1.53	* 9.00	14.00
			49.2			50.7					53.2				55.7				57.2	1.55	* 6.00	9.50
			51.2			52.7					55.2				57.7				59.2	1.56	* 5.00	* 8.00
			50.0			51.5					54.0				56.5				58.0	1.57	* 8.60	9.00
			46.1			47.6					50.1				52.6				54.1	1.57	* 7.50	12.00
39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9
			44.9			46.4					48.9				51.4				52.9	1.60	* 8.00	13.00
37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5
			43.7			45.2					47.7				50.2				51.7	1.62	* 8.50	14.00
			48.8			50.3					52.8				55.3				56.8	1.63	* 6.00	10.00
			50.8			52.3					54.8				57.3				58.8	1.65	* 5.00	* 8.50
			49.6			51.1					53.6				56.1				57.6	1.65	* 5.60	9.50
34.6	35.1	35.6	36.1	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	41.1	41.6	42.1	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1
39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	44.3	44.8	45.3	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3
25.6	26.1	26.6	27.1	27.6	28.1	28.6	29.2	29.7	30.2	30.7	31.2	32.2	32.7	33.2	33.7	34.2	34.7	35.2	35.8	36.3	36.8	37.3
			46.5			48.0					50.5				53.0				54.5	1.68	* 7.00	12.00
37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	41.9	42.4	42.9	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9
29.7	30.2	30.7	31.2	31.7	32.2	32.7	33.2	33.7	34.2	34.7	35.2	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3
			48.4			49.9					52.4				54.9				56.4	1.70	* 6.00	10.50
			45.3			46.8					49.3				51.8				53.3	1.70	* 7.50	13.00
			44.1			45.6					48.1				50.6				52.1	1.71	* 8.00	14.00
			49.1			50.7					53.2				55.7				57.2	1.73	* 5.60	10.00
			50.4			51.9					54.4				56.9				58.4	1.74	* 5.00	9.00
40.2	40.7	41.2	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.7	47.2	47.7	48.2	48.7	49.2	49.7	50.2	50.7	51.2	51.7
37.7	38.2	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3
			48.0			49.5					52.0				54.5				56.0	1.78	* 6.00	11.00
35.3	35.8	36.3	36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.4	40.9	41.9	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9
			45.6			47.1					49.7				52.2				53.7	1.81	* 7.00	13.00
			48.7			50.2					52.7				55.3				56.8	1.82	* 5.60	10.50
			44.4			45.9					48.5				51.0				52.5	1.82	* 7.50	14.00
30.4	30.9	31.4	31.9	32.4	32.9	33.4	33.9	34.5	35.0	35.5	36.0	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0
			50.0			51.5					54.0				56.5				58.0	1.83	* 5.00	9.50
			42.0			43.5					46.1				48.6				50.1	1.84	* 8.50	16.00

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters				
C	C	C	C	CX	C	C	C	C	C	CX	C	C	C	C	C	C	C	C	C		Small Sheave	Large Sheave			
167	168	169	170	173	175	176	177	178	180	181	182	183	184	185	187	188	189	190	193	195	197	198	1.31	* 6.00	* 8.00
				76.9					80.4						83.9				85.4		87.9		1.32	* 5.60	* 7.50
				77.7					81.2						84.7				86.2		88.7		1.32	* 7.50	10.00
				74.2					77.7						81.2				82.7		85.2		1.32	* 9.00	12.00
68.4	68.9	69.4	69.9	71.4	72.4	72.9	73.4	73.9	74.9	75.4	75.9	76.4	76.9	77.4	78.4	78.9	79.4	79.9	81.4	82.4	83.4	83.9	1.32	10.50	14.00
65.7	66.2	66.7	67.2	68.7	69.7	70.2	70.7	71.2	72.2	72.7	73.2	73.7	74.2	74.7	75.7	76.2	76.7	77.2	78.7	79.7	80.7	81.2	1.32	12.00	16.00
62.9	63.4	63.9	64.4	65.9	66.9	67.4	67.9	68.4	69.4	69.9	70.4	70.9	71.4	71.9	72.9	73.4	73.9	74.4	75.9	76.9	77.9	78.4	1.34	* 7.00	9.50
				75.0					78.5						82.0				83.5		86.0		1.35	* 9.50	13.00
67.3	67.8	68.3	68.8	70.3	71.3	71.8	72.3	72.8	73.8	74.3	74.8	75.3	75.8	76.3	77.3	77.8	78.3	78.8	80.3	81.3	82.3	82.8	1.36	* 8.00	11.00
				73.0					76.5						80.0				81.5		84.0		1.37	* 5.00	* 7.00
				78.5					82.0						85.5				87.0		89.5		1.37	* 13.00	18.00
60.6	61.1	61.6	62.1	63.6	64.6	65.1	65.6	66.1	67.1	67.6	68.1	68.6	69.1	69.6	70.6	71.1	71.6	72.1	73.6	74.6	75.6	76.1	1.37	* 7.00	10.50
				73.8					77.3						80.8				82.3		84.8		1.38	* 7.50	10.50
66.1	66.6	67.1	67.6	69.1	70.1	70.6	71.1	71.6	72.6	73.1	73.6	74.1	74.6	75.1	76.1	76.6	77.1	77.6	79.1	80.1	81.1	81.6	1.38	10.00	14.00
				76.6					80.1						83.6				85.1		87.6		1.39	* 6.00	* 8.50
				71.8					75.3						78.8				80.3		82.8		1.39	* 8.50	12.00
				77.3					80.8						84.3				85.8		88.3		1.40	* 5.60	* 8.00
				74.6					78.1						81.6				83.1		85.6		1.41	* 7.00	10.00
58.2	58.7	59.2	59.7	61.2	62.2	62.7	63.2	63.7	64.7	65.2	65.7	66.2	66.7	67.2	68.2	68.7	69.2	69.7	71.2	72.2	73.2	73.7	1.42	14.00	20.00
67.6	68.1	68.6	69.1	70.6	71.6	72.1	72.6	73.1	74.1	74.6	75.1	75.6	76.1	76.6	77.6	78.1	78.6	79.1	80.6	81.6	82.6	83.1	1.43	9.00	13.00
				73.4					76.9						80.4				81.9		84.4		1.44	* 7.50	11.00
63.7	64.2	64.7	65.2	66.7	67.7	68.2	68.7	69.2	70.2	70.7	71.2	71.7	72.2	72.7	73.7	74.2	74.7	75.2	76.7	77.7	78.7	79.2	1.44	11.00	16.00
66.5	67.0	67.5	68.0	69.5	70.5	71.0	71.5	72.0	73.0	73.5	74.0	74.5	75.0	75.5	76.5	77.0	77.5	78.0	79.5	80.5	81.5	82.0	1.45	9.50	14.00
				78.1					81.6						85.1				86.6		89.1		1.46	* 5.00	* 7.50
				76.2					79.7						83.2				84.7		87.2		1.47	* 6.00	9.00
				74.2					77.7						81.2				82.7		85.2		1.47	* 7.00	10.50
				76.9					80.4						83.9				85.4		87.9		1.48	* 5.60	* 8.50
				72.2					75.7						79.2				80.7		83.2		1.48	* 8.00	12.00
61.3	61.8	62.3	62.8	64.3	65.3	65.8	66.3	66.8	67.8	68.3	68.8	69.3	69.8	70.3	71.3	71.8	72.3	72.8	74.3	75.3	76.3	76.8	1.48	12.00	18.00
53.4	53.9	54.4	54.9	56.4	57.4	57.9	58.4	58.9	59.9	60.4	60.9	61.4	61.9	62.4	63.4	63.9	64.4	64.9	66.4	67.4	68.4	68.9	1.49	16.00	24.00
64.1	64.6	65.1	65.6	67.1	68.1	68.6	69.1	69.6	70.6	71.1	71.6	72.1	72.6	73.1	74.1	74.6	75.1	75.6	77.1	78.1	79.1	79.6	1.50	10.50	16.00
				71.0					74.5						78.0				79.5		82.0		1.51	* 8.50	13.00
58.9	59.4	59.9	60.4	61.9	62.9	63.4	63.9	64.4	65.4	65.9	66.4	66.9	67.4	67.9	68.9	69.4	69.9	70.4	71.9	72.9	73.9	74.4	1.52	13.00	20.00
66.8	67.3	67.8	68.3	69.8	70.8	71.3	71.8	72.3	73.3	73.8	74.3	74.8	75.3	75.8	76.8	77.3	77.8	78.3	79.8	80.8	81.8	82.3	1.53	9.00	14.00
				73.8					77.3						80.8				82.3		84.8		1.54	* 7.00	11.00
				75.8					79.3						82.8				84.3		86.8		1.55	* 6.00	9.50
				77.3					81.2						84.7				86.2		88.7		1.56	* 5.00	* 8.00
				76.5					80.0						83.5				85.0		87.5		1.57	* 5.60	9.00
				72.6					76.1						79.6				81.1		83.6		1.57	* 7.50	12.00
64.5	65.0	65.5	66.0	67.5	68.5	69.0	69.5	70.0	71.0	71.5	72.0	72.5	73.0	73.5	74.5	75.0	75.5	76.0	77.5	78.5	79.5	80.0	1.58	* 10.00	16.00
				71.4					74.9						78.4				79.9		82.4		1.60	* 8.00	13.00
62.1	62.6	63.1	63.6	65.1	66.1	66.6	67.1	67.6	68.6	69.1	69.6	70.1	70.6	71.1	72.1	72.6	73.1	73.6	75.1	76.1	77.1	77.6	1.61	11.00	18.00
				70.2					73.7						77.2				78.7		81.2		1.62	* 8.50	14.00
				75.4					78.9						82.4				83.9		86.4		1.63	* 6.00	10.00
				77.3					80.8						84.3				85.8		88.3		1.65	* 5.00	* 8.50
				76.1					79.6						83.1				84.6		87.1		1.65	* 5.60	9.50
59.7	60.2	60.7	61.2	62.7	63.7	64.2	64.7	65.2	66.2	66.7	67.2	67.7	68.2	68.7	69.7	70.2	70.7	71.2	72.7	73.7	74.7	75.2	1.65	12.00	20.00
64.8	65.3	65.8	66.3	67.8	68.8	69.3	69.8	70.3	71.3	71.8	72.3	72.8	73.4	73.9	74.9	75.4	75.9	76.4	77.9	78.9	79.9	80.4	1.66	9.50	16.00
50.9	51.4	51.9	52.4	53.9	54.9	55.4	55.9	56.4	57.4	57.9	58.4	58.9	59.4	59.9	60.9	61.4	61.9	62.4	63.9	64.9	65.9	66.5	1.67	16.00	27.00
				73.0					76.5						80.0				81.5		84.0		1.68	* 7.00	12.00
62.5	63.0	63.5	64.0	65.5	66.5	67.0	67.5	68.0	69.0	69.5	70.0	70.5	71.0	71.5	72.5	73.0	73.5	74.0	75.5	76.5	77.5	78.0	1.69	10.50	18.00
54.9	55.4	55.9	56.4	57.9	58.9	59.4	59.9	60.4	61.4	61.9	62.4	62.9	63.4	63.9	64.9	65.4	65.9	66.4	67.9	68.9	69.9	70.4	1.69	14.00	24.00
				75.0					78.5						82.0				83.5		86.0		1.70	* 6.00	10.50
				71.8					75.3						78.8				80.3		82.8		1.70	* 7.50	13.00
				70.6					74.1						77.6				79.1		81.6		1.71	* 8.00	14.00
				75.7					79.2						82.7				84.2		86.7		1.73	* 5.60	10.00
				76.9					80.4						83.9				85.4		87.9		1.74	* 5.00	9.00
65.2	65.7	66.2	66.7	68.2	69.2	69.7	70.2	70.7	71.7	72.2	72.7	73.2	73.7	74.2	75.2	75.7	76.2	76.7	78.2	79.2	80.2	80.7	1.74	9.00	16.00
62.8	63.3	63.8	64.3	65.8	66.8	67.3	67.8	68.3	69.3	69.8	70.3	70.8	71.3	71.8	72.8	73.3	73.9	74.4	75.9	76.9	77.9	78.4	1.77	10.00	18.00
				74.6					78.1						81.6				83.1		85.6		1.78	* 6.00	11.00
60.4	60.9	61.4	61.9	63.4	64.4	64.9	65.4	65.9	67.0	67.5	68.0	68.5	69.0	69.5	70.5	71.0	71.5	72.0	73.5	74.5	75.5	76.0	1.79	11.00	20.00
				72.2					75.7						79.2										

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																							
Small Sheave	Large Sheave	Small Sheave	Large Sheave		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		
					CX												CP											
6.40	8.40	* 6.00	* 8.00	1.31	200	202	204	205	206	207	208	210	214	215	218	220	221	225	228	229	230	235	238	240	245	246	248	
6.00	7.90	* 5.60	* 7.50	1.32								95.4						101.9										
7.90	10.40	* 7.50	* 10.00	1.32								96.2						102.7										
9.40	12.40	* 9.00	* 12.00	1.32								92.7						99.2										
10.90	14.40	* 10.50	* 14.00	1.32	84.9	85.9	86.9	87.4	87.9	88.4	88.9	89.9	90.9	91.4	92.9	93.9	94.4	96.4	97.9	98.4	98.9	101.4	102.9	103.9	106.4	106.9	107.9	
12.40	16.40	* 12.00	* 16.00	1.32	82.2	83.2	84.2	84.7	85.2	85.7	86.2	87.2	88.2	88.7	90.2	91.2	91.7	93.7	95.2	95.7	96.2	98.7	100.2	101.2	103.7	104.2	105.2	
7.40	9.90	* 7.00	* 9.50	1.34	79.4	80.4	81.4	81.9	82.4	82.9	83.4	84.4	85.4	85.9	87.4	88.4	88.9	90.9	92.4	92.9	93.4	95.9	97.4	98.4	100.9	101.4	102.4	
9.90	13.40	* 9.50	* 13.00	1.35	83.8	84.8	85.8	86.3	86.8	87.3	87.8	88.8	89.8	90.3	91.8	92.8	93.3	95.3	96.8	97.3	97.8	100.3	101.8	102.8	105.3	105.8	106.8	
8.40	11.40	* 8.00	* 11.00	1.36								91.5						98.0										
5.40	7.40	* 5.00	* 7.00	1.37								97.0						103.5										
13.40	18.40	* 13.00	* 18.00	1.37	77.1	78.1	79.1	79.6	80.1	80.6	81.1	82.1	83.1	83.6	85.1	86.1	86.6	88.6	90.1	90.6	91.1	93.6	95.1	96.1	98.6	99.1	100.1	
7.90	10.90	* 7.50	* 10.50	1.38								92.3						98.8										
10.40	14.40	* 10.00	* 14.00	1.38	82.6	83.6	84.6	85.1	85.6	86.1	86.6	87.6	88.6	89.1	90.6	91.6	92.1	94.1	95.6	96.1	96.6	99.1	100.6	101.6	104.1	104.6	105.6	
6.40	8.90	* 6.00	* 8.50	1.39								95.1						101.6										
8.90	12.40	* 8.50	* 12.00	1.39								90.3						96.8										
6.00	8.40	* 5.60	* 8.00	1.40								95.8						102.3										
7.40	10.40	* 7.00	* 10.00	1.41								93.1						99.6										
14.40	20.40	* 14.00	* 20.00	1.42	74.7	75.7	76.7	77.2	77.7	78.2	78.7	79.7	80.7	81.2	82.7	83.7	84.2	86.2	87.7	88.2	88.7	91.2	92.7	93.7	96.2	96.7	97.7	
9.40	13.40	* 9.00	* 13.00	1.43	84.1	85.1	86.1	86.6	87.1	87.6	88.1	89.1	90.1	90.6	92.1	93.1	93.6	95.6	97.2	97.7	98.2	100.7	102.2	103.2	105.7	106.2	107.2	
7.90	11.40	* 7.50	* 11.00	1.44								91.9						98.4										
11.40	16.40	* 11.00	* 16.00	1.44	80.2	81.2	82.2	82.7	83.2	83.7	84.2	85.2	86.2	86.7	88.2	89.2	89.7	91.7	93.2	93.7	94.2	96.7	98.2	99.2	101.7	102.2	103.2	
9.90	14.40	* 9.50	* 14.00	1.45	83.0	84.0	85.0	85.5	86.0	86.5	87.0	88.0	89.0	89.5	91.0	92.0	92.5	94.5	96.0	96.5	97.0	99.5	101.0	102.0	104.5	105.0	106.0	
5.40	7.90	* 5.00	* 7.50	1.46								96.6						103.1										
6.40	9.40	* 6.00	* 9.00	1.47								94.7						101.2										
7.40	10.90	* 7.00	* 10.50	1.47								92.7						99.2										
6.00	8.90	* 5.60	* 8.50	1.48								95.4						101.9										
8.40	12.40	* 8.00	* 12.00	1.48								90.7						97.2										
12.40	18.40	* 12.00	* 18.00	1.48	77.8	78.8	79.8	80.3	80.8	81.3	81.8	82.8	83.8	84.3	85.8	86.8	87.3	89.3	90.8	91.3	91.8	94.3	95.8	96.8	99.3	99.8	100.8	
16.40	24.40	* 16.00	* 24.00	1.49	69.9	70.9	71.9	72.4	72.9	73.4	73.9	74.9	75.9	76.4	77.9	78.9	79.4	81.4	82.9	83.4	83.9	86.4	87.9	88.9	91.4	91.9	92.9	
10.90	16.40	* 10.50	* 16.00	1.50	80.6	81.6	82.6	83.1	83.6	84.1	84.6	85.6	86.6	87.1	88.6	89.6	90.1	92.1	93.6	94.1	94.6	97.1	98.6	99.6	102.1	102.6	103.6	
8.90	13.40	* 8.50	* 13.00	1.51								89.5						96.0										
13.40	20.40	* 13.00	* 20.00	1.52	75.5	76.5	77.5	78.0	78.5	79.0	79.5	80.5	81.5	82.0	83.5	84.5	85.0	87.0	88.5	89.0	89.5	92.0	93.5	94.5	97.0	97.5	98.5	
9.40	14.40	* 9.00	* 14.00	1.53	83.3	84.3	85.3	85.8	86.3	86.8	87.4	88.4	89.4	89.9	91.4	92.4	92.9	94.9	96.4	96.9	97.4	99.9	101.4	102.4	104.9	105.4	106.4	
7.40	11.40	* 7.00	* 11.00	1.54								92.3						98.8										
6.40	9.90	* 6.00	* 9.50	1.55								94.3						100.8										
5.40	8.40	* 5.00	* 8.00	1.56								96.2						102.7										
6.00	9.40	* 5.60	* 9.00	1.57								95.0						101.5										
7.90	12.40	* 7.50	* 12.00	1.57								91.1						97.6										
10.40	16.40	* 10.00	* 16.00	1.58	81.0	82.0	83.0	83.5	84.0	84.5	85.0	86.0	87.0	87.5	89.0	90.0	90.5	92.5	94.0	94.5	95.0	97.5	99.0	100.0	102.5	103.0	104.0	
8.40	13.40	* 8.00	* 13.00	1.60								89.9						96.4										
11.40	18.40	* 11.00	* 18.00	1.61	78.6	79.6	80.6	81.1	81.6	82.1	82.6	83.6	84.6	85.1	86.6	87.6	88.1	90.1	91.6	92.1	92.6	95.1	96.6	97.6	100.1	100.6	101.6	
8.90	14.40	* 8.50	* 14.00	1.62								88.7						95.2										
6.40	10.40	* 6.00	* 10.00	1.63								93.9						100.4										
5.40	8.90	* 5.00	* 8.50	1.65								95.8						102.3										
6.00	9.90	* 5.60	* 9.50	1.65								94.6						101.1										
12.40	20.40	* 12.00	* 20.00	1.65	76.2	77.2	78.2	78.7	79.2	79.7	80.2	81.2	82.2	82.7	84.2	85.2	85.7	87.7	89.2	89.7	90.2	92.7	94.2	95.2	97.7	98.2	99.2	
9.90	16.40	* 9.50	* 16.00	1.66	81.4	82.4	83.4	83.9	84.4	84.9	85.4	86.4	87.4	87.9	89.4	90.4	90.9	92.9	94.4	94.9	95.4	97.9	99.4	100.4	102.9	103.4	104.4	
16.40	27.40	* 16.00	* 27.00	1.67	67.5	68.5	69.5	70.0	70.5	71.0	71.5	72.5	73.5	74.0	75.5	76.5	77.0	79.0	80.5	81.0	81.5	84.0	85.5	86.5	89.0	89.5	90.5	
7.40	12.40	* 7.00	* 12.00	1.68								91.5						98.0										
10.90	18.40	* 10.50	* 18.00	1.69	79.0	80.0	81.0	81.5	82.0	82.5	83.0	84.0	85.0	85.5	87.0	88.0	88.5	90.5	92.0	92.5	93.0	95.5	97.0	98.0	100.5	101.0	102.0	
14.40	24.40	* 14.00	* 24.00	1.69	71.4	72.4	73.4	73.9	74.4	74.9	75.4	76.4	77.4	77.9	79.4	80.4	81.0	83.0	84.5	85.0	85.5	88.0	89.5	90.5	93.0	93.5	94.5	
6.40	10.90	* 6.00	* 10.50	1.70								93.5						100.0										
7.90	13.40	* 7.50	* 13.00	1.70								90.3						96.8										
8.40	14.40	* 8.00	* 14.00	1.71								89.1						95.6										
6.00	10.40	* 5.60	* 10.00	1.73								94.2						100.7										
5.40	9.40	* 5.00	* 9.00	1.74								95.4						101.9										
9.40	16.40	* 9.00	* 16.00	1.74	81.7	82.7	83.7	84.2	84.7	85.2	85.7	86.7	87.7	88.2	89.7	90.7	91.2	93.2	94.8	95.3	95.8	98.3	99.8	100.8	103.3	103.8	104.8	
10.40	18.40	* 10.00	* 18.00	1.77	79.4	80.4	81.4	81.9	82.4	82.9	83.4	84.4	85.4	85.9	87.4	88.4	88.9	90.9	92.4	92.9	93.4	95.9	97.4	98.4	100.9	101.4	102.4	
6.40	11.40	* 6.00	* 11.00	1.78																								

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters				
C	CX	C	C	CX	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		Small Sheave	Large Sheave			
250	255	264	265	270	275	276	280	285	290	295	297	300	303	314	315	320	330	345	360	390	420	450	1.31	6.00	8.00
	117.0			124.5								139.5					154.5		169.5				1.32	5.60	7.50
	117.7			125.2								140.2					155.2		170.2				1.32	5.60	7.50
	114.2			121.7								136.7					151.7		166.7				1.32	7.50	10.00
108.9	111.4	115.9	116.4	118.9	121.4	121.9	123.9	126.4	128.9	131.4	132.4	133.9	135.4	140.9	141.4	143.9	148.9	156.4	163.9	179.0	194.0	209.0	1.32	10.50	14.00
106.2	108.7	113.2	113.7	116.2	118.7	119.2	121.2	123.7	126.2	128.7	129.7	131.2	132.7	138.2	138.7	141.2	146.2	153.7	161.2	176.2	191.2	206.2	1.32	10.50	14.00
103.4	105.9	110.4	110.9	113.4	115.9	116.4	118.4	120.9	123.4	125.9	126.9	128.4	129.9	135.4	135.9	138.4	143.4	150.9	158.4	173.4	188.4	203.4	1.32	12.00	16.00
	115.0			122.5								137.5					152.5		167.5				1.34	7.00	9.50
107.8	110.3	114.8	115.3	117.8	120.3	120.8	122.8	125.3	127.8	130.3	131.3	132.8	134.3	139.8	140.3	142.8	147.8	155.3	162.8	177.8	192.8	207.8	1.35	9.50	13.00
	113.0			120.5								135.5					150.5		165.5				1.36	8.00	11.00
	118.5			126.0								141.0					156.0		171.0				1.37	5.00	7.00
101.1	103.6	108.1	108.6	111.1	113.6	114.1	116.1	118.6	121.1	123.6	124.6	126.1	127.6	133.1	133.6	136.1	141.1	148.6	156.1	171.1	186.1	201.1	1.37	13.00	18.00
	113.8			121.3								136.3					151.3		166.3				1.38	7.50	10.50
106.6	109.1	113.6	114.1	116.6	119.1	119.6	121.6	124.1	126.6	129.1	130.1	131.6	133.1	138.6	139.1	141.6	146.6	154.1	161.6	176.6	191.6	206.6	1.38	10.00	14.00
	116.6			124.1								139.1					154.1		169.1				1.39	6.00	8.50
	111.8			119.3								134.3					149.3		164.3				1.39	8.50	12.00
	117.3			124.8								139.8					154.8		169.8				1.40	5.60	8.00
	114.6			122.1								137.1					152.1		167.1				1.41	7.00	10.00
98.7	101.2	105.7	106.2	108.7	111.2	111.7	113.7	116.2	118.7	121.2	122.2	123.7	125.2	130.7	131.2	133.7	138.7	146.2	153.7	168.7	183.7	198.7	1.42	14.00	20.00
108.2	110.7	115.2	115.7	118.2	120.7	121.2	123.2	125.7	128.2	130.7	131.7	133.2	134.7	140.2	140.7	143.2	148.2	155.7	163.2	178.2	193.2	208.2	1.43	9.00	13.00
	113.4			120.9								135.9					150.9		165.9				1.44	7.50	11.00
104.2	106.7	111.2	111.7	114.2	116.7	117.2	119.2	121.7	124.2	126.7	127.7	129.2	130.7	136.2	136.7	139.2	144.2	151.7	159.2	174.2	189.2	204.2	1.44	11.00	16.00
107.0	109.5	114.0	114.5	117.0	119.5	120.0	122.0	124.5	127.0	129.5	130.5	132.0	133.5	139.0	139.5	142.0	147.0	154.5	162.0	177.0	192.0	207.0	1.44	9.50	14.00
	118.1			125.6								140.6					155.6		170.6				1.46	5.00	7.50
	116.2			123.7								138.7					153.7		168.7				1.47	6.00	9.00
	114.2			121.7								136.7					151.7		166.7				1.47	7.00	10.50
	116.9			124.4								139.4					154.4		169.4				1.48	5.60	8.50
	112.2			119.7								134.7					149.7		164.7				1.48	8.00	12.00
101.8	104.3	108.8	109.3	111.8	114.3	114.8	116.8	119.4	121.9	124.4	125.4	126.9	128.4	133.9	134.4	136.9	141.9	149.4	156.9	171.9	186.9	201.9	1.49	12.00	18.00
93.9	96.5	101.0	101.5	104.0	106.5	107.0	109.0	111.5	114.0	116.5	117.5	119.0	120.5	126.0	126.5	129.0	134.0	141.5	149.0	164.0	179.0	194.0	1.49	16.00	24.00
104.6	107.1	111.6	112.1	114.6	117.1	117.6	119.6	122.1	124.6	127.1	128.1	129.6	131.1	136.6	137.1	139.6	144.6	152.1	159.6	174.6	189.6	204.6	1.50	10.50	16.00
	111.0			118.5								133.5					148.5		163.5				1.51	8.50	13.00
99.5	102.0	106.5	107.0	109.5	112.0	112.5	114.5	117.0	119.5	122.0	123.0	124.5	126.0	131.5	132.0	134.5	139.5	147.0	154.5	169.5	184.5	199.5	1.52	13.00	20.00
107.4	109.9	114.4	114.9	117.4	119.9	120.4	122.4	124.9	127.4	129.9	130.9	132.4	133.9	139.4	139.9	142.4	147.4	154.9	162.4	177.4	192.4	207.4	1.53	9.00	14.00
	113.8			121.3								136.3					151.3		166.3				1.54	7.00	11.00
	115.8			123.3								138.3					153.3		168.3				1.55	6.00	9.50
	117.7			125.2								140.2					155.2		170.2				1.56	5.00	8.00
	116.5			124.0								139.0					154.0		169.0				1.57	5.60	9.00
	112.6			120.1								135.1					150.1		165.1				1.57	7.50	12.00
105.0	107.5	112.0	112.5	115.0	117.5	118.0	120.0	122.5	125.0	127.5	128.5	130.0	131.5	137.0	137.5	140.0	145.0	152.5	160.0	175.0	190.0	205.0	1.58	10.00	16.00
	111.4			118.9								133.9					148.9		163.9				1.60	8.00	13.00
102.6	105.1	109.6	110.1	112.6	115.1	115.6	117.6	120.1	122.6	125.1	126.1	127.6	129.1	134.6	135.1	137.6	142.6	150.1	157.6	172.6	187.6	202.6	1.61	11.00	18.00
	110.2			117.7								132.8					147.8		162.8				1.62	8.50	14.00
	115.4			122.9								137.9					152.9		167.9				1.63	6.00	10.00
	117.3			124.8								139.8					154.8		169.8				1.65	5.00	8.50
	116.1			123.6								138.6					153.6		168.6				1.65	5.60	9.50
100.2	102.7	107.2	107.7	110.2	112.7	113.2	115.2	117.7	120.3	122.8	123.8	125.3	126.8	132.3	132.8	135.3	140.3	147.8	155.3	170.3	185.3	200.3	1.65	12.00	20.00
105.4	107.9	112.4	112.9	115.4	117.9	118.4	120.4	122.9	125.4	127.9	128.9	130.4	131.9	137.4	137.9	140.4	145.4	152.9	160.4	175.4	190.4	205.4	1.66	9.50	16.00
91.5	94.0	98.5	99.0	101.5	104.0	104.5	106.5	109.0	111.5	114.0	115.0	116.5	118.0	123.6	124.1	126.6	131.6	139.1	146.6	161.6	176.6	191.6	1.67	16.00	27.00
	113.0			120.5								135.5					150.5		165.5				1.68	7.00	12.00
103.0	105.5	110.0	110.5	113.0	115.5	116.0	118.0	120.5	123.0	125.5	126.5	128.0	129.5	135.0	135.5	138.0	143.0	150.5	158.0	173.0	188.0	203.0	1.69	10.50	18.00
95.5	98.0	102.5	103.0	105.5	108.0	108.5	110.5	113.0	115.5	118.0	119.0	120.5	122.0	127.5	128.0</										

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		C	C	C	C	CX	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
16.40	30.40	16.00	30.00	1.85																						
9.90	18.40	9.50	18.00	1.86																						
10.90	20.40	10.50	20.00	1.87																						
6.00	11.40	* 5.60	11.00	1.90																						
14.40	27.40	14.00	27.00	1.90																						
5.40	10.40	* 5.00	10.00	1.93																						
6.40	12.40	* 6.00	12.00	1.94																						
7.40	14.40	* 7.00	14.00	1.95																						
8.40	16.40	* 8.00	16.00	1.95																						
9.40	18.40	9.00	18.00	1.96																						
10.40	20.40	10.00	20.00	1.96																						
12.40	24.40	12.00	24.00	1.97																						
5.40	10.90	* 5.00	10.50	2.02																						
13.40	27.40	13.00	27.00	2.04																						
9.90	20.40	9.50	20.00	2.06																						
6.00	12.40	* 5.60	12.00	2.07																						
8.90	18.40	* 8.50	18.00	2.07																						
7.90	16.40	* 7.50	16.00	2.08																						
6.40	13.40	* 6.00	13.00	2.09																						
5.40	11.40	* 5.00	11.00	2.11																						
14.40	30.40	14.00	30.00	2.11																						
11.40	24.40	11.00	24.00	2.14																						
9.40	20.40	9.00	20.00	2.17																						
8.40	18.40	* 8.00	18.00	2.19																						
12.40	27.40	12.00	27.00	2.21																						
7.40	16.40	* 7.00	16.00	2.22																						
16.40	36.40	16.00	36.00	2.22																						
6.00	13.40	* 5.60	13.00	2.23																						
10.90	24.40	10.50	24.00	2.24																						
6.40	14.40	* 6.00	14.00	2.25																						
13.40	30.40	13.00	30.00	2.27																						
8.90	20.40	* 8.50	20.00	2.29																						
8.40	12.40	* 8.00	12.00	2.30																						
7.90	18.40	* 7.50	18.00	2.33																						
10.40	24.40	10.00	24.00	2.35																						
6.00	14.40	* 5.60	14.00	2.40																						
11.40	27.40	11.00	27.00	2.40																						
8.40	20.40	* 8.00	20.00	2.43																						
12.40	30.40	12.00	30.00	2.45																						
9.90	24.40	9.50	24.00	2.46																						
5.40	13.40	* 5.00	13.00	2.48																						
7.40	18.40	* 7.00	18.00	2.49																						
10.90	27.40	10.50	27.00	2.51																						
14.40	36.40	14.00	36.00	2.53																						
6.40	16.40	* 6.00	16.00	2.56																						
7.90	20.40	* 7.50	20.00	2.58																						
9.40	24.40	9.00	24.00	2.60																						
10.40	27.40	10.00	27.00	2.63																						
5.40	14.40	* 5.00	14.00	2.67																						
11.40	30.40	11.00	30.00	2.67																						
16.40	44.40	16.00	44.00	2.71																						
13.40	36.40	13.00	36.00	2.72																						
6.00	16.40	* 5.60	16.00	2.73																						
8.90	24.40	* 8.50	24.00	2.74																						
7.40	20.40	* 7.00	20.00	2.76																						
9.90	27.40	9.50	27.00	2.77																						
10.90	30.40	10.50	30.00	2.79																						
6.40	18.40	* 6.00	18.00	2.88																						
8.40	24.40	* 8.00	24.00	2.90																						
9.40	27.40	9.00	27.00	2.91																						
10.40	30.40	10.00	30.00	2.92																						
12.40	36.40	12.00	36.00	2.94																						
5.40	16.40	* 5.00	16.00	3.04																						
6.00	18.40	* 5.60	18.00	3.07																						
9.90	30.40	9.50	30.00	3.07																						
16.40	50.40	16.00	50.00	3.07																						

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																							Sheave Datum Diameters		
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	Speed Ratio	Small Sheave	Large Sheave
71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93			
		15.8	16.3	16.8	17.3	17.8	18.4	18.9	19.4	19.9	20.4	20.9	21.4	21.9	22.4	23.0	23.5	24.0	24.5	25.0	25.5	26.0	1.85	16.00	30.00
				25.8			27.3			28.8				30.3					31.8				1.86	9.50	18.00
																							1.87	10.50	20.00
																							1.90	* 5.60	11.00
																							1.90	* 14.00	27.00
																							1.93	* 5.00	10.00
																							1.94	* 6.00	12.00
																							1.95	* 7.00	14.00
																							1.95	* 8.00	16.00
																							1.96	9.00	18.00
																							1.96	10.00	20.00
																							1.97	12.00	24.00
																							2.02	* 5.00	10.50
																							2.04	13.00	27.00
																							2.06	9.50	20.00
																							2.07	* 5.60	12.00
																							2.07	* 8.50	18.00
																							2.08	7.50	16.00
																							2.09	* 6.00	13.00
																							2.11	* 5.00	11.00
																							2.11	14.00	30.00
																							2.14	11.00	24.00
																							2.17	9.00	20.00
																							2.19	* 8.00	18.00
																							2.21	* 12.00	27.00
																							2.22	* 7.00	16.00
																							2.22	16.00	36.00
																							2.23	* 5.60	13.00
																							2.24	10.50	24.00
																							2.25	* 6.00	14.00
																							2.27	13.00	30.00
																							2.29	* 8.50	20.00
																							2.30	* 5.00	12.00
																							2.33	* 7.50	18.00
																							2.35	10.00	24.00
																							2.40	* 5.60	14.00
																							2.40	11.00	27.00
																							2.43	* 8.00	20.00
																							2.45	12.00	30.00
																							2.46	9.50	24.00
																							2.48	* 5.00	13.00
																							2.49	* 7.00	18.00
																							2.51	10.50	27.00
																							2.53	14.00	36.00
																							2.56	* 6.00	16.00
																							2.58	* 7.50	20.00
																							2.60	9.00	24.00
																							2.63	10.00	27.00
																							2.67	* 5.00	14.00
																							2.67	11.00	30.00
																							2.71	16.00	44.00
																							2.72	13.00	35.00
																							2.73	* 5.60	16.00
																							2.74	* 8.50	24.00
																							2.76	* 7.00	20.00
																							2.77	9.50	27.00
																							2.79	10.50	30.00
																							2.88	* 6.00	18.00
																							2.90	* 8.00	24.00
																							2.91	9.00	27.00
																							2.92	10.00	30.00
																							2.94	12.00	36.00
																							3.04	* 5.00	16.00
																							3.07	* 5.60	18.00
																							3.07	9.50	30.00
																							3.07	16.00	50.00

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																				Sheave Datum Diameters					
C	C	C	CX	C	C	CX	C	C	C	C	C	CX	C	C	C	CX	C	C	C	C	Speed Ratio	Small Sheave	Large Sheave		
117	118	119	120	121	122	123	124	125	126	127	128	130	131	132	133	134	135	136	137	138	139	140	1.90	14.00	27.00
38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.6	44.6	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.7	1.85	16.00	30.00
35.7	36.2	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.3	46.8	47.3	1.86	9.50	18.00
			48.3			49.8					52.3				54.8			56.3					1.87	10.50	20.00
27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.6	31.1	31.6	32.1	32.6	33.6	34.1	34.6	35.1	35.7	36.2	36.7	37.2	37.7	38.2	38.7	1.90	5.60	11.00
			49.6			51.1					53.6				56.1			57.6					1.93	6.00	12.00
			47.2			48.7					51.2				53.7			55.2					1.94	7.00	14.00
			44.8			46.3					48.8				51.3			52.8					1.95	8.00	16.00
			42.4			43.9					46.4				48.9			50.4					1.96	9.00	18.00
38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	1.96	10.00	20.00
36.0	36.5	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.6	43.1	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	1.96	12.00	24.00
31.1	31.6	32.1	32.6	33.1	33.6	34.1	34.7	35.2	35.7	36.2	36.7	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.8	2.02	5.00	10.50
			49.2			50.7					53.2				55.7			57.2					2.04	13.00	27.00
27.6	28.2	28.7	29.2	29.7	30.2	30.7	31.2	31.8	32.3	32.8	33.3	34.3	34.8	35.3	35.8	36.4	36.9	37.4	37.9	38.4	38.9	39.4	2.06	9.50	20.00
36.4	36.9	37.4	37.9	38.4	38.9	39.4	39.9	40.4	40.9	41.4	42.0	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	2.07	5.60	12.00
			47.5			49.0					51.5				54.0			55.5					2.07	8.50	18.00
			40.4			41.9					44.4				46.9			48.4					2.07	7.50	16.00
			42.8			44.3					46.8				49.3			50.8					2.08	6.00	13.00
			46.4			47.9					50.4				52.9			54.4					2.09	5.00	11.00
			48.8			50.3					52.8				55.3			56.8					2.11	8.00	18.00
24.0	24.6	25.1	25.6	26.2	26.7	27.2	27.7	28.3	28.8	29.3	29.8	30.8	31.4	31.9	32.4	32.9	33.4	33.9	34.5	35.0	35.5	36.0	2.11	14.00	30.00
31.8	32.3	32.8	33.3	33.8	34.3	34.9	35.4	35.9	36.4	36.9	37.4	38.4	38.9	39.4	39.9	40.4	40.9	41.5	42.0	42.5	43.0	43.5	2.14	11.00	24.00
36.8	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.9	47.4	47.9	48.4	2.17	9.00	20.00
			40.7			42.2					44.8				47.3			48.8					2.19	8.00	18.00
28.3	28.8	29.4	29.9	30.4	30.9	31.4	31.9	32.4	33.0	33.5	34.0	35.0	35.5	36.0	36.5	37.1	37.6	38.1	38.6	39.1	39.6	40.1	2.21	12.00	27.00
			43.2			44.7					47.2				49.7			51.2					2.22	7.00	16.00
			46.7			48.2					50.7				53.2			54.7					2.23	16.00	36.00
32.1	32.7	33.2	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.2	37.7	38.8	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.8	2.24	10.50	24.00
24.7	25.2	25.8	26.3	26.8	27.3	27.9	28.4	28.9	29.4	30.0	30.5	31.5	32.0	32.6	33.1	33.6	34.1	34.6	35.1	35.7	36.2	36.7	2.25	6.00	14.00
			45.6			47.1					49.6				52.1			53.6					2.27	13.00	30.00
			38.6			40.2					42.7				45.2			46.7					2.29	8.50	20.00
			48.0			49.5					52.0				54.5			56.0					2.30	5.00	12.00
			41.1			42.6					45.1				47.6			49.1					2.33	7.50	18.00
32.5	33.0	33.5	34.0	34.5	35.0	35.6	36.1	36.6	37.1	37.6	38.1	39.1	39.6	40.1	40.6	41.1	41.7	42.2	42.7	43.2	43.7	44.2	2.35	10.00	24.00
			45.9			47.4					49.9				52.4			53.9					2.40	5.60	14.00
29.0	29.5	30.0	30.6	31.1	31.6	32.1	32.6	33.1	33.6	34.2	34.7	35.7	36.2	36.7	37.2	37.8	38.3	38.8	39.3	39.8	40.3	40.8	2.40	11.00	27.00
31.8	32.3	32.8	33.3	33.8	34.3	34.9	35.4	35.9	36.4	36.9	37.4	38.4	38.9	39.4	39.9	40.4	40.9	41.5	42.0	42.5	43.0	43.5	2.43	8.00	20.00
25.3	25.9	26.4	26.9	27.5	28.0	28.5	29.1	29.6	30.1	30.6	31.2	32.2	32.7	33.2	33.8	34.3	34.8	35.3	35.8	36.3	36.9	37.4	2.45	12.00	30.00
32.8	33.3	33.9	34.4	34.9	35.4	35.9	36.4	36.9	37.4	37.9	38.5	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	2.46	9.50	24.00
			47.1			48.6					51.2				53.7			55.2					2.48	5.00	13.00
29.3	29.9	30.4	31.4	31.9	32.4	33.0	33.5	34.0	34.5	35.0	36.0	36.6	37.1	37.6	38.1	38.6	39.1	39.6	40.1	40.7	41.2	2.49	7.00	18.00	
			43.9			45.4					47.9				50.4			51.9					2.51	10.50	27.00
			39.4			40.9					43.4				45.9			47.4					2.53	14.00	36.00
33.2	33.7	34.2	34.7	35.2	35.7	36.3	36.8	37.3	37.8	38.3	38.8	39.8	40.3	40.8	41.3	41.9	42.4	42.9	43.4	43.9	44.4	44.9	2.56	6.00	16.00
29.7	30.2	30.7	31.2	31.7	32.3	32.8	33.3	33.8	34.3	34.8	35.4	36.4	36.9	37.4	37.9	38.4	39.0	39.5	40.0	40.5	41.0	41.5	2.58	7.50	20.00
			46.3			47.8					50.3				52.8			54.3					2.67	5.00	14.00
26.0	26.5	27.1	27.6	28.1	28.7	29.2	29.7	30.2	30.8	31.3	31.8	32.9	33.4	33.9	34.4	34.9	35.5	36.0	36.5	37.0	37.5	38.1	2.67	11.00	30.00
			44.2			45.7					48.2				50.7			52.2					2.72	13.00	36.00
			35.1			36.6					39.2				41.7			43.2					2.73	8.50	24.00
			39.7			41.2					43.8				46.3			47.8					2.74	7.00	20.00
30.0	30.5	31.0	31.6	32.1	32.6	33.1	33.6	34.2	34.7	35.2	35.7	36.7	37.3	37.8	38.3	38.8	39.3	39.8	40.3	40.8	41.4	41.9	2.77	9.50	27.00
26.3	26.9	27.4	27.9	28.5	29.0	29.5	30.0	30.6	31.1	31.6	32.2	33.2	33.7	34.2	34.8	35.3	35.8	36.3	36.8	37.4	37.9	38.4	2.79	10.50	30.00
			42.2			43.7					46.2				48.7			50.2					2.88	6.00	18.00
			35.4			36.9					39.5				42.1			43.6					2.90	8.00	24.00
30.3	30.9	31.4	31.9	32.4	32.9	33.5	34.0	34.5	35.0	35.5	36.0	37.1	37.6	38.1	38.6	39.1	39.6	40.2	40.7	41.2	41.7	42.2	2.91	9.00	27.00
26.6	27.2	27.7	28.2	28.8	29.3	29.8	30.4	30.9	31.4	32.0	32.5	33.5	34.1	34.6	35.1	35.6	36.1	36.7	37.2	37.7	38.2	38.7	2.92	10.00	30.00
			44.6			46.1					48.6				51.2			52.7					2.94	12.00	36.00
			42.5			44.0					46.5				49.0			50.5					3.04	5.00	16.00
27.0	27.5	28.0	28.6	29.1	29.6	30.2	30.7	31.2	31.8	32.3	32.8	33.9	34.4	34.9	35.4	36.0	36.5	37.0	37.5	38.0	38.6	39.1	3.07	9.50	30.00
																							3.07	16.00	50.00

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																						
Small Sheave	Large Sheave	Small Sheave	Large Sheave		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C				
16.40	30.40	16.00	30.00	1.85	35.1	35.6	36.1	36.7	37.2	37.7	38.2	38.7	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.7	43.3	43.8	44.8	45.8	46.8	47.3	47.8
9.90	18.40	9.50	18.00	1.86	50.2	50.7	51.2	51.7	52.2	52.7	53.2	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.2	57.7	58.2	58.7	59.7	60.7	61.7	62.2	62.7
10.90	20.40	10.50	20.00	1.87	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3	53.8	54.3	54.8	55.3	55.8	56.3	57.3	58.3	59.3	59.8	60.3
6.00	11.40	* 5.60	11.00	1.90				60.4						63.4													67.4
14.40	27.40	14.00	27.00	1.90	39.2	39.7	40.2	40.7	41.2	41.7	42.2	42.8	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.8	49.8	50.8	51.3	51.8
5.40	10.40	* 5.00	10.00	1.93				61.6						64.6													70.6
6.40	12.40	* 6.00	12.00	1.94				59.2						62.2													68.2
7.40	14.40	* 7.00	14.00	1.95				56.8						59.9													65.9
8.40	16.40	* 8.00	16.00	1.95				54.5						57.5													63.5
9.40	18.40	* 9.00	18.00	1.96	50.5	51.0	51.5	52.0	52.6	53.1	53.6	54.1	54.6	55.1	55.6	56.1	56.6	57.1	57.6	58.1	58.6	59.1	60.1	61.1	62.1	62.6	63.1
10.40	20.40	10.00	20.00	1.96	48.1	48.6	49.1	49.6	50.1	50.6	51.1	51.6	52.1	52.7	53.2	53.7	54.2	54.7	55.2	55.7	56.2	56.7	57.7	58.7	59.7	60.2	60.7
12.40	24.40	12.00	24.00	1.97	43.3	43.8	44.3	44.8	45.3	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	50.8	51.3	51.8	52.8	53.8	54.8	55.4	55.9
5.40	10.90	* 5.00	10.50	2.02				61.2						64.2													70.2
13.40	27.40	13.00	27.00	2.04	39.9	40.4	40.9	41.4	41.9	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.5	50.5	51.6	52.1	52.6
9.90	20.40	9.50	20.00	2.06	48.5	49.0	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	58.0	59.0	60.1	60.6	61.1
6.00	12.40	* 5.60	12.00	2.07				59.5						62.5													68.6
8.90	18.40	* 8.50	18.00	2.07				52.4						55.4													61.5
7.90	16.40	* 7.50	16.00	2.08				54.8						57.8													63.9
6.40	13.40	* 6.00	13.00	2.09				58.4						61.4													67.4
5.40	11.40	* 5.00	11.00	2.11				60.8						63.8													69.8
14.40	30.40	14.00	30.00	2.11	36.5	37.0	37.5	38.0	38.6	39.1	39.6	40.1	40.6	41.1	41.6	42.1	42.6	43.1	43.7	44.2	44.7	45.2	46.2	47.2	48.2	48.7	49.2
11.40	24.40	11.00	24.00	2.14	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5	51.0	51.6	52.1	52.6	53.6	54.6	55.6	56.1	56.6
9.40	20.40	9.00	20.00	2.17	48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.4	53.9	54.4	54.9	55.4	55.9	56.4	56.9	57.4	58.4	59.4	60.4	60.9	61.4
8.40	18.40	* 8.00	18.00	2.19				52.8						55.8													61.8
12.40	27.40	12.00	27.00	2.21	40.6	41.1	41.6	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	50.3	51.3	52.3	52.8	53.3
7.40	16.40	* 7.00	16.00	2.22				55.2						58.2													64.2
16.40	36.40	* 16.00	36.00	2.22	29.4	29.9	30.5	31.0	31.5	32.0	32.6	33.1	33.6	34.1	34.7	35.2	35.7	36.2	36.7	37.3	37.8	38.3	39.3	40.4	41.4	41.9	42.4
6.00	13.40	* 5.60	13.00	2.23				58.7						61.7													67.7
10.90	24.40	10.50	24.00	2.24	44.3	44.8	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.4	49.9	50.4	50.9	51.4	51.9	52.4	52.9	53.9	54.9	55.9	56.4	57.0
6.40	14.40	* 6.00	14.00	2.25				57.6						60.6													66.6
13.40	30.40	* 13.00	30.00	2.27	37.2	37.7	38.2	38.7	39.3	39.8	40.3	40.8	41.3	41.8	42.3	42.8	43.3	43.9	44.4	44.9	45.4	45.9	46.9	47.9	48.9	49.4	50.0
8.90	20.40	* 8.50	20.00	2.29				50.7						53.8													59.8
5.40	12.40	* 5.00	12.00	2.30				60.0						63.0													69.0
7.90	18.40	* 7.50	18.00	2.33				53.2						56.2													62.2
10.40	24.40	10.00	24.00	2.35	44.7	45.2	45.7	46.2	46.7	47.2	47.7	48.2	48.7	49.2	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.3	54.3	55.3	56.3	56.8	57.3
6.00	14.40	* 5.60	14.00	2.40				57.9						60.9													66.9
11.40	27.40	11.00	27.00	2.40	41.3	41.8	42.3	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.4	46.9	47.4	47.9	48.4	48.9	49.5	50.0	51.0	52.0	53.0	53.5	54.0
8.40	20.40	* 8.00	20.00	2.43				51.1						54.1													60.2
12.40	30.40	12.00	30.00	2.45	37.9	38.4	38.9	39.4	39.9	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.6	45.1	45.6	46.1	46.6	47.6	48.6	49.6	50.2	50.7
9.90	24.40	9.50	24.00	2.46	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	49.6	50.1	50.6	51.1	51.6	52.1	52.6	53.1	53.6	54.7	55.7	56.7	57.2	57.7
5.40	13.40	* 5.00	13.00	2.48				59.2						62.2													68.2
7.40	18.40	* 7.00	18.00	2.49				53.5						56.5													62.6
10.90	27.40	10.50	27.00	2.51	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.8	46.3	46.8	47.3	47.8	48.3	48.8	49.3	49.8	50.3	51.3	52.3	53.4	53.9	54.4
14.40	36.40	14.00	36.00	2.53	30.7	31.2	31.8	32.3	32.8	33.3	33.9	34.4	34.9	35.5	36.0	36.5	37.0	37.6	38.1	38.6	39.1	39.6	40.7	41.7	42.8	43.3	43.8
6.40	16.40	* 6.00	16.00	2.56				55.9						59.0													65.0
7.90	20.40	* 7.50	20.00	2.58				51.5						54.5													60.5
9.40	24.40	9.00	24.00	2.60	45.4	45.9	46.4	46.9	47.4	47.9	48.5	49.0	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	55.0	56.0	57.0	57.5	58.0
10.40	27.40	10.00	27.00	2.63	42.0	42.5	43.0	43.6	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.2	49.7	50.2	50.7	51.7	52.7	53.7	54.2	54.7
5.40	14.40	* 5.00	14.00	2.67				58.4						61.4													67.4
16.40	44.40	16.00	44.00	2.71	38.6	39.1	39.6	40.1	40.6	41.1	41.7	42.2	42.7	43.2	43.7	44.2	44.7	45.2	45.8	46.3	46.8	47.3	48.3	49.3	50.3	50.9	51.4
13.40	36.40	13.00	36.00	2.72	31.3	31.9	32.4	32.9	33.5	34.0	34.5	35.1	35.6	36.1	36.6	37.2	37.7	38.2	38.7	39.3	39.8	40.3	41.4	42.4	43.4	44.0	44.5
6.00	16.40	* 5.60	16.00	2.73				56.2						59.3													65.3
8.90	24.40	* 8.50	24.00	2.74				47.3						50.3													56.4
7.40	20.40	* 7.00	20.00	2.76				51.8						54.9													60.9
9.90	27.40	9.50	27.00	2.77	42.4	42.9	43.4	43.9	44.4	44.9	45.4	45.9	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5	51.0	52.0	53.1	54.1	54.6	55.1
10.90	30.40	10.50	30.00	2.79	38.9	39.4	39.9	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.1	44.6	45.1	45.6	46.1	46.6	47.1	47.					

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters				
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		Small Sheave	Large Sheave			
167	168	169	170	173	175	176	177	178	180	181	182	183	184	185	187	188	189	190	193	195	197	198	1.85	16.00	30.00
48.3	48.8	49.3	49.8	51.3	52.4	52.9	53.4	53.9	54.9	55.4	55.9	56.4	56.9	57.4	58.4	58.9	59.4	59.9	61.4	62.4	63.4	63.9	1.86	9.50	18.00
63.2	63.7	64.2	64.7	66.2	67.2	67.7	68.2	68.7	69.7	70.2	70.7	71.2	71.7	72.2	73.2	73.7	74.2	74.7	76.2	77.2	78.2	78.7	1.87	10.50	20.00
60.8	61.3	61.8	62.3	63.8	64.8	65.3	65.8	66.3	67.3	67.8	68.3	68.8	69.3	69.8	70.8	71.3	71.8	72.3	73.8	74.8	75.8	76.3	1.90	* 5.60	11.00
				74.9					78.4						81.9			83.4	85.9				1.90		
52.3	52.8	53.4	53.9	55.4	56.4	56.9	57.4	57.9	58.9	59.4	59.9	60.4	60.9	61.4	62.4	62.9	63.4	63.9	65.4	66.4	67.4	67.9	1.90	14.00	27.00
				74.9					78.4						81.9			83.4	85.9				1.93	* 5.00	10.00
				76.1					79.6						83.1			84.6	87.1				1.94	* 6.00	12.00
				73.8					77.3						80.8			82.3	84.8				1.95	* 7.00	14.00
				71.4					74.9						78.4			79.9	82.4				1.95	* 8.00	16.00
				69.0					72.5						76.0			77.5	80.0				1.96	9.00	18.00
63.6	64.1	64.6	65.1	66.6	67.6	68.1	68.6	69.1	70.1	70.6	71.1	71.6	72.1	72.6	73.6	74.1	74.6	75.1	76.6	77.6	78.6	79.1	1.96	10.00	20.00
61.2	61.7	62.2	62.7	64.2	65.2	65.7	66.2	66.7	67.7	68.2	68.7	69.2	69.7	70.2	71.2	71.7	72.2	72.7	74.2	75.2	76.2	76.7	1.96	11.00	21.00
56.4	56.9	57.4	57.9	59.4	60.4	60.9	61.4	61.9	62.9	63.4	63.9	64.4	64.9	65.4	66.4	66.9	67.4	67.9	69.4	70.4	71.4	71.9	1.97	12.00	24.00
				75.7					79.2						82.7			84.2	86.7				2.02	* 5.00	10.50
53.1	53.6	54.1	54.6	56.1	57.1	57.6	58.1	58.6	59.6	60.1	60.6	61.1	61.6	62.1	63.1	63.6	64.2	64.7	66.2	67.2	68.2	68.7	2.04	13.00	27.00
61.6	62.1	62.6	63.1	64.6	65.6	66.1	66.6	67.1	68.1	68.6	69.1	69.6	70.1	70.6	71.6	72.1	72.6	73.1	74.6	75.6	76.6	77.1	2.06	9.50	20.00
				74.1					77.6						81.1			82.6	85.1				2.07	* 5.60	12.00
				67.0					70.5						74.0			75.5	78.0				2.07	* 6.50	18.00
				69.4					72.9						76.4			77.9	80.4				2.08	* 7.50	16.00
				72.9					76.4						80.0			81.5	84.0				2.09	* 6.00	13.00
				75.3					78.8						82.3			83.8	86.3				2.11	* 5.00	11.00
49.7	50.3	50.8	51.3	52.8	53.8	54.3	54.8	55.3	56.3	56.8	57.3	57.8	58.3	58.8	59.9	60.4	60.9	61.4	62.9	63.9	64.9	65.4	2.11	14.00	30.00
57.1	57.6	58.1	58.6	60.1	61.1	61.6	62.1	62.6	63.6	64.1	64.6	65.1	65.6	66.1	67.1	67.6	68.2	68.7	70.2	71.2	72.2	72.7	2.14	11.00	24.00
61.9	62.4	62.9	63.4	64.9	65.9	66.4	66.9	67.4	68.5	69.0	69.5	70.0	70.5	71.0	72.0	72.5	73.0	73.5	75.0	76.0	77.0	77.5	2.17	9.00	20.00
				67.3					70.9						74.4			75.9	78.4				2.19	* 8.00	18.00
53.8	54.3	54.8	55.3	56.8	57.8	58.3	58.8	59.3	60.4	60.9	61.4	61.9	62.4	62.9	63.9	64.4	64.9	65.4	66.9	67.9	68.9	69.4	2.21	12.00	27.00
				69.7					73.2						76.8			78.3	80.8				2.22	* 7.00	16.00
42.9	43.5	44.0	44.5	46.0	47.0	47.6	48.1	48.6	49.6	50.1	50.6	51.1	51.6	52.1	53.2	53.7	54.2	54.7	56.2	57.2	58.2	58.8	2.22	16.00	36.00
				73.2					76.8						80.3			81.8	84.3				2.23	* 5.60	13.00
57.5	58.0	58.5	59.0	60.5	61.5	62.0	62.5	63.0	64.0	64.5	65.0	65.5	66.0	66.5	67.5	68.0	68.5	69.0	70.5	71.5	72.5	73.0	2.24	10.50	24.00
				72.1					75.6						79.1			80.6	83.1				2.25	* 6.00	14.00
50.5	51.0	51.5	52.0	53.5	54.5	55.0	55.5	56.0	57.0	57.5	58.1	58.6	59.1	59.6	60.6	61.1	61.6	62.1	63.6	64.6	65.6	66.1	2.25	13.00	30.00
				65.3					68.8						72.3			73.8	76.3				2.29	* 8.50	20.00
				74.5					78.0						81.5			83.0	85.5				2.30	* 5.00	12.00
				67.7					71.2						74.7			76.2	78.7				2.33	* 7.50	18.00
57.8	58.3	58.8	59.3	60.8	61.8	62.4	62.9	63.4	64.4	64.9	65.4	65.9	66.4	66.9	67.9	68.4	68.9	69.4	70.9	71.9	72.9	73.4	2.35	10.00	24.00
				72.4					75.9						79.4			80.9	83.5				2.40	* 5.60	14.00
54.5	55.0	55.5	56.0	57.5	58.6	59.1	59.6	60.1	61.1	61.6	62.1	62.6	63.1	63.6	64.6	65.1	65.6	66.1	67.6	68.6	69.6	70.1	2.40	11.00	27.00
				65.7					69.2						72.7			74.2	76.7				2.43	* 8.00	20.00
51.2	51.7	52.2	52.7	54.2	55.2	55.7	56.2	56.7	57.8	58.3	58.8	59.3	59.8	60.3	61.3	61.8	62.3	62.8	64.3	65.3	66.4	66.9	2.45	12.00	30.00
58.2	58.7	59.2	59.7	61.2	62.2	62.7	63.2	63.7	64.7	65.2	65.7	66.2	66.7	67.2	68.3	68.8	69.3	69.8	71.3	72.3	73.3	73.8	2.46	9.50	24.00
				73.7					77.2						80.7			82.2	84.7				2.48	* 5.00	13.00
				68.1					71.6						75.1			76.6	79.1				2.49	* 7.00	18.00
54.9	55.4	55.9	56.4	57.9	58.9	59.4	59.9	60.4	61.4	61.9	62.5	63.0	63.5	64.0	65.0	65.5	66.0	66.5	68.0	69.0	70.0	70.5	2.51	10.50	27.00
44.3	44.8	45.3	45.9	47.4	48.4	48.9	49.5	50.0	51.0	51.5	52.0	52.5	53.0	53.5	54.6	55.1	55.6	56.1	57.6	58.6	59.7	60.2	2.53	14.00	36.00
				70.5					74.0						77.5			79.0	81.5				2.56	* 6.00	16.00
				66.1					69.6						73.1			74.6	77.1				2.58	* 7.50	20.00
58.6	59.1	59.6	60.1	61.6	62.6	63.1	63.6	64.1	65.1	65.6	66.1	66.6	67.1	67.6	68.6	69.1	69.6	70.1	71.6	72.6	73.6	74.2	2.60	9.00	24.00
55.2	55.7	56.2	56.8	58.3	59.3	59.8	60.3	60.8	61.8	62.3	62.8	63.3	63.8	64.3	65.3	65.8	66.3	66.8	68.4	69.4	70.4	70.9	2.63	10.00	27.00
				72.9					76.4						79.9			81.4	83.9				2.67	* 5.00	14.00
51.9	52.4	52.9	53.4	54.9	55.9	56.4	57.0	57.5	58.5	59.0	59.5	60.0	60.5	61.0	62.0	62.5	63.0	63.5	65.1	66.1	67.1	67.6	2.67	11.00	30.00
35.0	35.5	36.1	36.6	38.2	39.3	39.8	40.4	40.9	42.0	42.5	43.0	43.6	44.1	44.6	45.7	46.2	46.7	47.2	48.8	49.8	50.9	51.4	2.71	16.00	44.00
45.0	45.5	46.0	46.5	48.1	49.1	49.6	50.1	50.7	51.7	52.2	52.7	53.2	53.7	54.2	55.3	55.8	56.3	56.8	58.3	59.3	60.4	60.9	2.72	13.00	36.00
				70.8					74.3						77.8			79.3	81.8				2.73	* 5.60	16.00
				61.9					65.5						69.0			70.5	73.0				2.74	* 8.50	24.00
				66.4					69.9						73.5			75.0	77.5				2.76	* 7.00	20.00
55.6	56.1	56.6	57.1	58.6	59.6	60.1	60.7	61.2	62.2	62.7	63.2	63.7	64.2	64.7	65.7	66.2	66.7	67.2	68.7	69.7	70.7	71.2	2.77	9.50	27.00
52.2	52.7	53.2	53.8	55.3	56.3	56.8	57.3	57.8	58.8	59.3	59.8	60.4	60.9	61.4	62.4	62.9	63.4	63.9	65.4	66.4	67.4	67.9	2.79	10.50	30.00

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters				
C	C	C	C	CX	C	C	C	C	C	C	C	C	C	C	C	CX	C	C	C		Small Sheave	Large Sheave			
250	255	264	265	270	275	276	280	285	290	295	297	300	303	314	315	320	330	345	360	390	420	450	1.85	16.00	30.00
89.0	91.6	96.1	96.6	99.1	101.6	102.1	104.1	106.6	109.1	111.6	112.6	114.1	115.6	121.1	121.6	124.1	129.1	136.6	144.2	159.2	174.2	189.2	1.86	9.50	18.00
103.8	106.3	110.8	111.3	113.8	116.3	116.8	118.8	121.3	123.8	126.3	127.3	128.8	130.3	135.8	136.3	138.8	143.8	151.3	158.8	173.8	188.8	203.8	1.87	10.50	20.00
101.4	103.9	108.4	108.9	111.4	113.9	114.4	116.4	118.9	121.4	123.9	124.9	126.4	127.9	133.4	133.9	136.4	141.4	148.9	156.4	171.4	186.4	201.4	1.90	* 5.60	11.00
	114.9		122.4									137.4					152.4	167.4					1.90	14.00	27.00
93.0	95.5	100.0	100.5	103.0	105.5	106.0	108.1	110.6	113.1	115.6	116.6	118.1	119.6	125.1	125.6	128.1	133.1	140.6	148.1	163.1	178.1	193.1	1.93	* 5.00	10.00
	116.1		123.6									138.6					153.6	168.6					1.94	* 6.00	12.00
	113.8		121.3									136.3					151.3	166.3					1.95	* 7.00	14.00
	111.4		118.9									133.9					148.9	163.9					1.95	* 8.00	16.00
104.1	106.6	111.2	111.7	114.2	116.7	117.2	119.2	121.7	124.2	126.7	127.7	129.2	130.7	136.2	136.7	139.2	144.2	151.7	159.2	174.2	189.2	204.2	1.96	9.00	18.00
101.8	104.3	108.8	109.3	111.8	114.3	114.8	116.8	119.3	121.8	124.3	125.3	126.8	128.3	133.8	134.3	136.8	141.8	149.3	156.8	171.8	186.8	201.8	1.96	10.00	20.00
97.0	99.5	104.0	104.5	107.0	109.5	110.0	112.0	114.5	117.0	119.5	120.5	122.0	123.5	129.0	129.5	132.0	137.0	144.6	152.1	167.1	182.1	197.1	1.97	12.00	24.00
	109.0		116.5									131.5					146.5	161.5					2.02	* 5.00	10.50
93.8	96.3	100.8	101.3	103.8	106.3	106.8	108.8	111.3	113.8	116.3	117.3	118.8	120.3	125.8	126.3	128.8	133.8	141.4	148.9	163.9	178.9	193.9	2.04	13.00	27.00
102.1	104.6	109.2	109.7	112.2	114.7	115.2	117.2	119.7	122.2	124.7	125.7	127.2	128.7	134.2	134.7	137.2	142.2	149.7	157.2	172.2	187.2	202.2	2.06	9.50	20.00
	114.1		121.6									136.6					151.6	166.6					2.07	* 5.60	12.00
	107.0		114.5									129.5					144.6	159.6					2.07	* 8.50	18.00
	109.4		116.9									131.9					146.9	161.9					2.08	* 7.50	16.00
	113.0		120.5									135.5					150.5	165.5					2.09	* 6.00	13.00
	115.3		122.8									137.9					152.9	167.9					2.11	* 5.00	11.00
90.5	93.0	97.6	98.1	100.6	103.1	103.6	105.6	108.1	110.6	113.1	114.1	115.6	117.1	122.6	123.1	125.6	130.6	138.2	145.7	160.7	175.7	190.7	2.11	14.00	30.00
97.7	100.3	104.8	105.3	107.8	110.3	110.8	112.8	115.3	117.8	120.3	121.3	122.8	124.3	129.8	130.3	132.8	137.8	145.3	152.8	167.8	182.8	197.8	2.14	11.00	24.00
102.5	105.0	109.5	110.0	112.5	115.0	115.5	117.5	120.0	122.5	125.0	126.0	127.5	129.0	134.5	135.0	137.5	142.5	150.0	157.5	172.5	187.5	202.5	2.17	9.00	20.00
	107.4		114.9									129.9					144.9	160.0					2.19	* 8.00	18.00
94.5	97.0	101.5	102.0	104.6	107.1	107.6	109.6	112.1	114.6	117.1	118.1	119.6	121.1	126.6	127.1	129.6	134.6	142.1	149.6	164.6	179.6	194.6	2.21	12.00	27.00
	109.8		117.3									132.3					147.3	162.3					2.22	* 7.00	16.00
84.0	86.5	91.1	91.6	94.1	96.6	97.1	99.1	101.6	104.1	106.6	107.6	109.2	110.7	116.2	116.7	119.2	124.2	131.7	139.3	154.3	169.3	184.3	2.22	* 16.00	36.00
	113.3		120.8									135.8					150.8	165.8					2.23	* 5.60	13.00
98.1	100.6	105.1	105.6	108.1	110.6	111.1	113.2	115.7	118.2	120.7	121.7	123.2	124.7	130.2	130.7	133.2	138.2	145.7	153.2	168.2	183.2	198.2	2.24	10.50	24.00
	112.2		119.7									134.7					149.7	164.7					2.25	* 6.00	14.00
91.3	93.8	98.3	98.8	101.3	103.8	104.3	106.3	108.8	111.4	113.9	114.9	116.4	117.9	123.4	123.9	126.4	131.4	138.9	146.4	161.4	176.4	191.4	2.27	13.00	30.00
	105.4		112.9									127.9					143.0	158.0					2.29	* 8.50	20.00
	114.5		122.0									137.1					152.1	167.1					2.30	* 5.00	12.00
	107.8		115.3									130.3					145.3	160.3					2.33	* 7.50	18.00
98.5	101.0	105.5	106.0	108.5	111.0	111.5	113.5	116.0	118.5	121.0	122.0	123.5	125.1	130.6	131.1	133.6	138.6	146.1	153.6	168.6	183.6	198.6	2.35	10.00	24.00
	112.5		120.0									135.0					150.0	165.0					2.40	* 5.60	14.00
95.3	97.8	102.3	102.8	105.3	107.8	108.3	110.3	112.8	115.3	117.8	118.8	120.3	121.8	127.4	127.9	130.4	135.4	142.9	150.4	165.4	180.4	195.4	2.40	11.00	27.00
	105.8		113.3									128.3					143.3	158.3					2.43	* 8.00	20.00
92.0	94.5	99.1	99.6	102.1	104.6	105.1	107.1	109.6	112.1	114.6	115.6	117.1	118.6	124.1	124.6	127.1	132.2	139.7	147.2	162.2	177.2	192.3	2.45	12.00	30.00
98.9	101.4	105.9	106.4	108.9	111.4	111.9	113.9	116.4	118.9	121.4	122.4	123.9	125.4	130.9	131.4	133.9	138.9	146.5	154.0	169.0	184.0	199.0	2.46	9.50	24.00
	113.7		121.2									136.3					151.3	166.3					2.48	* 5.00	13.00
	108.2		115.7									130.7					145.7	160.7					2.49	* 7.00	18.00
95.6	98.2	102.7	103.2	105.7	108.2	108.7	110.7	113.2	115.7	118.2	119.2	120.7	122.2	127.7	128.2	130.7	135.7	143.3	150.8	165.8	180.8	195.8	2.51	10.50	27.00
85.5	88.0	92.5	93.0	95.5	98.1	98.6	100.6	103.1	105.6	108.1	109.1	110.6	112.1	117.7	118.2	120.7	125.7	133.2	140.8	155.8	170.8	185.9	2.53	14.00	36.00
	110.6		118.1									133.1					148.1	163.1					2.56	* 6.00	16.00
	106.2		113.7									128.7					143.7	158.7					2.58	* 7.50	20.00
99.2	101.8	106.3	106.8	109.3	111.8	112.3	114.3	116.8	119.3	121.8	122.8	124.3	125.8	131.3	131.8	134.3	139.3	146.8	154.3	169.3	184.3	199.3	2.60	9.00	24.00
96.0	98.5	103.0	103.5	106.0	108.6	109.1	111.1	113.6	116.1	118.6	119.6	121.1	122.6	128.1	128.6	131.1	136.1	143.6	151.2	166.2	181.2	196.2	2.63	10.00	27.00
	112.9		120.4									135.5					150.5	165.5					2.67	* 5.00	14.00
92.8	95.3	99.8	100.3	102.8	105.3	105.8	107.8	110.3	112.8	115.4	116.4	117.9	119.4	124.9	125.4	127.9	132.9	140.4	147.9	162.9	177.9	192.9	2.67	11.00	30.00
77.1	79.6	84.2	84.7	87.2	89.7	90.2	92.3	94.8	97.3	99.8	100.9	102.4	103.9	109.4	109.9	112.5	117.5	125.0	132.6	147.7	162.7	177.8	2.71	16.00	44.00
86.2	88.7	93.3	93.8	96.3	98.8	99.3	101.3	103.8	106.3	108.9	109.9	111.4	112.9	118.4	118.9	121.4	126.4	134.0	141.5	156.5	171.6	186.6	2.72	13.00	36.00
	110.9		118.4									133.4					148.4	163.4					2.73	* 5.60	16.00
	102.1		109.7									124.7					139.7	154.7					2.74	* 8.50	24.00
	106.5		114.1									129.1					144.1	159.1					2.76	* 7.00	20.00
96.4	98.9	103.4	103.9	106.4	108.9	109.4	111.4	113.9																	

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																			
Small Sheave	Large Sheave	Small Sheave	Large Sheave		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		
8.90	27.40	* 8.50	27.00	3.08																				
14.40	44.40	14.00	44.00	3.08																				
7.90	24.40	* 7.50	24.00	3.09																				
6.40	20.40	* 6.00	20.00	3.19																				
11.40	36.40	11.00	36.00	3.19																				
9.40	30.40	9.00	30.00	3.23																				
8.40	27.40	* 8.00	27.00	3.26																				
7.40	24.40	* 7.00	24.00	3.30																				
13.40	44.40	13.00	44.00	3.31																				
10.90	36.40	10.50	36.00	3.34																				
6.00	20.40	5.60	20.00	3.40																				
5.40	18.40	* 5.00	18.00	3.41																				
8.90	30.40	* 8.50	30.00	3.42																	16.1			
7.90	27.40	* 7.50	27.00	3.47																				
10.40	36.40	10.00	36.00	3.50																				
14.40	50.40	14.00	50.00	3.50																				
12.40	44.40	12.00	44.00	3.58																				
8.40	30.40	* 8.00	30.00	3.62																				
9.90	36.40	9.50	36.00	3.68																				
7.40	27.40	* 7.00	27.00	3.70																				
13.40	50.40	13.00	50.00	3.76																				
5.40	20.40	* 5.00	20.00	3.78																				
6.40	24.40	* 6.00	24.00	3.81																				
7.90	30.40	* 7.50	30.00	3.85																				
9.40	36.40	9.00	36.00	3.87																				
11.40	44.40	11.00	44.00	3.89																				
12.40	50.40	12.00	50.00	4.06																				
6.00	24.40	* 5.60	24.00	4.07																				
10.90	44.40	10.50	44.00	4.07																				
8.90	36.40	* 8.50	36.00	4.09																				
7.40	30.40	* 7.00	30.00	4.11																				
10.40	44.40	10.00	44.00	4.27																				
8.40	27.40	* 8.00	27.00	4.28																				
8.40	36.40	* 8.00	36.00	4.33																				
11.40	50.40	11.00	50.00	4.42																				
9.90	44.40	9.50	44.00	4.48																				
5.40	24.40	* 5.00	24.00	4.52																				
6.00	27.40	* 5.60	27.00	4.57																				
7.90	36.40	* 7.50	36.00	4.61																				
10.90	50.40	10.50	50.00	4.62																				
9.40	44.40	9.00	44.00	4.72																				
6.40	30.40	* 6.00	30.00	4.75																				
10.40	50.40	10.00	50.00	4.85																				
7.40	36.40	* 7.00	36.00	4.92																				
8.90	44.40	* 8.50	44.00	4.99																				
5.40	27.40	* 5.00	27.00	5.07																				
6.00	30.40	* 5.60	30.00	5.07																				
9.90	50.40	9.50	50.00	5.09																				
8.40	44.40	* 8.00	44.00	5.29																				
9.40	50.40	9.00	50.00	5.36																				
7.90	44.40	* 7.50	44.00	5.62																				
5.40	30.40	* 5.00	30.00	5.63																				
8.90	50.40	* 8.50	50.00	5.66																				
6.40	36.40	* 6.00	36.00	5.69																				
7.40	44.40	* 7.00	44.00	6.00																				
8.40	50.40	* 8.00	50.00	6.00																				
6.00	36.40	* 5.60	36.00	6.07																				
7.90	50.40	* 7.50	50.00	6.38																				
5.40	36.40	* 5.00	36.00	6.74																				
7.40	50.40	* 7.00	50.00	6.81																				
6.40	44.40	* 6.00	44.00	6.94																				
6.00	44.40	* 5.60	44.00	7.40																				
6.40	50.40	* 6.00	50.00	7.88																				
5.40	44.40	* 5.00	44.00	8.22																				
6.00	50.40	* 5.60	50.00	8.40																				
5.40	50.40	* 5.00	50.00	9.33																				

Key to Horsepower Correction Factor

0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
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* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																			Sheave Datum Diameters								
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	Speed Ratio	Small Sheave		Large Sheave				
71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90		91	92		93	8.50	14.00	27.00
																				20.0				3.08	*	8.50	27.00
																				25.0				3.08	*	14.00	44.00
																								3.09	*	7.50	24.00
																								3.19	*	6.00	20.00
																								3.19	*	11.00	36.00
																								3.23	*	9.00	30.00
																								3.26	*	8.00	27.00
																								3.30	*	7.00	24.00
																								3.31	*	13.00	44.00
																								3.34	*	10.50	36.00
																								3.40	*	5.60	20.00
																								3.41	*	5.00	18.00
																								3.42	*	8.50	30.00
																								3.47	*	7.50	27.00
																								3.50	*	10.00	36.00
																								3.50	*	14.00	50.00
																								3.58	*	12.00	44.00
																								3.62	*	8.00	30.00
																								3.68	*	9.50	36.00
																								3.70	*	7.00	27.00
																								3.76	*	13.00	50.00
																								3.78	*	5.00	20.00
																								3.81	*	6.00	24.00
																								3.85	*	7.50	30.00
																								3.87	*	9.00	36.00
																								3.89	*	11.00	44.00
																								4.06	*	12.00	50.00
																								4.07	*	5.60	24.00
																								4.07	*	10.50	44.00
																								4.09	*	8.50	36.00
																								4.11	*	7.00	30.00
																								4.27	*	10.00	44.00
																								4.28	*	6.00	27.00
																								4.33	*	8.00	36.00
																								4.42	*	11.00	50.00
																								4.48	*	9.50	44.00
																								4.52	*	5.00	24.00
																								4.57	*	5.60	27.00
																								4.61	*	7.50	36.00
																								4.62	*	10.50	50.00
																								4.72	*	9.00	44.00
																								4.75	*	6.00	30.00
																								4.85	*	10.00	50.00
																								4.92	*	7.00	36.00
																								4.99	*	8.50	44.00
																								5.07	*	5.00	27.00
																								5.07	*	5.60	30.00
																								5.09	*	9.50	50.00
																								5.29	*	8.00	44.00
																								5.36	*	9.00	50.00
																								5.62	*	7.50	44.00
																								5.63	*	5.00	30.00
																								5.66	*	8.50	50.00
																								5.69	*	6.00	36.00
																								6.00	*	7.00	44.00
																								6.00	*	8.00	50.00
																								6.07	*	5.60	36.00
																								6.38	*	7.50	50.00
																								6.74	*	5.00	36.00
																								6.81	*	7.00	50.00
																								6.94	*	6.00	44.00
																								7.40	*	5.60	44.00
																								7.88	*	6.00	50.00
																								8.22	*	5.00	44.00
																								8.40	*	5.60	50.00
																								9.33	*	5.00	50.00

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																						
Small Sheave	Large Sheave	Small Sheave	Large Sheave		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C			
					94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116
8.90	27.40	* 8.50	27.00	3.08							21.6	22.1				24.3	24.8			26.4			28.0			29.6	
14.40	44.40	* 14.00	44.00	3.08																							
7.90	24.40	* 7.50	24.00	3.09							25.4	25.9				28.0	28.5			30.1			31.6			33.2	
6.40	20.40	* 6.00	20.00	3.19							28.2	30.2	30.7			32.8	33.3			34.8			36.4			37.9	
11.40	36.40	* 11.00	36.00	3.19																							
9.40	30.40	* 9.00	30.00	3.23														21.7	22.3	22.9	23.4	24.0	24.5	25.1	25.6	26.2	26.7
8.40	27.40	* 8.00	27.00	3.26					19.6		21.9	22.4				24.6	25.1			26.8			28.4			29.9	
7.40	24.40	* 7.00	24.00	3.30					23.6		25.7	26.2				28.3	28.8			30.4			32.0			33.5	
13.40	44.40	* 13.00	44.00	3.31																							
10.90	36.40	* 10.50	36.00	3.34																							
6.00	20.40	* 5.60	20.00	3.40																							
5.40	18.40	* 5.00	18.00	3.41																							
8.90	30.40	* 8.50	30.00	3.42																							
7.90	27.40	* 7.50	27.00	3.47																							
10.40	36.40	* 10.00	36.00	3.50																							
14.40	50.40	* 14.00	50.00	3.50																							
12.40	44.40	* 12.00	44.00	3.58																							
8.40	30.40	* 8.00	30.00	3.62																							
9.90	36.40	* 9.50	36.00	3.68																							
7.40	27.40	* 7.00	27.00	3.70																							
13.40	50.40	* 13.00	50.00	3.76																							
5.40	20.40	* 5.00	20.00	3.78																							
6.40	24.40	* 6.00	24.00	3.81																							
7.90	30.40	* 7.50	30.00	3.85																							
9.40	36.40	* 9.00	36.00	3.87																							
11.40	44.40	* 11.00	44.00	3.89																							
12.40	50.40	* 12.00	50.00	4.06																							
6.00	24.40	* 5.60	24.00	4.07																							
10.90	44.40	* 10.50	44.00	4.07																							
8.90	36.40	* 8.50	36.00	4.09																							
7.40	30.40	* 7.00	30.00	4.11																							
10.40	44.40	* 10.00	44.00	4.27																							
6.40	27.40	* 6.00	27.00	4.28																							
8.40	36.40	* 8.00	36.00	4.33																							
11.40	50.40	* 11.00	50.00	4.42																							
9.90	44.40	* 9.50	44.00	4.48																							
5.40	24.40	* 5.00	24.00	4.52																							
6.00	27.40	* 5.60	27.00	4.57																							
7.90	36.40	* 7.50	36.00	4.61																							
10.90	50.40	* 10.50	50.00	4.62																							
9.40	44.40	* 9.00	44.00	4.72																							
6.40	30.40	* 6.00	30.00	4.75																							
10.40	50.40	* 10.00	50.00	4.85																							
7.40	36.40	* 7.00	36.00	4.92																							
8.90	44.40	* 8.50	44.00	4.95																							
5.40	27.40	* 5.00	27.00	5.07																							
6.00	30.40	* 5.60	30.00	5.07																							
9.90	50.40	* 9.50	50.00	5.09																							
8.40	44.40	* 8.00	44.00	5.29																							
9.40	50.40	* 9.00	50.00	5.36																							
7.90	44.40	* 7.50	44.00	5.62																							
5.40	30.40	* 5.00	30.00	5.63																							
8.90	50.40	* 8.50	50.00	5.66																							
6.40	36.40	* 6.00	36.00	5.69																							
7.40	44.40	* 7.00	44.00	6.00																							
8.40	50.40	* 8.00	50.00	6.00																							
6.00	36.40	* 5.60	36.00	6.07																							
7.90	50.40	* 7.50	50.00	6.38																							
5.40	36.40	* 5.00	36.00	6.74																							
7.40	50.40	* 7.00	50.00	6.81																							
6.40	44.40	* 6.00	44.00	6.94																							
6.00	44.40	* 5.60	44.00	7.40																							
6.40	50.40	* 6.00	50.00	7.88																							
5.40	44.40	* 5.00	44.00	8.22																							
6.00	50.40	* 5.60	50.00	8.40																							
5.40	50.40	* 5.00	50.00	9.33																							

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance														Speed Ratio	Sheave Datum Diameters												
C	C	C	C CX CP	C	C	C CX	C	C	C	C	C	C	C		C	C	C	C	Small Sheave	Large Sheave							
117	118	119	120	121	122	123	124	125	126	127	128	130	131	132	133	134	135	136	137	138	139	140	3.08	* 8.50	27.00		
			32.2			36.4					39.0				39.0			40.5						3.08	14.00	44.00	
			35.8			37.3					39.9				42.4			43.9						3.09	* 7.50	24.00	
			40.4			41.9					44.5				47.0			48.5						3.19	* 6.00	20.00	
	27.3	27.8	28.4	28.9	29.4	30.0	30.5	31.0	31.6	32.1	32.6	33.1	34.2	34.7	35.2	35.8	36.3	36.8	37.3	37.9	38.4	38.9	39.4	3.19	11.00	36.00	
			32.6			34.1					36.7				39.3			40.9						3.26	* 8.00	27.00	
			36.1			37.6					40.2				42.8			44.3						3.30	* 7.00	24.00	
											25.7	26.8	27.4	28.0	28.5	29.1	29.6	30.2	30.7	31.3	31.8	32.4		3.31	13.00	44.00	
			40.7			42.2					44.8				47.3			48.8						3.34	10.50	36.00	
			42.9			44.4					46.9				49.5			51.0						3.40	* 5.60	20.00	
			29.2			30.8					33.5				36.1			37.7						3.41	* 5.00	18.00	
			32.9			34.5					37.1				39.6			41.2						3.42	* 8.50	30.00	
											25.4	26.0	27.1	27.7	28.3	28.8	29.4	30.0	30.5	31.1	31.6	32.2	32.7	3.47	* 7.50	27.00	
																								3.50	10.00	36.00	
																								3.50	14.00	50.00	
																								3.58	12.00	44.00	
	29.5					31.1					33.8				36.4			38.0						3.62	* 8.00	30.00	
											25.1	25.7	26.3	27.4	28.0	28.6	29.1	29.7	30.3	30.8	31.4	31.9	32.5	33.0	3.68	9.50	36.00
																								3.70	* 7.00	27.00	
																								3.76	13.00	50.00	
																								3.78	* 5.00	20.00	
																								3.81	* 6.00	24.00	
																								3.85	* 7.50	30.00	
																								3.87	9.00	36.00	
																								3.89	11.00	44.00	
																								4.06	12.00	50.00	
																								4.07	* 5.60	24.00	
																								4.07	10.50	44.00	
																								4.09	* 8.50	36.00	
																								4.11	* 7.00	30.00	
																								4.27	10.00	44.00	
																								4.28	* 6.00	27.00	
																								4.33	* 8.00	36.00	
																								4.42	11.00	50.00	
																								4.48	9.50	44.00	
																								4.52	* 5.00	24.00	
																								4.57	* 5.60	27.00	
																								4.61	* 7.50	36.00	
																								4.62	10.50	50.00	
																								4.72	9.00	44.00	
																								4.75	* 6.00	30.00	
																								4.85	10.00	50.00	
																								4.92	* 7.00	35.00	
																								4.99	* 8.50	44.00	
																								5.07	* 5.00	27.00	
																								5.07	* 5.60	30.00	
																								5.09	9.50	50.00	
																								5.29	* 8.00	44.00	
																								5.36	9.00	50.00	
																								5.62	* 7.50	44.00	
																								5.63	* 5.00	30.00	
																								5.66	* 8.50	50.00	
																								5.69	* 6.00	36.00	
																								6.00	* 7.00	44.00	
																								6.00	* 8.00	50.00	
																								6.07	* 5.60	35.00	
																								6.38	* 7.50	50.00	
																								6.74	* 5.00	36.00	
																								6.81	* 7.00	50.00	
																								6.94	* 6.00	44.00	
																								7.40	* 5.60	44.00	
																								7.88	6.00	50.00	
																								8.22	* 5.00	44.00	
																								8.40	* 5.60	50.00	
																								9.33	* 5.00	50.00	

Key to Horsepower Correction Factor: 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4

* Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-Belts. Use of non-notched V-Belts can result in reduced belt performance and loss of energy efficiency. See Table No. D4 on Page D7.

Heavy Duty V-Belt Drive Design Manual

Table No. B23

Hi-Power® II V-Belt, Tri-Power® Molded Notch V-Belt, Predator V-Belt, Hi-Power® II PowerBand® Belt and Predator PowerBand Belt Drives



V-Belt No. and Center Distance																			Sheave Datum Diameters								
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	Speed Ratio	Small Sheave	Large Sheave					
167	168	169	170	173	175	176	177	178	180	181	182	183	184	185	187	188	189	190	193	195	197	198	3.08	* 8.50	27.00		
36.2	36.8	37.3	37.9	39.5	40.6	41.1	41.7	42.2	43.3	43.8	44.3	44.9	45.4	45.9	47.0	47.5	48.0	48.6	50.1	51.2	52.2	52.7	3.08	14.00	44.00		
				62.7					66.2						69.7			71.2		73.7			3.09	7.50	24.00		
				67.2					70.7						74.2			75.7		78.2			3.19	* 6.00	20.00		
46.3	46.9	47.4	47.9	49.4	50.5	51.0	51.5	52.0	53.1	53.6	54.1	54.6	55.1	55.6	56.7	57.2	57.7	58.2	59.7	60.7	61.8	62.3	3.19	11.00	36.00		
				56.3	57.4	57.9	58.4	58.9	59.9	60.4	60.9	61.4	61.9	62.4	63.4	64.0	64.5	65.0	66.5	67.5	68.5	69.0	3.23	9.00	30.00		
				59.7					63.2						66.8			68.3		70.8			3.26	* 8.00	27.00		
				63.0					66.6						70.1			71.6		74.1			3.30	* 7.00	24.00		
36.9	37.4	38.0	38.5	40.2	41.2	41.8	42.3	42.8	43.9	44.5	45.0	45.5	46.0	46.6	47.6	48.2	48.7	49.2	50.8	51.8	52.9	53.4	3.31	13.00	44.00		
46.7	47.2	47.7	48.2	49.8	50.8	51.3	51.9	52.4	53.4	53.9	54.4	54.9	55.5	56.0	57.0	57.5	58.0	58.5	60.1	61.1	62.1	62.6	3.34	10.50	36.00		
				67.5					71.0						74.5			76.0		78.5			3.40	* 5.60	20.00		
				69.6					73.1						76.6			78.1		80.6			3.41	* 5.00	18.00		
				60.3					63.8						67.3			68.8		71.3			3.42	* 8.50	30.00		
				60.1					63.6						67.1			68.7		71.2			3.47	* 7.50	27.00		
47.0	47.5	48.1	48.6	50.1	51.2	51.7	52.2	52.7	53.7	54.3	54.8	55.3	55.8	56.3	57.3	57.9	58.4	58.9	60.4	61.4	62.5	63.0	3.50	10.00	36.00		
					34.4				34.9						40.6			41.2		41.7			3.50	14.00	50.00		
37.5	38.1	38.6	39.2	40.8	41.9	42.4	43.0	43.5	44.6	45.1	45.6	46.2	46.7	47.2	48.3	48.8	49.4	49.9	51.5	52.5	53.6	54.1	3.58	* 12.00	44.00		
				57.0					60.6						64.2			65.7		68.2			3.62	* 8.00	30.00		
47.3	47.9	48.4	48.9	50.5	51.5	52.0	52.5	53.1	54.1	54.6	55.1	55.6	56.1	56.7	57.7	58.2	58.7	59.2	60.8	61.8	62.8	63.3	3.68	9.50	36.00		
				60.4					64.0						67.5			69.0		71.5			3.70	* 7.00	27.00		
					34.4	34.9	35.5	36.1	37.3	37.9	38.4	39.0	39.6	40.1	41.2	41.8	42.4	42.9	44.6	45.7	46.8	47.3	3.76	13.00	50.00		
				67.9					71.4						74.9			76.4		79.0			3.78	* 5.00	20.00		
				63.8					67.3						70.8			72.3		74.8			3.81	* 6.00	24.00		
				57.4					61.0						64.5			66.0		68.6			3.85	* 7.50	30.00		
47.7	48.2	48.7	49.2	50.8	51.8	52.4	52.9	53.4	54.4	54.9	55.5	56.0	56.5	57.0	58.0	58.5	59.1	59.6	61.1	62.1	63.2	63.7	3.87	9.00	36.00		
38.1	38.7	39.2	39.8	41.4	42.5	43.1	43.6	44.1	45.2	45.7	46.3	46.8	47.3	47.9	48.9	49.5	50.0	50.5	52.1	53.2	54.2	54.7	3.89	11.00	44.00		
				33.8	35.0	35.5	36.1	36.7	37.9	38.5	39.0	39.6	40.2	40.7	41.9	42.4	43.0	43.5	45.2	46.3	47.4	47.9	4.06	12.00	50.00		
				64.0					67.6						71.1			72.6		75.1			4.07	* 5.60	24.00		
38.4	39.0	39.5	40.1	41.7	42.8	43.4	43.9	44.5	45.5	46.1	46.6	47.1	47.7	48.2	49.3	49.8	50.3	50.9	52.4	53.5	54.6	55.1	4.07	10.50	44.00		
				51.1					54.8						58.4			59.9		62.5			4.09	* 8.50	36.00		
				57.7					61.3						64.9			66.4		68.9			4.11	* 7.00	30.00		
38.7	39.3	39.9	40.4	42.1	43.1	43.7	44.2	44.8	45.8	46.4	46.9	47.5	48.0	48.5	49.6	50.1	50.7	51.2	52.8	53.8	54.9	55.4	4.27	10.00	44.00		
				61.1					64.7						68.2			69.7		72.3			4.28	* 6.00	27.00		
				51.5					55.1						58.7			60.3		62.8			4.33	* 8.00	36.00		
				34.3	35.5	36.1	36.7	37.3	38.5	39.1	39.6	40.2	40.8	41.4	42.5	43.0	43.6	44.2	45.8	46.9	48.0	48.6	4.42	11.00	50.00		
39.1	39.6	40.2	40.7	42.4	43.5	44.0	44.5	45.1	46.2	46.7	47.2	47.8	48.3	48.9	49.9	50.5	51.0	51.5	53.1	54.2	55.2	55.7	4.48	9.50	44.00		
				64.5					68.0						71.5			73.1		75.6			4.52	* 5.00	24.00		
				61.4					65.0						68.5			70.0		72.6			4.57	* 5.60	27.00		
				51.8					55.4						59.1			60.6		63.2			4.61	* 7.50	36.00		
				32.8	34.6	35.8	36.4	37.0	37.6	38.8	39.4	39.9	40.5	41.1	41.7	42.8	43.4	43.9	44.5	46.1	47.2	48.3	48.9	4.62	10.50	50.00	
39.4	39.9	40.5	41.0	42.7	43.8	44.3	44.9	45.4	46.5	47.0	47.6	48.1	48.6	49.2	50.2	50.8	51.3	51.8	53.4	54.5	55.5	56.1	4.72	9.00	44.00		
				58.4					62.0						65.6			67.1		69.6			4.75	* 6.00	30.00		
				32.4	33.1	33.9	36.1	36.7	37.3	37.9	39.1	39.7	40.2	40.8	41.4	42.0	43.1	43.7	44.2	44.8	47.6	48.7	49.2	4.85	10.00	50.00	
				52.1					55.8						59.4			60.9		63.5			4.92	* 7.00	36.00		
				43.0					46.8						50.6			52.2		54.8			4.99	* 8.50	44.00		
				61.8					65.4						68.9			70.5		73.0			5.07	* 5.00	27.00		
				58.7					62.3						65.9			67.4		69.9			5.07	* 5.60	30.00		
				32.7	33.4	35.2	36.4	37.0	37.6	38.2	39.4	40.0	40.5	41.1	41.7	42.3	43.4	44.0	44.5	45.1	46.8	47.9	49.0	49.5	5.09	9.50	50.00
				43.3					47.1						50.9			52.5		55.1			5.29	* 8.00	44.00		
				32.4	33.0	33.6	35.5	36.7	37.3	37.9	38.5	39.7	40.3	40.9	41.4	42.0	42.6	43.7	44.3	44.8	47.1	48.2	49.3	49.8	5.36	9.00	50.00
				59.1					62.7						66.3			67.8		70.3			5.62	* 7.50	44.00		
				35.8					40.0						44.0			45.7		48.5			5.63	* 5.00	30.00		
				52.8					56.5						60.1			61.6		64.2			5.66	* 8.50	50.00		
				43.9					47.8						51.5			53.1		55.8			5.69	* 6.00	36.00		
				35.1					40.3						44.3			46.0		48.8			6.00	* 7.00	44.00		
				53.1					56.7						60.4			61.9		64.5			6.07	* 8.00	50.00		
				36.4					40.6						44.6			46.3		49.1			6.38	* 5.60	36.00		
				53.5					57.1						60.8			62.3		64.9			6.74	* 5.00	36.00		
				36.7					40.9						44.9			46.6		49.4			6.81	* 7.00	50.00		
				44.6					48.4						52.2			53.8		56.5			6.94	* 6.00	44.00		
				44.8					48.7						52.4			54.0		56.7			7.40	* 5.60	44.00		
				37.8					41.5						45.5			47.2		50.0			7.88	* 6.00	50.00		
				45.2					49.0						52.8			54.4		57.1			8.22	* 5.00	44.00		
				37.5					41.7						45.8			47.5		50.3			8.40	* 5.60	50.00		
				37.8					42.1						46.2			47.9		50.7			9.33	* 5.00	50.00		

Heavy Duty V-Belt Drive Design Manual

Table No. B24

Hi-Power® II V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																					
Small Sheave	Large Sheave	Small Sheave	Large Sheave		D 90	D 98	D 104	D 105	D 107	D 108	D 110	D 112	D 120	D 124	D 128	D 132	D 135	D 136	D 140	D 144	D 148	D 152	D 154	D 158	D 160	
13.60	13.60	13.00	13.00	1.00	26.2	30.2	33.2	33.7	34.7	35.2	36.2	37.2	41.2	43.2	45.2	47.2	48.7	49.2	51.2	53.2	55.2	57.2	58.2	60.2	60.2	61.2
14.10	14.10	13.50	13.50	1.00	25.4	29.4	32.4	32.9	33.9	34.4	35.4	36.4	40.4	42.4	44.4	46.4	47.9	48.4	50.4	52.4	54.4	56.4	57.4	59.4	59.4	60.4
14.60	14.60	14.00	14.00	1.00	24.7	28.7	31.7	32.2	33.2	33.7	34.7	35.7	39.7	41.7	43.7	45.7	47.2	47.7	49.7	51.7	53.7	55.7	56.7	58.7	58.7	59.7
15.10	15.10	14.50	14.50	1.00	23.9	27.9	30.9	31.4	32.4	32.9	33.9	34.9	38.9	40.9	42.9	44.9	46.4	46.9	48.9	50.9	52.9	54.9	55.9	57.9	57.9	58.9
15.60	15.60	15.00	15.00	1.00	23.1	27.1	30.1	30.6	31.6	32.1	33.1	34.1	38.1	40.1	42.1	44.1	45.6	46.1	48.1	50.1	52.1	54.1	55.1	57.1	57.1	58.1
16.10	16.10	15.50	15.50	1.00	22.3	26.3	29.3	29.8	30.8	31.3	32.3	33.3	37.3	39.3	41.3	43.3	44.8	45.3	47.3	49.3	51.3	53.3	54.3	56.3	56.3	57.3
16.60	16.60	16.00	16.00	1.00	21.5	25.5	28.5	29.0	30.0	30.5	31.5	32.5	36.5	38.5	40.5	42.5	44.0	44.5	46.5	48.5	50.5	52.5	53.5	55.5	55.5	56.5
17.60	17.60	17.00	17.00	1.00	19.9	23.9	26.9	27.4	28.4	28.9	29.9	30.9	34.9	36.9	38.9	40.9	42.4	42.9	44.9	46.9	48.9	50.9	51.9	53.9	53.9	54.9
18.60	18.60	18.00	18.00	1.00	22.4	25.4	28.4	28.9	29.9	30.4	31.4	32.4	36.4	38.4	40.4	42.4	43.9	44.4	46.4	48.4	50.4	52.4	54.4	55.4	57.4	57.4
20.60	20.60	20.00	20.00	1.00	22.7	25.7	28.7	29.2	30.2	30.7	31.7	32.7	36.7	38.7	40.7	42.7	44.2	44.7	46.7	48.7	50.7	52.7	54.7	55.7	57.7	57.7
22.60	22.60	22.00	22.00	1.00	21.1	24.1	27.1	27.6	28.6	29.1	30.1	31.1	35.1	37.1	39.1	41.1	42.6	43.1	45.1	47.1	49.1	51.1	53.1	54.1	56.1	56.1
14.60	15.10	14.00	14.50	1.03	24.3	28.3	31.3	31.8	32.8	33.3	34.3	35.3	39.3	41.3	43.3	45.3	46.8	47.3	49.3	51.3	53.3	55.3	56.3	58.3	58.3	59.3
15.10	15.60	14.50	15.00	1.03	23.5	27.5	30.5	31.0	32.0	32.5	33.5	34.5	38.5	40.5	42.5	44.5	46.0	46.5	48.5	50.5	52.5	54.5	55.5	57.5	57.5	58.5
15.60	16.10	15.00	15.50	1.03	22.7	26.7	29.7	30.2	31.2	31.7	32.7	33.7	37.7	39.7	41.7	43.7	45.2	45.7	47.7	49.7	51.7	53.7	54.7	56.7	56.7	57.7
16.10	16.60	15.50	16.00	1.03	21.9	25.9	28.9	29.4	30.4	30.9	31.9	32.9	36.9	38.9	40.9	42.9	44.4	44.9	46.9	48.9	50.9	52.9	53.9	55.9	55.9	56.9
13.60	14.10	13.00	13.50	1.04	25.8	29.8	32.8	33.3	34.3	34.8	35.8	36.8	40.8	42.8	44.8	46.8	48.3	48.8	50.8	52.8	54.8	56.8	57.8	59.8	59.8	60.8
14.10	14.60	13.50	14.00	1.04	25.1	29.1	32.1	32.6	33.6	34.1	35.1	36.1	40.1	42.1	44.1	46.1	47.6	48.1	50.1	52.1	54.1	56.1	57.1	59.1	59.1	60.1
15.60	16.60	15.00	16.00	1.06	22.3	26.3	29.3	29.8	30.8	31.3	32.3	33.3	37.3	39.3	41.3	43.3	44.8	45.3	47.3	49.3	51.3	53.3	54.3	56.3	56.3	57.3
16.60	17.60	16.00	17.00	1.06	20.7	24.7	27.7	28.2	29.2	29.7	30.7	31.7	35.7	37.7	39.7	41.7	43.2	43.7	45.7	47.7	49.7	51.7	52.7	54.7	54.7	55.7
17.60	18.60	17.00	18.00	1.06	23.2	27.2	30.2	30.7	31.7	32.2	33.2	34.2	38.2	40.2	42.2	44.2	45.7	46.2	48.2	50.2	52.2	54.2	55.2	57.2	57.2	58.2
13.60	14.60	13.00	14.00	1.07	25.4	29.4	32.4	32.9	33.9	34.4	35.4	36.4	40.4	42.4	44.4	46.4	47.9	48.4	50.4	52.4	54.4	56.4	57.4	59.4	59.4	60.4
14.10	15.10	13.50	14.50	1.07	24.7	28.7	31.7	32.2	33.2	33.7	34.7	35.7	39.7	41.7	43.7	45.7	47.2	47.7	49.7	51.7	53.7	55.7	56.7	58.7	58.7	59.7
14.60	15.60	14.00	15.00	1.07	23.9	27.9	30.9	31.4	32.4	32.9	33.9	34.9	38.9	40.9	42.9	44.9	46.4	46.9	48.9	50.9	52.9	54.9	55.9	57.9	57.9	58.9
15.10	16.10	14.50	15.50	1.07	23.1	27.1	30.1	30.6	31.6	32.1	33.1	34.1	38.1	40.1	42.1	44.1	45.6	46.1	48.1	50.1	52.1	54.1	55.1	57.1	57.1	58.1
16.10	17.60	15.50	17.00	1.09	21.1	25.1	28.1	28.6	29.6	30.1	31.1	32.1	36.1	38.1	40.1	42.1	43.6	44.1	46.1	48.1	50.1	52.1	53.1	55.1	55.1	56.1
22.60	24.60	22.00	24.00	1.09	21.1	25.1	28.1	28.6	29.6	30.1	31.1	32.1	36.1	38.1	40.1	42.1	43.6	44.1	46.1	48.1	50.1	52.1	53.1	55.1	55.1	56.1
14.60	16.10	14.00	15.50	1.10	23.5	27.5	30.5	31.0	32.0	32.5	33.5	34.5	38.5	40.5	42.5	44.5	46.0	46.5	48.5	50.5	52.5	54.5	55.5	57.5	57.5	58.5
15.10	16.60	14.50	16.00	1.10	22.7	26.7	29.7	30.2	31.2	31.7	32.7	33.7	37.7	39.7	41.7	43.7	45.2	45.7	47.7	49.7	51.7	53.7	54.7	56.7	56.7	57.7
20.60	22.60	20.00	22.00	1.10	23.6	27.6	30.6	31.1	32.1	32.6	33.6	34.6	38.6	40.6	42.6	44.6	46.1	46.6	48.6	50.6	52.6	54.6	55.6	57.6	57.6	58.6
13.60	15.10	13.00	14.50	1.11	25.0	29.0	32.0	32.5	33.5	34.0	35.0	36.0	40.0	42.0	44.0	46.0	47.5	48.0	50.0	52.0	54.0	56.0	57.0	59.0	59.0	60.0
14.10	15.60	13.50	15.00	1.11	24.3	28.3	31.3	31.8	32.8	33.3	34.3	35.3	39.3	41.3	43.3	45.3	46.8	47.3	49.3	51.3	53.3	55.3	56.3	58.3	58.3	59.3
18.60	20.60	18.00	20.00	1.11	21.1	25.1	28.1	28.6	29.6	30.1	31.1	32.1	36.1	38.1	40.1	42.1	43.6	44.1	46.1	48.1	50.1	52.1	53.1	55.1	55.1	56.1
18.60	20.60	18.00	20.00	1.12	19.9	23.9	26.9	27.4	28.4	28.9	29.9	30.9	34.9	36.9	38.9	40.9	42.4	42.9	44.9	46.9	48.9	50.9	51.9	53.9	53.9	54.9
15.60	17.60	15.00	17.00	1.13	21.5	25.5	28.5	29.0	30.0	30.5	31.5	32.5	36.5	38.5	40.5	42.5	44.0	44.5	46.5	48.5	50.5	52.5	53.5	55.5	55.5	56.5
14.10	16.10	13.50	15.50	1.14	23.9	27.9	30.9	31.4	32.4	32.9	33.9	34.9	38.9	40.9	42.9	44.9	46.4	46.9	48.9	50.9	52.9	54.9	55.9	57.9	57.9	58.9
14.60	16.60	14.00	16.00	1.14	23.1	27.1	30.1	30.6	31.6	32.1	33.1	34.1	38.1	40.1	42.1	44.1	45.6	46.1	48.1	50.1	52.1	54.1	55.1	57.1	57.1	58.1
13.60	15.60	13.00	15.00	1.15	24.6	28.6	31.6	32.1	33.1	33.6	34.6	35.6	39.6	41.6	43.6	45.6	47.1	47.6	49.6	51.6	53.6	55.6	56.6	58.6	58.6	59.6
16.10	18.60	15.50	18.00	1.16	20.3	24.3	27.3	27.8	28.8	29.3	30.3	31.3	35.3	37.3	39.3	41.3	42.8	43.3	45.3	47.3	49.3	51.3	52.3	54.3	54.3	55.3
15.10	17.60	14.50	17.00	1.17	21.9	25.9	28.9	29.4	30.4	30.9	31.9	32.9	36.9	38.9	40.9	42.9	44.4	44.9	46.9	48.9	50.9	52.9	53.9	55.9	55.9	56.9
17.60	20.60	17.00	20.00	1.17	21.1	25.1	28.1	28.6	29.6	30.1	31.1	32.1	36.1	38.1	40.1	42.1	43.6	44.1	46.1	48.1	50.1	52.1	53.1	55.1	55.1	56.1
13.60	16.10	13.00	15.50	1.18	24.2	28.2	31.2	31.7	32.7	33.2	34.2	35.2	39.2	41.2	43.2	45.2	46.7	47.2	49.2	51.2	53.2	55.2	56.2	58.2	58.2	59.2
14.10	16.60	13.50	16.00	1.18	23.4	27.4	30.4	30.9	31.9	32.4	33.4	34.4	38.4	40.4	42.4	44.4	45.9	46.4	48.4	50.4	52.4	54.4	55.4	57.4	57.4	58.4

Heavy Duty V-Belt Drive Design Manual

Table No. B24

Hi-Power® II V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																				Speed Ratio	Sheave Datum Diameters						
D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D		Small Sheave	Large Sheave					
162	164	165	166	167	170	171	173	180	195	205	210	220	225	230	240	248	255	260	270	280	285	300	315	330	1.00	13.00	13.00
62.2	63.2	63.7	64.2	64.7	66.2	66.7	67.7	71.2	78.7	83.7	86.2	90.0	92.5	95.0	100.0	104.0	107.5	110.0	115.0	120.0	122.5	130.0	137.5	145.0	1.00	13.50	13.50
61.4	62.4	62.9	63.4	63.9	65.4	65.9	66.9	70.4	77.9	82.9	85.4	89.2	91.7	94.2	99.2	103.2	106.7	109.2	114.2	119.2	121.7	129.2	136.7	144.2	1.00	14.00	14.00
60.7	61.7	62.2	62.7	63.2	64.7	65.2	66.2	69.7	77.2	82.2	84.7	88.4	90.9	93.4	98.4	102.4	105.9	108.4	113.4	118.4	120.9	128.4	135.9	143.4	1.00	14.50	14.50
59.9	60.9	61.4	61.9	62.4	63.9	64.4	65.4	68.9	76.4	81.4	83.9	87.6	90.1	92.6	97.6	101.6	105.1	107.6	112.6	117.6	120.1	127.6	135.1	142.6	1.00	15.00	15.00
59.1	60.1	60.6	61.1	61.6	63.1	63.6	64.6	68.1	75.6	80.6	83.1	86.8	89.3	91.8	96.8	100.8	104.3	106.8	111.8	116.8	119.3	126.8	134.3	141.8	1.00	15.50	15.00
58.3	59.3	59.8	60.3	60.8	62.3	62.8	63.8	67.3	74.8	79.8	82.3	86.0	88.5	91.0	96.0	100.0	103.5	106.0	111.0	116.0	118.5	126.0	133.5	141.0	1.00	16.00	15.50
57.5	58.5	59.0	59.5	60.0	61.5	62.0	63.0	66.5	74.0	79.0	81.5	85.2	87.7	90.2	95.2	99.2	102.7	105.2	110.2	115.2	117.7	125.2	132.7	140.2	1.00	16.00	16.00
55.9	56.9	57.4	57.9	58.4	59.9	60.4	61.4	64.9	72.4	77.4	79.9	83.6	86.1	88.6	93.6	97.6	101.1	103.6	108.6	113.6	116.1	123.6	131.1	138.6	1.00	17.00	17.00
54.4	55.4	55.9	56.4	56.9	58.4	58.9	59.9	63.4	70.9	75.9	78.4	82.1	84.6	87.1	92.1	96.1	99.6	102.1	107.1	112.1	114.6	122.1	129.6	137.1	1.00	18.00	18.00
51.2	52.2	52.7	53.2	53.7	55.2	55.7	56.7	60.2	67.7	72.7	75.2	78.9	81.4	83.9	88.9	92.9	96.4	98.9	103.9	108.9	111.4	119.4	126.9	134.4	1.00	20.00	20.00
48.1	49.1	49.6	50.1	50.6	52.1	52.6	53.6	57.1	64.6	69.6	72.1	75.8	78.3	80.8	85.8	89.8	93.3	95.8	100.8	105.8	108.3	116.3	123.8	131.3	1.00	22.00	22.00
60.3	61.3	61.8	62.3	62.8	64.3	64.8	65.8	69.3	76.8	81.8	84.3	88.0	90.5	93.0	98.0	102.0	105.5	108.0	113.0	118.0	120.5	128.0	135.5	143.0	1.03	14.00	14.50
59.5	60.5	61.0	61.5	62.0	63.5	64.0	65.0	68.5	76.0	81.0	83.5	87.2	89.7	92.2	97.2	101.2	104.7	107.2	112.2	117.2	119.7	127.2	134.7	142.2	1.03	14.50	15.00
58.7	59.7	60.2	60.7	61.2	62.7	63.2	64.2	67.7	75.2	80.2	82.7	86.4	88.9	91.4	96.4	100.4	103.9	106.4	111.4	116.4	118.9	126.4	133.9	141.4	1.03	15.00	15.50
57.9	58.9	59.4	59.9	60.4	61.9	62.4	63.4	66.9	74.4	79.4	81.9	85.6	88.1	90.6	95.6	99.6	103.1	105.6	110.6	115.6	118.1	125.6	133.1	140.6	1.03	15.50	16.00
61.8	62.8	63.3	63.8	64.3	65.8	66.3	67.3	70.8	78.3	83.3	85.8	89.5	92.0	94.5	99.5	103.5	107.0	109.5	114.5	119.5	122.0	130.0	137.5	145.0	1.04	13.00	13.50
61.1	62.1	62.6	63.1	63.6	65.1	65.6	66.6	70.1	77.6	82.6	85.1	88.8	91.3	93.8	98.8	102.8	106.3	108.8	113.8	118.8	121.3	128.8	136.3	143.8	1.04	13.50	14.00
58.3	59.3	59.8	60.3	60.8	62.3	62.8	63.8	67.3	74.8	79.8	82.3	86.0	88.5	91.0	96.0	100.0	103.5	106.0	111.0	116.0	118.5	126.0	133.5	141.0	1.06	15.00	16.00
56.7	57.7	58.2	58.7	59.2	60.7	61.2	62.2	65.7	73.2	78.2	80.7	84.4	86.9	89.4	94.4	98.4	101.9	104.4	109.4	114.4	116.9	124.4	131.9	139.4	1.06	16.00	17.00
55.2	56.2	56.7	57.2	57.7	59.2	59.7	60.7	64.2	71.7	76.7	79.2	82.9	85.4	87.9	92.9	96.9	100.4	102.9	107.9	112.9	115.4	122.9	130.4	137.9	1.06	17.00	18.00
61.4	62.4	62.9	63.4	63.9	65.4	65.9	66.9	70.4	77.9	82.9	85.4	89.1	91.6	94.1	99.1	103.1	106.6	109.1	114.1	119.1	121.6	129.1	136.6	144.1	1.07	13.00	14.00
60.7	61.7	62.2	62.7	63.2	64.7	65.2	66.2	69.7	77.2	82.2	84.7	88.4	90.9	93.4	98.4	102.4	105.9	108.4	113.4	118.4	120.9	128.4	135.9	143.4	1.07	13.50	14.50
59.9	60.9	61.4	61.9	62.4	63.9	64.4	65.4	68.9	76.4	81.4	83.9	87.6	90.1	92.6	97.6	101.6	105.1	107.6	112.6	117.6	120.1	127.6	135.1	142.6	1.07	14.00	15.00
59.1	60.1	60.6	61.1	61.6	63.1	63.6	64.6	68.1	75.6	80.6	83.1	86.8	89.3	91.8	96.8	100.8	104.3	106.8	111.8	116.8	119.3	126.8	134.3	141.8	1.07	14.50	15.50
57.1	58.1	58.6	59.1	59.6	61.1	61.6	62.6	66.1	73.6	78.6	81.1	84.8	87.3	89.8	94.8	98.8	102.3	104.8	109.8	114.8	117.3	124.8	132.3	139.8	1.09	15.00	17.00
46.5	47.5	48.0	48.5	49.0	50.5	51.0	52.0	55.5	63.0	68.0	70.5	74.2	76.7	79.2	84.2	88.2	91.7	94.2	99.2	104.2	106.7	114.2	121.7	129.2	1.09	22.00	24.00
59.5	60.5	61.0	61.5	62.0	63.5	64.0	65.0	68.5	76.0	81.0	83.5	87.2	89.7	92.2	97.2	101.2	104.7	107.2	112.2	117.2	119.7	127.2	134.7	142.2	1.10	14.00	15.50
58.7	59.7	60.2	60.7	61.2	62.7	63.2	64.2	67.7	75.2	80.2	82.7	86.4	88.9	91.4	96.4	100.4	103.9	106.4	111.4	116.4	118.9	126.4	133.9	141.4	1.10	14.50	16.00
49.7	50.7	51.2	51.7	52.2	53.7	54.2	55.2	58.7	66.2	71.2	73.7	77.4	79.9	82.4	87.4	91.4	94.9	97.4	102.4	107.4	109.9	117.4	124.9	132.4	1.10	20.00	22.00
61.0	62.0	62.5	63.0	63.5	65.0	65.5	66.5	70.0	77.5	82.5	85.0	88.7	91.2	93.7	98.7	102.7	106.2	108.7	113.7	118.7	121.2	128.7	136.2	143.7	1.11	13.00	14.50
60.3	61.3	61.8	62.3	62.8	64.3	64.8	65.8	69.3	76.8	81.8	84.3	88.0	90.5	93.0	98.0	102.0	105.5	108.0	113.0	118.0	120.5	128.0	135.5	143.0	1.11	13.50	15.00
52.8	53.8	54.3	54.8	55.3	56.8	57.3	58.3	61.8	69.3	74.3	76.8	80.5	83.0	85.5	90.5	94.5	98.0	100.5	105.5	110.5	113.0	120.5	128.0	135.5	1.11	18.00	20.00
55.9	56.9	57.4	57.9	58.4	59.9	60.4	61.4	64.9	72.4	77.4	79.9	83.6	86.1	88.6	93.6	97.6	101.1	103.6	108.6	113.6	116.1	123.6	131.1	138.6	1.12	16.00	18.00
57.5	58.5	59.0	59.5	60.0	61.5	62.0	63.0	66.5	74.0	79.0	81.5	85.2	87.7	90.2	95.2	99.2	102.7	105.2	110.2	115.2	117.7	125.2	132.7	140.2	1.13	15.00	17.00
59.9	60.9	61.4	61.9	62.4	63.9	64.4	65.4	68.9	76.4	81.4	83.9	87.6	90.1	92.6	97.6	101.6	105.1	107.6	112.6	117.6	120.1	127.6	135.1	142.6	1.14	13.50	15.50
59.1	60.1	60.6	61.1	61.6	63.1	63.6	64.6	68.1	75.6	80.6	83.1	86.8	89.3	91.8	96.8	100.8	104.3	106.8	111.8	116.8	119.3	126.8	134.3	141.8	1.14	14.00	16.00
60.7	61.7	62.2	62.7	63.2	64.7	65.2	66.2	69.7	77.2	82.2	84.7	88.4	90.9	93.4	98.4	102.4	105.9	108.4	113.4	118.4	120.9	128.4	135.9	143.4	1.15	13.00	15.00
56.3	57.3	57.8	58.3	58.8	60.3	60.8	61.8	65.3	72.8	77.8	80.3	84.0	86.5	89.0	94.0	98.0	101.5	104.0	109.0	114.0	116.5	124.0	131.5	139.0	1.16	15.00	18.00
57.9	58.9	59.4	59.9	60.4	61.9	62.4	63.4	66.9	74.4	79.4	81.9	85.6	88.1	90.6	95.6	99.6	103.1	105.6	110.6	115.6	118.1	125.6	133.1	140.6	1.17	14.50	17.00
53.6	54.6	55.1	55.6	56.1	57.6	58.1	59.1	62.6	70.1	75.1	77.6	81.3	83.8	86.3	91.3	95.3	98.8	101.3	106.3	111.3	113.8	121.3	128.8	136.3	1.17	17.00	20.00
60.3	61.3	61.8	62.3	62.8	64.3	64.8	65.8	69.3	76.8	81.8	84.3	88.0	90.5	93.0	98.0	102.0	105.5	108.0	113.0	118.0	120.5	128.0	135.5	143.0	1.18	13.00	15.50
59.5	60.5	61.0	61.5	62.0	63.5	64.0	65.0	68.5	76.0	81.0	83.5	87.2	89.7	92.2	97.2	101.2	104.7	107.2	112.2	117.2	119.7	127.2	134.7	142.2	1.18	13.50	16.00
56.7	57.7	58.2	58.7	59.2	60.7	61.2	62.2	65.7	73.2	78.2	80.7	84.4	86.9	89.4	94.4	98.4	101.9	104.4	109.4	114.4	116.9	124.4	131.9	139.4	1.19	15.00	18.00
48.1	49.1	49.6	50.1	50.6	52.1	52.6	53.6	57.1	64.6	69.6	72.1	75.8	78.3	80.8	85.8	89.8	93.3	95.8	100.8	105.8	108.3	115.8	123.3	1			

Heavy Duty V-Belt Drive Design Manual

Table No. B24

Hi-Power® II V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance												
Small Sheave	Large Sheave	Small Sheave	Large Sheave		D 335	D 345	D 354	D 360	D 390	D 394	D 420	D 441	D 450	D 480	D 540	D 600	D 660
13.60	13.60	13.00	13.00	1.00	147.5	152.5	157.0	160.0	175.0	177.0	190.0	200.5	205.0	220.0	250.0	280.0	310.0
14.10	14.10	13.50	13.50	1.00	146.7	151.7	156.2	159.2	174.2	176.2	189.2	199.7	204.2	219.2	249.2	279.2	309.2
14.60	14.60	14.00	14.00	1.00	145.9	150.9	155.4	158.4	173.4	175.4	188.4	198.9	203.4	218.4	248.4	278.4	308.4
15.10	15.10	14.50	14.50	1.00	145.1	150.1	154.6	157.6	172.6	174.6	187.6	198.1	202.6	217.6	247.6	277.6	307.6
15.60	15.60	15.00	15.00	1.00	144.3	149.3	153.8	156.8	171.8	173.8	186.8	197.3	201.8	216.8	246.8	276.8	306.8
16.10	16.10	15.50	15.50	1.00	143.5	148.5	153.0	156.0	171.0	173.0	186.0	196.5	201.0	216.0	246.0	276.0	306.0
16.60	16.60	16.00	16.00	1.00	142.8	147.8	152.3	155.3	170.3	172.3	185.3	195.8	200.3	215.3	245.3	275.3	305.3
17.60	17.60	17.00	17.00	1.00	141.2	146.2	150.7	153.7	168.7	170.7	183.7	194.2	198.7	213.7	243.7	273.7	303.7
18.60	18.60	18.00	18.00	1.00	139.6	144.6	149.1	152.1	167.1	169.1	182.1	192.6	197.1	212.1	242.1	272.1	302.1
20.60	20.60	20.00	20.00	1.00	136.5	141.5	146.0	149.0	164.0	166.0	179.0	189.5	194.0	209.0	239.0	269.0	299.0
22.60	22.60	22.00	22.00	1.00	133.3	138.3	142.8	145.8	160.8	162.8	175.8	186.3	190.8	205.8	235.8	265.8	295.8
14.60	15.10	14.00	14.50	1.03	145.5	150.5	155.0	158.0	173.0	175.0	188.0	198.5	203.0	218.0	248.0	278.0	308.0
15.10	15.60	14.50	15.00	1.03	144.7	149.7	154.2	157.2	172.2	174.2	187.2	197.7	202.2	217.2	247.2	277.2	307.2
15.60	16.10	15.00	15.50	1.03	143.9	148.9	153.4	156.4	171.4	173.4	186.4	196.9	201.4	216.4	246.4	276.4	306.4
16.10	16.60	15.50	16.00	1.03	143.2	148.2	152.7	155.7	170.7	172.7	185.7	196.2	200.7	215.7	245.7	275.7	305.7
13.60	14.10	13.00	13.50	1.04	147.1	152.1	156.6	159.6	174.6	176.6	189.6	200.1	204.6	219.6	249.6	279.6	309.6
14.10	14.60	13.50	14.00	1.04	146.3	151.3	155.8	158.8	173.8	175.8	188.8	199.3	203.8	218.8	248.8	278.8	308.8
15.60	16.60	15.00	16.00	1.06	142.0	147.0	151.5	154.5	169.5	171.5	184.5	195.0	199.5	214.5	244.5	274.5	304.5
17.60	18.60	17.00	18.00	1.06	140.4	145.4	149.9	152.9	167.9	169.9	182.9	193.4	197.9	212.9	242.9	272.9	302.9
13.60	14.60	13.00	14.00	1.07	146.7	151.7	156.2	159.2	174.2	176.2	189.2	199.7	204.2	219.2	249.2	279.2	309.2
14.10	15.10	13.50	14.50	1.07	145.9	150.9	155.4	158.4	173.4	175.4	188.4	198.9	203.4	218.4	248.4	278.4	308.4
14.60	15.60	14.00	15.00	1.07	145.1	150.1	154.6	157.6	172.6	174.6	187.6	198.1	202.6	217.6	247.6	277.6	307.6
15.10	16.10	14.50	15.50	1.07	144.3	149.3	153.8	156.8	171.8	173.8	186.8	197.3	201.8	216.8	246.8	276.8	306.8
16.10	17.60	15.50	17.00	1.09	142.4	147.4	151.9	154.9	169.9	171.9	184.9	195.4	199.9	214.9	244.9	274.9	304.9
22.60	24.60	22.00	24.00	1.09	131.8	136.8	141.3	144.3	159.3	161.3	174.3	184.8	189.3	204.3	234.3	264.3	294.3
14.60	16.10	14.00	15.50	1.10	144.7	149.7	154.2	157.2	172.2	174.2	187.2	197.7	202.2	217.2	247.2	277.2	307.2
15.10	16.60	14.50	16.00	1.10	143.9	148.9	153.4	156.4	171.4	173.4	186.4	196.9	201.4	216.4	246.4	276.4	306.4
20.60	22.60	20.00	22.00	1.10	134.9	139.9	144.4	147.4	162.4	164.4	177.4	187.9	192.4	207.4	237.4	267.4	297.4
13.60	15.10	13.00	14.50	1.11	146.3	151.3	155.8	158.8	173.8	175.8	188.8	199.3	203.8	218.8	248.8	278.8	308.8
14.10	15.60	13.50	15.00	1.11	145.5	150.5	155.0	158.0	173.0	175.0	188.0	198.5	203.0	218.0	248.0	278.0	308.0
18.60	20.60	18.00	20.00	1.11	138.1	143.1	147.6	150.6	165.6	167.6	180.6	191.1	195.6	210.6	240.6	270.6	300.6
16.60	18.60	16.00	18.00	1.12	141.2	146.2	150.7	153.7	168.7	170.7	183.7	194.2	198.7	213.7	243.7	273.7	303.7
15.60	17.60	15.00	17.00	1.13	142.8	147.8	152.3	155.3	170.3	172.3	185.3	195.8	200.3	215.3	245.3	275.3	305.3
14.10	16.10	13.50	15.50	1.14	145.1	150.1	154.6	157.6	172.6	174.6	187.6	198.1	202.6	217.6	247.6	277.6	307.6
14.60	16.60	14.00	16.00	1.14	144.3	149.3	153.8	156.8	171.8	173.8	186.8	197.3	201.8	216.8	246.8	276.8	306.8
13.60	15.60	13.00	15.00	1.15	145.9	150.9	155.4	158.4	173.4	175.4	188.4	198.9	203.4	218.4	248.4	278.4	308.4
16.10	18.60	15.50	18.00	1.16	141.6	146.6	151.1	154.1	169.1	171.1	184.1	194.6	199.1	214.1	244.1	274.1	304.1
15.10	17.60	14.50	17.00	1.17	143.2	148.2	152.7	155.7	170.7	172.7	185.7	196.2	200.7	215.7	245.7	275.7	305.7
17.60	20.60	17.00	20.00	1.17	138.8	143.8	148.3	151.3	166.3	168.3	181.3	191.8	196.3	211.3	241.3	271.3	301.3
13.60	16.10	13.00	15.50	1.18	145.5	150.5	155.0	158.0	173.0	175.0	188.0	198.5	203.0	218.0	248.0	278.0	308.0
14.10	16.60	13.50	16.00	1.18	144.7	149.7	154.2	157.2	172.2	174.2	187.2	197.7	202.2	217.2	247.2	277.2	307.2
15.60	18.60	15.00	18.00	1.19	142.0	147.0	151.5	154.5	169.5	171.5	184.5	195.0	199.5	214.5	244.5	274.5	304.5
20.60	24.60	20.00	24.00	1.19	133.3	138.3	142.8	145.8	160.8	162.8	175.8	186.3	190.8	205.8	235.8	265.8	295.8
14.60	17.60	14.00	17.00	1.21	143.5	148.5	153.0	156.0	171.0	173.0	186.0	196.5	201.0	216.0	246.0	276.0	306.0
13.60	16.60	13.00	16.00	1.22	145.1	150.1	154.6	157.6	172.6	174.6	187.6	198.1	202.6	217.6	247.6	277.6	307.6
18.60	22.60	18.00	22.00	1.22	136.5	141.5	146.0	149.0	164.0	166.0	179.0	189.5	194.0	209.0	239.0	269.0	299.0
22.60	27.60	22.00	27.00	1.22	129.4	134.4	138.9	141.9	156.9	158.9	171.9	182.4	186.9	201.9	231.9	261.9	291.9
15.10	18.60	14.50	18.00	1.23	142.4	147.4	151.9	154.9	169.9	171.9	184.9	195.4	199.9	214.9	244.9	274.9	304.9
16.60	20.60	16.00	20.00	1.24	139.6	144.6	149.1	152.1	167.1	169.1	182.1	192.6	197.1	212.1	242.1	272.1	302.1
14.10	17.80	13.50	17.00	1.25	143.9	148.9	153.4	156.4	171.4	173.4	186.4	196.9	201.4	216.4	246.4	276.4	306.4
14.60	18.60	14.00	18.00	1.27	142.8	147.8	152.3	155.3	170.3	172.3	185.3	195.8	200.3	215.3	245.3	275.3	305.3
16.10	20.60	15.50	20.00	1.28	140.0	145.0	149.5	152.5	167.5	169.5	182.5	193.0	197.5	212.5	242.5	272.5	302.5
17.60	22.60	17.00	22.00	1.28	137.2	142.2	146.7	149.7	164.7	166.7	179.7	190.2	194.7	209.7	239.7	269.7	299.7
13.60	17.80	13.00	17.00	1.29	144.3	149.3	153.8	156.8	171.8	173.8	186.8	197.3	201.8	216.8	246.8	276.8	306.8
14.10	18.60	13.50	18.00	1.32	143.1	148.1	152.6	155.6	170.6	172.6	185.6	196.1	200.6	215.6	245.6	275.6	305.6
15.60	20.60	15.00	20.00	1.32	140.4	145.4	149.9	152.9	167.9	169.9	182.9	193.4	197.9	212.9	242.9	272.9	302.9
18.60	24.60	18.00	24.00	1.32	134.9	139.9	144.4	147.4	162.4	164.4	177.4	187.9	192.4	207.4	237.4	267.4	297.4
20.60	27.60	20.00	27.00	1.34	130.9	135.9	140.4	143.4	158.4	160.4	173.4	183.9	188.4	203.4	233.4	263.4	293.4
15.10	20.60	14.50	20.00	1.36	140.8	145.8	150.3	153.3	168.3	170.3	183.3	193.8	198.3	213.3	243.3	273.3	303.3
16.60	22.60	16.00	22.00	1.36	138.0	143.0	147.5	150.5	165.5	167.5	180.5	191.0	195.5	210.5	240.5	270.5	300.5
13.60	18.60	13.00	18.00	1.37	143.5	148.5	153.0	156.0	171.0	173.0	186.0	196.5	201.0	216.0	246.0	276.0	306.0
16.10	22.60	15.50	22.00	1.40	138.4	143.4	147.9	150.9	165.9	167.9	180.9	191.4	195.9	210.9	240.9	270.9	300.9
17.60	24.60	17.00	24.00	1.40	135.7	140.7	145.2	148.2	163.2	165.2	178.2	188.7	193.2	208.2	238.2	268.2	298.2
14.60	20.60	14.00	20.00	1.41	141.2	146.2	150.7	153.7	168.7	170.7	183.7	194.2	198.7	213.7	243.7	273.7	303.7
15.60	22.60	15.00	22.00	1.45	138.8	143.8	148.3	151.3	166.3	168.3							

Heavy Duty V-Belt Drive Design Manual

Table No. B24

Hi-Power® II V-Belt and Hi-Power® II PowerBand® Belt Drives



Sheave Outside Diameters		Sheave Datum Diameters		Speed Ratio	V-Belt No. and Center Distance																				
Small Sheave	Large Sheave	Small Sheave	Large Sheave		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D		
16.10	24.60	15.50	24.00	1.53																					
14.60	22.60	14.00	22.00	1.55	22.0	25.1	25.6	26.6	27.1	28.1	29.1	33.1	35.1	37.2	39.2	40.7	41.2	43.2	45.2	47.2	49.2	50.2	52.2		
17.60	27.60	17.00	27.00	1.57								26.6	28.7	30.7	32.7	34.7	36.7	38.3	38.8	40.8	42.8	44.8	46.8		
15.60	24.60	15.00	24.00	1.58	22.4	25.4	25.9	26.9	27.4	28.5	29.5	33.5	35.5	37.5	39.5	41.0	41.6	43.6	45.6	47.6	49.6	50.6	52.6		
14.10	22.60	13.50	22.00	1.60								26.0	27.0	31.0	33.1	35.1	37.1	38.6	39.1	41.1	43.2	45.2	47.2		
15.10	24.60	14.50	24.00	1.63																					
20.60	33.60	20.00	33.00	1.63														29.3	31.3	33.4	35.4	36.4	38.5	39.5	
13.60	22.60	13.00	22.00	1.66	22.7	25.8	26.3	27.3	27.8	28.8	29.8	33.9	35.9	37.9	39.9	41.4	41.9	43.9	45.9	47.9	50.0	51.0	53.0		
16.60	27.60	16.00	27.00	1.66								27.3	29.4	31.4	33.4	34.9	35.5	37.5	39.5	41.5	43.5	44.5	46.6	47.6	
14.60	24.60	14.00	24.00	1.68			23.3	23.8	24.8	25.3	26.3	27.3	31.4	33.4	35.5	37.5	39.0	39.5	41.5	43.5	45.5	47.5	48.5	50.6	
16.10	27.60	15.50	27.00	1.71																					
14.10	24.60	13.50	24.00	1.74		23.6	24.1	25.1	25.7	26.7	27.7	31.8	33.8	35.8	37.8	39.3	39.9	41.9	43.9	45.9	47.9	48.9	50.9		
15.60	27.60	15.00	27.00	1.77								23.9	28.0	30.1	32.1	34.1	35.7	36.2	38.2	40.2	42.2	44.3	45.3	47.3	
22.60	40.60	22.00	40.00	1.80																					
13.60	24.60	13.00	24.00	1.81		24.0	24.5	25.5	26.0	27.0	28.0	32.1	34.1	36.2	38.2	39.7	40.2	42.2	44.2	46.3	48.3	49.3	51.3		
18.60	33.60	18.00	33.00	1.81																					
15.10	27.60	14.50	27.00	1.83								24.2	28.4	30.4	32.5	34.5	36.0	36.5	38.5	40.6	42.6	44.6	47.6	48.7	
14.60	27.60	14.00	27.00	1.89								23.5	24.6	28.7	30.8	32.8	34.8	36.4	36.9	38.9	40.9	43.0	45.0	48.0	
17.60	33.60	17.00	33.00	1.91														28.8	29.3	31.4	33.4	35.5	37.5	38.5	40.6
14.10	27.60	13.50	27.00	1.96								23.9	24.9	29.1	31.1	33.2	35.2	36.7	37.2	39.3	41.3	43.3	45.3	46.3	
20.60	40.60	20.00	40.00	1.97																					
16.60	33.60	16.00	33.00	2.02														27.9	29.4	30.0	32.0	34.1	36.2	38.2	
13.60	27.60	13.00	27.00	2.03			22.6	23.2	24.2	25.3	29.4	31.5	33.5	35.5	37.1	37.6	39.6	41.6	43.7	45.7	46.7	48.7	49.7		
16.10	33.60	15.50	33.00	2.09														28.2	29.8	30.3	32.4	34.4	36.5	38.6	
15.60	33.60	15.00	33.00	2.15														28.5	30.1	30.6	32.7	34.8	36.8	38.9	
22.60	48.60	22.00	48.00	2.15																					
18.60	40.60	18.00	40.00	2.18																					
15.10	33.60	14.50	33.00	2.23														26.7	28.8	30.4	31.0	33.0	35.1	37.2	
14.60	33.60	14.00	33.00	2.30														27.1	29.2	30.8	31.3	33.4	35.5	37.5	
17.60	40.60	17.00	40.00	2.31																					
20.60	48.60	20.00	48.00	2.36																					
14.10	33.60	13.50	33.00	2.38														27.4	29.5	31.1	31.6	33.7	35.8	37.9	
16.60	40.60	16.00	40.00	2.45																					
13.60	33.60	13.00	33.00	2.47														27.7	29.8	31.4	31.9	34.0	36.1	38.2	
16.10	40.60	15.50	40.00	2.52																					
22.60	58.60	22.00	58.00	2.59																					
15.60	40.60	15.00	40.00	2.60																					
18.60	48.60	18.00	48.00	2.61																					
15.10	40.60	14.50	40.00	2.69																					
17.60	48.60	17.00	48.00	2.76																					
14.60	40.60	14.00	40.00	2.78																					
20.60	58.60	20.00	58.00	2.84																					
14.10	40.60	13.50	40.00	2.88																					
16.60	48.60	16.00	48.00	2.93																					
13.60	40.60	13.00	40.00	2.99																					
16.10	48.60	15.50	48.00	3.02																					
15.60	48.60	15.00	48.00	3.12																					
18.60	58.60	18.00	58.00	3.15																					
15.10	48.60	14.50	48.00	3.22																					
14.60	48.60	14.00	48.00	3.33																					
17.60	58.60	17.00	58.00	3.33																					
14.10	48.60	13.50	48.00	3.45																					
16.60	58.60	16.00	58.00	3.53																					
13.60	48.60	13.00	48.00	3.57																					
16.10	58.60	15.50	58.00	3.64																					
15.60	58.60	15.00	58.00	3.76																					
15.10	58.60	14.50	58.00	3.88																					
14.60	58.60	14.00	58.00	4.01																					
14.10	58.60	13.50	58.00	4.16																					
13.60	58.60	13.00	58.00	4.31																					

Key to Horsepower Correction Factor



Heavy Duty V-Belt Drive Design Manual

Table No. B24

Hi-Power® II V-Belt and Hi-Power® II PowerBand® Belt Drives



V-Belt No. and Center Distance																Speed Ratio	Sheave Datum Diameters	
D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D		Small Sheave	Large Sheave
119.3	126.8	134.3	136.8	141.8	146.3	149.3	164.3	166.3	179.3	189.8	194.3	209.3	239.3	269.3	299.3	1.53	15.50	24.00
122.1	129.6	137.1	139.6	144.6	149.1	152.1	167.1	169.1	182.1	192.6	197.1	212.1	242.1	272.1	302.1	1.55	14.00	22.00
115.7	123.2	130.7	133.2	138.3	142.8	145.8	160.8	162.8	175.8	186.3	190.8	205.8	235.8	265.8	295.8	1.57	17.00	27.00
119.7	127.2	134.7	137.2	142.2	146.7	149.7	164.7	166.7	179.7	190.2	194.7	209.7	239.7	269.7	299.7	1.58	15.00	24.00
122.4	129.9	137.5	140.0	145.0	149.5	152.5	167.5	169.5	182.5	193.0	197.5	212.5	242.5	272.5	302.5	1.60	13.50	22.00
120.1	127.6	135.1	137.6	142.6	147.1	150.1	165.1	167.1	180.1	190.6	195.1	210.1	240.1	270.1	300.1	1.63	14.50	24.00
108.6	116.1	123.6	126.1	131.1	135.6	138.6	153.6	155.6	168.6	179.2	183.7	198.7	228.7	258.7	288.7	1.63	20.00	33.00
122.8	130.3	137.8	140.3	145.3	149.8	152.8	167.8	169.8	182.8	193.4	197.9	212.9	242.9	272.9	302.9	1.66	13.00	22.00
116.5	124.0	131.5	134.0	139.0	143.5	146.5	161.5	163.5	176.5	187.0	191.5	206.5	236.5	266.5	296.5	1.66	16.00	27.00
120.5	128.0	135.5	138.0	143.0	147.5	150.5	165.5	167.5	180.5	191.0	195.5	210.5	240.5	270.5	300.5	1.68	14.00	24.00
116.9	124.4	131.9	134.4	139.4	143.9	146.9	161.9	163.9	176.9	187.4	191.9	206.9	236.9	266.9	296.9	1.71	15.50	27.00
120.8	128.3	135.8	138.3	143.3	147.8	150.8	165.8	167.8	180.8	191.3	195.8	210.8	240.8	270.8	300.8	1.74	13.50	24.00
117.3	124.8	132.3	134.8	139.8	144.3	147.3	162.3	164.3	177.3	187.8	192.3	207.3	237.3	267.3	297.3	1.77	15.00	27.00
101.3	108.8	116.4	118.9	123.9	128.4	131.4	146.4	148.4	161.4	171.9	176.4	191.4	221.4	251.4	281.4	1.80	22.00	40.00
121.2	128.7	136.2	138.7	143.7	148.2	151.2	166.2	168.2	181.2	191.7	196.2	211.2	241.2	271.2	301.2	1.81	13.00	24.00
110.1	117.6	125.1	127.6	132.6	137.1	140.1	155.1	157.1	170.1	180.6	185.1	200.1	230.1	260.1	290.1	1.81	18.00	33.00
117.6	125.1	132.6	135.1	140.1	144.6	147.6	162.6	164.6	177.6	188.1	192.6	207.6	237.6	267.6	297.6	1.83	14.50	27.00
118.0	125.5	133.0	135.5	140.5	145.0	148.0	163.0	165.0	178.0	188.5	193.0	208.0	238.0	268.0	298.0	1.89	14.00	27.00
118.8	118.4	125.9	128.4	133.4	137.9	140.9	155.9	157.9	170.9	181.4	185.9	200.9	230.9	260.9	290.9	1.91	17.00	33.00
118.4	125.9	133.4	135.9	140.9	145.4	148.4	163.4	165.4	178.4	188.9	193.4	208.4	238.4	268.4	298.4	1.96	13.50	27.00
102.8	110.3	117.9	120.4	125.4	129.9	132.9	147.9	149.9	162.9	173.4	177.9	192.9	222.9	252.9	282.9	1.97	20.00	40.00
111.6	119.1	126.6	129.1	134.1	138.6	141.6	156.6	158.6	171.6	182.1	186.6	201.6	231.6	261.6	291.6	2.02	16.00	33.00
118.8	126.3	133.8	136.3	141.3	145.8	148.8	163.8	165.8	178.8	189.3	193.8	208.8	238.8	268.8	298.8	2.03	13.00	27.00
112.0	119.5	127.0	129.5	134.5	139.0	142.0	157.0	159.0	172.0	182.5	187.0	202.0	232.0	262.0	292.0	2.09	15.50	33.00
112.3	119.9	127.4	129.9	134.9	139.4	142.4	157.4	159.4	172.4	182.9	187.4	202.4	232.4	262.4	292.4	2.15	15.00	33.00
94.5	102.1	109.7	112.2	117.2	121.7	124.7	139.7	141.7	154.7	165.2	169.7	184.7	214.7	244.7	274.7	2.15	22.00	48.00
104.3	111.8	119.3	121.9	126.9	131.4	134.4	149.4	151.4	164.4	174.9	179.4	194.4	224.4	254.4	284.4	2.18	18.00	40.00
112.7	120.2	127.8	130.3	135.3	139.8	142.8	157.8	159.8	172.8	183.3	187.8	202.8	232.8	262.8	292.8	2.23	14.50	33.00
113.1	120.6	128.1	130.6	135.6	140.1	143.1	158.1	160.1	173.1	183.6	188.1	203.1	233.1	263.1	293.1	2.30	14.00	33.00
105.0	112.5	120.1	122.6	127.6	132.1	135.1	150.1	152.1	165.1	175.6	180.1	195.1	225.1	255.1	285.1	2.31	17.00	40.00
96.0	103.5	111.1	113.6	118.6	123.1	126.1	141.1	143.1	156.1	166.6	171.1	186.1	216.1	246.1	276.1	2.36	20.00	48.00
113.5	121.0	128.5	131.0	136.0	140.5	143.5	158.5	160.5	173.5	184.0	188.5	203.5	233.5	263.5	293.5	2.38	13.50	33.00
105.7	113.3	120.8	123.3	128.3	132.8	135.8	150.8	152.8	165.8	176.3	180.8	195.8	225.8	255.8	285.8	2.45	16.00	40.00
113.8	121.4	128.9	131.4	136.4	140.9	143.9	158.9	160.9	173.9	184.4	188.9	203.9	233.9	263.9	293.9	2.47	13.00	33.00
106.1	113.6	121.2	123.7	128.7	133.2	136.2	151.2	153.2	166.2	176.7	181.2	196.2	226.2	256.2	286.2	2.52	15.50	40.00
85.7	93.3	101.0	103.5	108.5	113.0	116.0	131.0	133.0	146.0	156.5	161.0	176.0	206.0	236.0	266.0	2.59	22.00	58.00
106.5	114.0	121.6	124.1	129.1	133.6	136.6	151.6	153.6	166.6	177.1	181.6	196.6	226.6	256.6	286.6	2.60	15.00	40.00
97.4	105.0	112.6	115.1	120.1	124.6	127.6	142.6	144.6	157.6	168.1	172.6	187.6	217.6	247.6	277.6	2.61	18.00	48.00
106.8	114.4	121.9	124.4	129.4	133.9	136.9	151.9	153.9	166.9	177.4	181.9	196.9	226.9	256.9	286.9	2.69	14.50	40.00
98.1	105.7	113.3	115.8	120.8	125.3	128.3	143.3	145.3	158.3	168.8	173.3	188.3	218.3	248.3	278.3	2.76	17.00	48.00
107.2	114.8	122.3	124.8	129.8	134.3	137.3	152.3	154.3	167.3	177.8	182.3	197.3	227.3	257.3	287.3	2.78	14.00	40.00
87.1	94.7	102.4	104.9	110.0	114.6	117.6	132.6	134.6	147.6	158.1	162.6	177.6	207.6	237.6	267.6	2.84	20.00	58.00
107.6	115.1	122.7	125.2	130.2	134.7	137.7	152.7	154.7	167.7	178.2	182.7	197.7	227.7	257.7	287.7	2.88	13.50	40.00
98.8	106.4	114.0	116.5	121.5	126.0	129.0	144.0	146.0	159.0	169.5	174.0	189.0	219.0	249.0	279.0	2.93	16.00	48.00
107.9	115.5	123.0	125.5	130.5	135.0	138.0	153.0	155.0	168.0	178.5	183.0	198.0	228.0	258.0	288.0	2.99	13.00	40.00
99.2	106.8	114.4	116.9	121.9	126.4	129.4	144.4	146.4	159.4	170.0	174.5	189.5	219.5	249.5	279.5	3.02	15.50	48.00
99.5	107.1	114.7	117.3	122.3	126.8	129.8	144.8	146.8	159.8	170.4	174.9	189.9	219.9	249.9	279.9	3.12	18.00	48.00
88.4	96.1	103.8	106.3	111.4	116.0	119.0	134.0	136.0	149.0	160.0	164.5	179.5	209.5	239.5	270.0	3.15	18.00	58.00
99.9	107.5	115.1	117.6	122.6	127.1	130.1	145.1	147.1	160.1	171.0	175.5	190.5	220.5	250.5	280.5	3.22	14.50	48.00
100.3	107.9	115.5	118.0	123.0	127.5	130.5	145.5	147.5	160.5	171.4	175.9	190.9	220.9	250.9	280.9	3.33	14.00	48.00
89.1	96.8	104.5	107.0	112.1	116.7	119.7	134.7	136.7	149.7	160.7	165.2	180.2	210.2	240.2	270.2	3.33	17.00	58.00
100.6	108.2	115.8	118.3	123.3	127.8	130.8	145.8	147.8	160.8	171.7	176.2	191.2	221.2	251.2	281.2	3.45	13.50	48.00
89.8	97.5	105.2	107.7	112.8	117.4	120.4	135.4	137.4	150.4	161.4	165.9	180.9	210.9	240.9	270.9	3.53	16.00	58.00
101.0	108.6	116.2	118.7	123.7	128.2	131.2	146.2	148.2	161.2	172.1	176.6	191.6	221.6	251.6	281.6	3.57	13.00	48.00
90.2	97.9	105.5	108.1	113.2	117.8	120.8	135.8	137.8	150.8	161.8	166.3	181.3	211.3	241.3	271.3	3.64	15.50	58.00
90.5	98.2	105.9	108.4	113.5	118.1	121.1	136.1	138.1	151.1	162.1	166.6	181.6	211.6	241.6	271.6	3.76	15.00	58.00
90.8	98.5	106.2	108.7	113.8	118.4	121.4	136.4	138.4	151.4	162.4	166.9	181.9	211.9	241.9	271.9	3.88	14.50	58.00
91.2	98.9	106.6	109.1	114.2	118.8	121.8	136.8	138.8	151.8	162.8	167.3	182.3	212.3	242.3	272.3	4.01	14.00	58.00
91.5	99.2	106.9	109.4	114.5	119.1	122.1	137.1	139.1	152.1	163.1	167.6	182.6	212.6	242.6	272.6	4.16	13.50	58.00
91.9	99.6	107.3	109.8	114.9	119.5	122.5	137.5	139.5	152.5	163.5	168.0	183.0	213.0	243.0	273.0	4.31	13.00	58.00

Key to Horsepower Correction Factor: 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4

Table No. B25



Rated Horsepower per belt for A Section Hi-Power II® V-Belts and Hi-Power II® PowerBand Belts

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Datum Diameter																			RPM of Faster Shaft	Additional Horsepower per Belt for Speed Ratio																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	Basic Horsepower per Belt for Small Sheave Datum Diameter																				Additional Horsepower per Belt for Speed Ratio																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.20	5.40	5.60	5.80	6.00	6.20	6.40	6.60		7.00	1.00 to 1.01	1.02 to 1.03	1.04 to 1.05	1.06 to 1.07	1.08 to 1.09	1.10 to 1.11	1.12 to 1.13	1.14 to 1.15	1.16 to 1.17	1.18 to 1.19	1.20 to 1.21	1.22 to 1.23	1.24 to 1.25	1.26 to 1.27	1.28 to 1.29	1.30 to 1.31	1.32 to 1.33	1.34 to 1.35	1.36 to 1.37	1.38 to 1.39	1.40 to 1.41	1.42 to 1.43	1.44 to 1.45	1.46 to 1.47	1.48 to 1.49	1.50 to 1.51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
950	1.40	1.62	1.83	2.04	2.25	2.46	2.67	2.88	3.08	3.29	3.49	3.69	3.89	4.09	4.29	4.49	4.69	4.88	5.08	5.46	0.00	0.02	0.05	0.07	0.09	0.12	0.14	0.17	0.20	0.23	0.26	0.29	0.32	0.35	0.39	0.43	0.47	0.51	0.55	0.59	0.63	0.67	0.71	0.75	0.79	0.83	0.87	0.91	0.95	0.99	1.03	1.07	1.11	1.15	1.19	1.23	1.27	1.31	1.35	1.39	1.43	1.47	1.51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
1160	1.62	1.87	2.13	2.38	2.63	2.88	3.13	3.37	3.62	3.86	4.10	4.34	4.57	4.81	5.04	5.28	5.51	5.74	5.96	6.42	1160	0.00	0.03	0.06	0.09	0.12	0.14	0.17	0.20	0.23	0.26	0.29	0.32	0.35	0.39	0.43	0.47	0.51	0.55	0.59	0.63	0.67	0.71	0.75	0.79	0.83	0.87	0.91	0.95	0.99	1.03	1.07	1.11	1.15	1.19	1.23	1.27	1.31	1.35	1.39	1.43	1.47	1.51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
1425	1.86	2.17	2.47	2.77	3.07	3.37	3.66	3.95	4.24	4.53	4.81	5.09	5.37	5.65	5.92	6.20	6.47	6.73	7.00	7.52	1425	0.00	0.04	0.07	0.11	0.14	0.18	0.21	0.25	0.28	0.32	0.35	0.39	0.43	0.47	0.51	0.55	0.59	0.63	0.67	0.71	0.75	0.79	0.83	0.87	0.91	0.95	0.99	1.03	1.07	1.11	1.15	1.19	1.23	1.27	1.31	1.35	1.39	1.43	1.47	1.51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
1750	2.13	2.50	2.86	3.21	3.57	3.92	4.26	4.61	4.94	5.28	5.61	5.94	6.27	6.59	6.90	7.22	7.53	7.84	8.14	8.73	1750	0.00	0.04	0.07	0.11	0.14	0.18	0.21	0.25	0.28	0.32	0.35	0.39	0.43	0.47	0.51	0.55	0.59	0.63	0.67	0.71	0.75	0.79	0.83	0.87	0.91	0.95	0.99	1.03	1.07	1.11	1.15	1.19	1.23	1.27	1.31	1.35	1.39	1.43	1.47	1.51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
2850	2.80	3.33	3.85	4.37	4.87	5.36	5.85	6.32	6.78	7.24	7.68	8.11	8.53	8.93	9.33	9.71	10.1	10.4	10.8	11.4	2850	0.00	0.07	0.14	0.21	0.28	0.35	0.43	0.50	0.57	0.64	0.71	0.78	0.84	0.91	0.98	1.05	1.12	1.19	1.26	1.33	1.40	1.47	1.54	1.61	1.68	1.75	1.82	1.89	1.96	2.03	2.10	2.17	2.24	2.31	2.38	2.45	2.52	2.59	2.66	2.73	2.80	2.87	2.94	3.01	3.08	3.15	3.22	3.29	3.36	3.43	3.50	3.57	3.64	3.71	3.78	3.85	3.92	3.99	4.06	4.13	4.20	4.27	4.34	4.41	4.48	4.55	4.62	4.69	4.76	4.83	4.90	4.97	5.04	5.11	5.18	5.25	5.32	5.39	5.46	5.53	5.60	5.67	5.74	5.81	5.88	5.95	6.02	6.09	6.16	6.23	6.30	6.37	6.44	6.51	6.58	6.65	6.72	6.79	6.86	6.93	7.00	7.07	7.14	7.21	7.28	7.35	7.42	7.49	7.56	7.63	7.70	7.77	7.84	7.91	7.98	8.05	8.12	8.19	8.26	8.33	8.40	8.47	8.54	8.61	8.68	8.75	8.82	8.89	8.96	9.03	9.10	9.17	9.24	9.31	9.38	9.45	9.52	9.59	9.66	9.73	9.80	9.87	9.94	10.01	10.08	10.15	10.22	10.29	10.36	10.43	10.50	10.57	10.64	10.71	10.78	10.85	10.92	10.99	11.06	11.13	11.20	11.27	11.34	11.41	11.48	11.55	11.62	11.69	11.76	11.83	11.90	11.97	12.04	12.11	12.18	12.25	12.32	12.39	12.46	12.53	12.60	12.67	12.74	12.81	12.88	12.95	13.02	13.09	13.16	13.23	13.30	13.37	13.44	13.51	13.58	13.65	13.72	13.79	13.86	13.93	14.00	14.07	14.14	14.21	14.28	14.35	14.42	14.49	14.56	14.63	14.70	14.77	14.84	14.91	14.98	15.05	15.12	15.19	15.26	15.33	15.40	15.47	15.54	15.61	15.68	15.75	15.82	15.89	15.96	16.03	16.10	16.17	16.24	16.31	16.38	16.45	16.52	16.59	16.66	16.73	16.80	16.87	16.94	17.01	17.08	17.15	17.22	17.29	17.36	17.43	17.50	17.57	17.64	17.71	17.78	17.85	17.92	17.99	18.06	18.13	18.20	18.27	18.34	18.41	18.48	18.55	18.62	18.69	18.76	18.83	18.90	18.97	19.04	19.11	19.18	19.25	19.32	19.39	19.46	19.53	19.60	19.67	19.74	19.81	19.88	19.95	20.02	20.09	20.16	20.23	20.30	20.37	20.44	20.51	20.58	20.65	20.72	20.79	20.86	20.93	21.00	21.07	21.14	21.21	21.28	21.35	21.42	21.49	21.56	21.63	21.70	21.77	21.84	21.91	21.98	22.05	22.12	22.19	22.26	22.33	22.40	22.47	22.54	22.61	22.68	22.75	22.82	22.89	22.96	23.03	23.10	23.17	23.24	23.31	23.38	23.45	23.52	23.59	23.66	23.73	23.80	23.87	23.94	24.01	24.08	24.15	24.22	24.29	24.36	24.43	24.50	24.57	24.64	24.71	24.78	24.85	24.92	24.99	25.06	25.13	25.20	25.27	25.34	25.41	25.48	25.55	25.62	25.69	25.76	25.83	25.90	25.97	26.04	26.11	26.18	26.25	26.32	26.39	26.46	26.53	26.60	26.67	26.74	26.81	26.88	26.95	27.02	27.09	27.16	27.23	27.30	27.37	27.44	27.51	27.58	27.65	27.72	27.79	27.86	27.93	28.00	28.07	28.14	28.21	28.28	28.35	28.42	28.49	28.56	28.63	28.70	28.77	28.84	28.91	28.98	29.05	29.12	29.19	29.26	29.33	29.40	29.47	29.54	29.61	29.68	29.75	29.82	29.89	29.96	30.03	30.10	30.17	30.24	30.31	30.38	30.45	30.52	30.59	30.66	30.73	30.80	30.87	30.94	31.01	31.08	31.15	31.22	31.29	31.36	31.43	31.50	31.57	31.64	31.71	31.78	31.85	31.92	31.99	32.06	32.13	32.20	32.27	32.34	32.41	32.48	32.55	32.62	32.69	32.76	32.83	32.90	32.97	33.04	33.11	33.18	33.25	33.32	33.39	33.46	33.53	33.60	33.67	33.74	33.81	33.88	33.95	34.02	34.09	34.16	34.23	34.30	34.37	34.44	34.51	34.58	34.65	34.72	34.79	34.86	34.93	35.00	35.07	35.14	35.21	35.28	35.35	35.42	35.49	35.56	35.63	35.70	35.77	35.84	35.91	35.98	36.05	36.12	36.19	36.26	36.33	36.40	36.47	36.54	36.61	36.68	36.75	36.82	36.89	36.96	37.03	37.10	37.17	37.24	37.31	37.38	37.45	37.52	37.59	37.66	37.73	37.80	37.87	37.94	38.01	38.08	38.15	38.22	38.29	38.36	38.43	38.50	38.57	38.64	38.71	38.78	38.85	38.92	38.99	39.06	39.13	39.20	39.27	39.34	39.41	39.48	39.55	39.62	39.69	39.76	39.83	39.90	39.97	40.04	40.11	40.18	40.25	40.32	40.39	40.46	40.53	40.60	40.67	40.74	40.81	40.88	40.95	41.02	41.09	41.16	41.23	41.30	41.37	41.44	41.51	41.58	41.65	41.72	41.79	41.86	41.93	42.00	42.07	42.14	42.21	42.28	42.35	42.42	42.49	42.56	42.63	42.70	42.77	42.84	42.91	42.98	43.05	43.12	43.19	43.26	43.33	43.40	43.47	43.54	43.61	43.68	43.75	43.82	43.89	43.96	44.03	44.10	44.17	44.24	44.31	44.38	44.45	44.52	44.59	44.66	44.73	44.80	44.87	44.94	45.01	45.08	45.15	45.22	45.29	45.36	45.43	45.50	45.57	45.64	45.71	45.78	45.85	45.92	45.99	46.06	46.13	46.20	46.27	46.34	46.41	46.48	46.55	46.62	46.69	46.76	46.83	46.90	46.97	47.04	47.11	47.18	47.25	47.32	47.39	47.46	47.53	47.60	47.67	47.74	47.81	47.88	47.95	48.02	48.09	48.16	48.23	48.30	48.37	48.44	48.51	48.58	48.65	48.72	48.79	48.86	48.93	49.00	49.07	49.14	49.21	49.28	49.35	49.42	49.49	49.56	49.63	49.70	49.77	49.84	49.91	49.98	50.05	50.12	50.19	50.26	50.33	50.40	50.47	50.54	50.61	50.68	50.75	50.82	50.89	50.96	51.03	51.10	51.17	51.24	51.31	51.38	51.45	51.52	51.59	51.66	51.73	51.80	51.87	51.94	52.01	52.08	52.15	52.22	52.29	52.36	52.43	52.50	52.57	52.64	52.71	52.78	52.85	52.92	52.99	53.06	53.13	53.20	53.27	53.34	53.41	53.48	53.55	53.62	53.69	53.76	53.83	53.90	53.97	54.04	54.11	54.18	54.25	54.32	54.39	54.46	54.53	54.60	54.67	54.74	54.81	54.88	54.95	55.02	55.09	55.16	55.23	55.30	55.37	55.44	55.51	55.58	55.65	55.72	55.79	55.86	55.93	56.00	56.07	56.14	56.21	56.28	56.35	56.42	56.49	56.56	56.63	56.70	56.77	56.84	56.91	56.98	57.05	57.12	57.19	57.26	57.33	57.40	57.47	57.54	57.61	57.68	57.75	57.82	57.89	57.96	58.03	58.10	58.17	58.24	58.31	58.38	58.45	58.52	58.59	58.66	58.73	58.80	58.87	58.94	59.01	59.08	59.15	59.22	59.29	59.36	59.43	59.50	59.57	59.64	59.71	59.78	59.85	59.92	59.99	60.06	60.13	60.20	60.27	60.34	60.41	60.48	60.55	60.62	60.69	60.76	60.83	60.90	60.97	61.04	61.11	61.18	61.25	61.32	61.39	61.46	61.53	61.60	61.67	61.74	61.81	61.88	61.95	62.02	62.09	62.16	62.23	62.30	62.37	62.44	62.51	62.58	62.65	62.72	62.79	62.86	62.93	63.00	63.07	63.14	63.21	63.28	63.35	63.42	63.49	63.56



Rated Horsepower per belt for A Section Predator V-Belts

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Datum Diameter																		Additional Horsepower per Belt for Speed Ratio																			
	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.20	5.40	5.60	5.80	6.00	6.20	6.40	6.60	7.00	1.00 to 1.01	1.02 to 1.03	1.04 to 1.05	1.06 to 1.07	1.08 to 1.09	1.10 to 1.11	1.12 to 1.13	1.14 to 1.15	1.16 to 1.17	1.18 to 1.19	1.20 to 1.21	1.22 to 1.23	1.24 to 1.25	1.26 to 1.27	1.28 to 1.29			
950	1.93	2.29	2.66	3.02	3.38	3.74	4.10	4.46	4.82	5.17	5.53	5.88	6.23	6.58	6.93	7.28	7.62	7.97	8.31	8.99	0.00	0.03	0.06	0.08	0.11	0.14	0.17	0.19	0.22	0.25	0.28	0.30	0.37	0.41	0.46			
1160	2.24	2.69	3.12	3.56	4.00	4.43	4.86	5.29	5.71	6.14	6.56	6.98	7.40	7.82	8.24	8.65	9.06	9.47	9.88	10.7	1160	0.00	0.03	0.07	0.10	0.14	0.17	0.20	0.24	0.27	0.30	0.33	0.37	0.41	0.46			
1425	2.62	3.15	3.68	4.21	4.73	5.25	5.77	6.28	6.79	7.30	7.81	8.31	8.81	9.31	9.81	10.3	10.8	11.3	11.8	12.7	1425	0.00	0.04	0.08	0.12	0.17	0.21	0.25	0.29	0.33	0.37	0.41	0.46	0.50	0.55	0.60		
1750	3.04	3.68	4.32	4.95	5.57	6.20	6.82	7.43	8.04	8.65	9.25	9.85	10.4	11.0	11.6	12.2	12.8	13.4	13.9	15.1	1750	0.00	0.05	0.10	0.15	0.20	0.25	0.31	0.36	0.41	0.46	0.50	0.55	0.60	0.66	0.75		
2850	4.19	5.16	6.12	7.07	8.01	8.93	9.85	10.8	11.6	12.5	13.4	14.3	15.1	15.9	16.7	17.5	18.3	19.1	19.9	21.3	2850	0.00	0.08	0.17	0.25	0.33	0.41	0.50	0.58	0.66	0.75	0.84	0.93	1.02	1.11	1.20		
3450	4.63	5.76	6.87	7.97	9.05	10.1	11.1	12.2	13.2	14.2	15.1	16.1	17.0	17.9	18.8	19.6	20.4	21.2	22.0	23.5	3450	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.50	
200	0.54	0.63	0.71	0.80	0.88	0.97	1.05	1.14	1.22	1.31	1.39	1.47	1.56	1.64	1.72	1.81	1.89	1.97	2.05	2.22	200	0.00	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
400	0.96	1.13	1.29	1.46	1.62	1.78	1.94	2.10	2.26	2.42	2.58	2.74	2.90	3.06	3.22	3.38	3.53	3.69	3.85	4.16	400	0.00	0.01	0.02	0.03	0.05	0.06	0.07	0.08	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	
600	1.34	1.58	1.82	2.06	2.29	2.53	2.76	3.00	3.23	3.47	3.70	3.93	4.16	4.39	4.62	4.85	5.08	5.31	5.54	5.99	600	0.00	0.02	0.03	0.05	0.07	0.09	0.10	0.12	0.14	0.16	0.16	0.16	0.16	0.16	0.16	0.16	
800	1.68	2.00	2.31	2.62	2.93	3.24	3.54	3.85	4.15	4.46	4.76	5.06	5.36	5.66	5.96	6.26	6.56	6.85	7.15	7.73	800	0.00	0.02	0.05	0.07	0.09	0.12	0.14	0.16	0.19	0.21	0.21	0.21	0.21	0.21	0.21	0.21	
1000	2.00	2.39	2.77	3.15	3.53	3.91	4.29	4.66	5.04	5.41	5.78	6.15	6.51	6.88	7.25	7.61	7.97	8.33	8.69	9.41	1000	0.00	0.03	0.06	0.09	0.12	0.15	0.17	0.20	0.23	0.26	0.26	0.26	0.26	0.26	0.26	0.26	
1200	2.30	2.76	3.21	3.66	4.11	4.56	5.00	5.44	5.88	6.32	6.75	7.19	7.62	8.05	8.48	8.90	9.33	9.75	10.2	11.0	1200	0.00	0.03	0.07	0.10	0.14	0.17	0.21	0.24	0.28	0.31	0.31	0.31	0.31	0.31	0.31	0.31	
1400	2.59	3.11	3.63	4.15	4.66	5.17	5.68	6.19	6.69	7.20	7.69	8.19	8.68	9.18	9.66	10.2	10.6	11.1	11.6	12.5	1400	0.00	0.04	0.08	0.12	0.16	0.20	0.24	0.29	0.33	0.37	0.37	0.37	0.37	0.37	0.37	0.37	
1600	2.85	3.44	4.03	4.61	5.19	5.77	6.34	6.91	7.48	8.04	8.60	9.15	9.71	10.3	10.8	11.3	11.9	12.4	13.0	14.0	1600	0.00	0.05	0.09	0.14	0.19	0.23	0.28	0.33	0.37	0.42	0.42	0.42	0.42	0.42	0.42	0.42	
1800	3.10	3.76	4.41	5.06	5.70	6.34	6.97	7.60	8.23	8.85	9.46	10.1	10.7	11.3	11.9	12.5	13.1	13.7	14.2	15.4	1800	0.00	0.05	0.10	0.16	0.21	0.26	0.31	0.37	0.42	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
2000	3.34	4.06	4.77	5.48	6.18	6.88	7.58	8.26	8.95	9.62	10.3	11.0	11.6	12.3	12.9	13.6	14.2	14.8	15.5	16.7	2000	0.00	0.06	0.12	0.17	0.23	0.29	0.35	0.41	0.47	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
2200	3.56	4.34	5.12	5.89	6.65	7.40	8.15	8.90	9.63	10.4	11.1	11.8	12.5	13.2	13.9	14.6	15.3	16.0	16.6	17.9	2200	0.00	0.06	0.13	0.19	0.26	0.32	0.38	0.45	0.51	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58
2400	3.77	4.61	5.45	6.27	7.09	7.90	8.71	9.50	10.3	11.1	11.8	12.6	13.4	14.1	14.8	15.6	16.3	17.0	17.7	19.1	2400	0.00	0.07	0.14	0.21	0.28	0.35	0.42	0.49	0.56	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
2600	3.96	4.86	5.76	6.64	7.51	8.38	9.23	10.1	10.9	11.7	12.6	13.4	14.2	14.9	15.7	16.5	17.2	18.0	18.7	20.1	2600	0.00	0.08	0.15	0.23	0.30	0.38	0.45	0.53	0.61	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
2800	4.14	5.10	6.05	6.98	7.91	8.83	9.73	10.6	11.5	12.4	13.2	14.1	14.9	15.7	16.5	17.3	18.1	18.9	19.6	21.1	2800	0.00	0.08	0.16	0.24	0.33	0.41	0.49	0.57	0.65	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
3000	4.31	5.32	6.32	7.31	8.29	9.25	10.2	11.1	12.1	13.0	13.9	14.7	15.6	16.5	17.3	18.1	18.9	19.7	20.5	22.0	3000	0.00	0.09	0.17	0.26	0.35	0.44	0.52	0.61	0.70	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
3200	4.46	5.53	6.58	7.62	8.64	9.65	10.6	11.6	12.6	13.5	14.5	15.4	16.3	17.1	18.0	18.8	19.6	20.4	21.2	22.7	3200	0.00	0.09	0.19	0.28	0.37	0.47	0.56	0.65	0.74	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
3400	4.60	5.72	6.82	7.90	8.97	10.0	11.1	12.1	13.1	14.0	15.0	15.9	16.8	17.7	18.6	19.5	20.3	21.1	22.0	23.5	3400	0.00	0.10	0.20	0.30	0.40	0.49	0.59	0.69	0.79	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
3600	4.72	5.89	7.04	8.16	9.27	10.4	11.4	12.5	13.5	14.5	15.5	16.4	17.4	18.3	19.2	20.0	20.8	21.6	22.4	24.0	3600	0.00	0.10	0.21	0.31	0.42	0.52	0.63	0.73	0.84	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
3800	4.83	6.04	7.23	8.40	9.55	10.7	11.8	12.9	13.9	14.9	15.9	16.9	17.8	18.8	19.7	20.5	21.3	22.1	23.0	24.6	3800	0.00	0.11	0.22	0.33	0.44	0.55	0.66	0.77	0.88	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4000	4.93	6.18	7.41	8.62	9.80	11.0	12.1	13.2	14.3	15.3	16.3	17.3	18.3	19.2	20.0	20.8	21.6	22.4	24.0	25.6	4000	0.00	0.12	0.23	0.35	0.47	0.58	0.70	0.81	0.93	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
4200	5.00	6.30	7.57	8.82	10.0	11.2	12.4	13.5	14.6	15.6	16.7	17.6	18.5	19.4	20.3	21.1	21.9	22.7	24.3	26.0	4200	0.00	0.12	0.24	0.37	0.49	0.61	0.73	0.86	0.98	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
4400	5.07	6.40	7.71	8.99	10.2	11.4	12.6	13.8	14.9	15.9	16.9	17.8	18.7	19.6	20.4	21.2	22.0	22.8	24.4	26.1	4400	0.00	0.13	0.26	0.38	0.51	0.64	0.77	0.90	1.02	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
4600	5.11	6.49	7.83	9.13	10.4	11.6	12.8	14.0	15.1	16.1	17.1	18.0	18.9	19.8	20.6	21.4	22.2	23.0	24.6	26.3	4600	0.00	0.13	0.27	0.40	0.54	0.67	0.80	0.94	1.07	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21
4800	5.14	6.55	7.92	9.25	10.5	11.8	13.0	14.1	15.1	16.1	17.1	18.0	18.9	19.8	20.6	21.4	22.2	23.0	24.6	26.3	4800	0.00	0.14	0.28	0.42	0.56	0.70	0.84	0.98	1.12	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26
5000	5.16	6.59	7.99	9.34	10.7	11.9	13.1	14.1	15.1	16.1	17.1	18.0	18.9	19.8	20.6	21.4	22.2	23.0	24.6	26.3	5000	0.00	0.15	0.29	0.44	0.58	0.73	0.87	1.02	1.16	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31
5200	5.15	6.62	8.04	9.41	10.7	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	5200	0.00	0.15	0.30	0.45	0.61	0.76	0.91	1.06	1.21	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
5400	5.13	6.62	8.06	9.45	10.8	12.1	13.1	14.1	15.1	16.1	17.1	18.1	19.1	20.1	21.1	22.1	23.1	24.1	25.1	26.1	5400	0.00	0.16	0.31	0.47	0.63	0.79	0.94	1.10	1.26	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
5600	5.09	6.60	8.06	9.46	10.9	12.2	13.2	14.2	15.2	16.2	17.2	18.2	19.2	20.																								

Table No. B28



Rated Horsepower per belt for B Section Hi-Power II V-Belts and Hi-Power II PowerBand Belts

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Datum Diameter															RPM of Faster Shaft	Additional Horsepower per Belt for Speed Ratio																																
	5.40	5.60	5.80	6.00	6.20	6.40	6.60	6.80	7.00	7.40	8.00	8.60	9.40	1.00 to 1.01	1.02 to 1.03		1.04 to 1.06	1.07 to 1.08	1.09 to 1.12	1.13 to 1.16	1.17 to 1.22	1.23 to 1.32	1.33 to 1.50	1.51 and over																									
725	3.87	4.13	4.38	4.63	4.88	5.13	5.37	5.62	5.87	6.35	7.08	7.79	8.73	9.40	0.00	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36	725	0.00	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36	0.40	0.44	0.48	0.52	0.56	0.60	0.64	0.68	0.72	0.76	0.80	0.84	0.88	
870	4.47	4.76	5.06	5.35	5.64	5.93	6.22	6.50	6.79	7.36	8.19	9.02	10.1	10.1	0.00	0.05	0.10	0.15	0.19	0.24	0.29	0.34	0.39	0.44	870	0.00	0.05	0.10	0.15	0.19	0.24	0.29	0.34	0.39	0.44	0.48	0.52	0.56	0.60	0.64	0.68	0.72	0.76	0.80	0.84	0.88	0.92	0.96	1.00
950	4.78	5.09	5.41	5.73	6.04	6.35	6.66	6.97	7.28	7.88	8.78	9.67	10.8	10.8	0.00	0.05	0.11	0.16	0.21	0.26	0.32	0.37	0.42	0.47	950	0.00	0.05	0.11	0.16	0.21	0.26	0.32	0.37	0.42	0.47	0.52	0.56	0.60	0.64	0.68	0.72	0.76	0.80	0.84	0.88	0.92	0.96	1.00	1.04
1160	5.54	5.92	6.29	6.66	7.03	7.39	7.76	8.12	8.48	9.18	10.2	11.3	12.6	12.6	0.00	0.06	0.13	0.19	0.26	0.32	0.39	0.45	0.52	0.58	1160	0.00	0.06	0.13	0.19	0.26	0.32	0.39	0.45	0.52	0.58	0.63	0.68	0.71	0.75	0.79	0.83	0.87	0.91	0.95	0.99	1.03	1.07	1.11	1.15
1425	6.41	6.85	7.29	7.72	8.15	8.58	9.00	9.42	9.83	10.7	11.8	13.0	14.5	14.5	0.00	0.08	0.16	0.24	0.32	0.40	0.48	0.55	0.63	0.71	1425	0.00	0.08	0.16	0.24	0.32	0.40	0.48	0.55	0.63	0.71	0.78	0.86	0.93	1.00	1.07	1.14	1.21	1.28	1.35	1.42	1.49	1.56	1.63	1.70
1750	7.33	7.84	8.35	8.85	9.34	9.83	10.3	10.8	11.3	12.2	13.2	14.8	16.4	16.4	0.00	0.10	0.19	0.29	0.39	0.49	0.58	0.68	0.78	0.88	1750	0.00	0.10	0.19	0.29	0.39	0.49	0.58	0.68	0.78	0.88	0.98	1.08	1.18	1.27	1.37	1.47	1.57	1.67	1.77	1.87	1.97	2.07	2.17	2.27
2850	9.18	9.81	10.4	11.0	11.6	12.2	12.7	13.2	13.7	14.6	15.9				0.00	0.16	0.32	0.48	0.63	0.79	0.95	1.11	1.27	1.42	2850	0.00	0.16	0.32	0.48	0.63	0.79	0.95	1.11	1.27	1.42	1.57	1.73	1.88	2.03	2.18	2.33	2.48	2.63	2.78	2.93	3.08	3.23	3.38	
3450	9.23	9.85	10.4	11.0	11.5	12.0	12.5	12.9							0.00	0.19	0.38	0.58	0.77	0.96	1.15	1.34	1.53	1.73	3450	0.00	0.19	0.38	0.58	0.77	0.96	1.15	1.34	1.53	1.73	1.92	2.11	2.30	2.49	2.68	2.87	3.06	3.25	3.44	3.63	3.82	4.01	4.20	
200	1.35	1.43	1.51	1.59	1.67	1.75	1.82	1.90	1.98	2.14	2.37	2.60	2.91	2.91	0.00	0.01	0.02	0.03	0.04	0.06	0.07	0.08	0.09	0.10	200	0.00	0.01	0.02	0.03	0.04	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24
400	2.40	2.55	2.70	2.85	3.00	3.14	3.29	3.44	3.58	3.87	4.31	4.74	5.30	5.30	0.00	0.02	0.04	0.07	0.09	0.11	0.13	0.16	0.18	0.20	400	0.00	0.02	0.04	0.07	0.09	0.11	0.13	0.16	0.18	0.20	0.23	0.27	0.31	0.35	0.39	0.43	0.47	0.51	0.55	0.59	0.63	0.67	0.71	0.75
600	3.33	3.55	3.76	3.98	4.19	4.40	4.61	4.82	5.03	5.44	6.06	6.67	7.47	7.47	0.00	0.03	0.07	0.10	0.13	0.17	0.20	0.23	0.27	0.30	600	0.00	0.03	0.07	0.10	0.13	0.17	0.20	0.23	0.27	0.30	0.34	0.38	0.42	0.46	0.50	0.54	0.58	0.62	0.66	0.70	0.74	0.78	0.82	0.86
800	4.18	4.46	4.73	5.01	5.28	5.55	5.82	6.08	6.35	6.88	7.66	8.44	9.45	9.45	0.00	0.04	0.09	0.13	0.18	0.22	0.27	0.31	0.36	0.40	800	0.00	0.04	0.09	0.13	0.18	0.22	0.27	0.31	0.36	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10
1000	4.96	5.30	5.63	5.96	6.28	6.61	6.93	7.25	7.57	8.20	9.14	10.1	11.3	11.3	0.00	0.06	0.11	0.17	0.22	0.28	0.33	0.39	0.44	0.50	1000	0.00	0.06	0.11	0.17	0.22	0.28	0.33	0.39	0.44	0.50	0.56	0.61	0.67	0.73	0.78	0.84	0.89	0.94	0.99	1.04	1.09	1.14	1.19	1.24
1200	5.68	6.07	6.45	6.83	7.21	7.58	7.95	8.32	8.69	9.42	10.5	11.5	12.9	12.9	0.00	0.07	0.13	0.20	0.27	0.33	0.40	0.47	0.53	0.60	1200	0.00	0.07	0.13	0.20	0.27	0.33	0.40	0.47	0.53	0.60	0.67	0.73	0.79	0.85	0.91	0.97	1.03	1.09	1.15	1.21	1.27	1.33	1.39	1.45
1400	6.33	6.77	7.20	7.63	8.05	8.47	8.89	9.30	9.71	10.5	11.7	12.9	14.3	14.3	0.00	0.08	0.16	0.23	0.31	0.39	0.47	0.54	0.62	0.70	1400	0.00	0.08	0.16	0.23	0.31	0.39	0.47	0.54	0.62	0.70	0.78	0.86	0.94	1.02	1.10	1.18	1.26	1.34	1.42	1.50	1.58	1.66	1.74	1.82
1600	6.93	7.41	7.88	8.35	8.82	9.28	9.74	10.2	10.6	11.5	12.8	14.0	15.6	15.6	0.00	0.09	0.18	0.27	0.36	0.44	0.53	0.62	0.71	0.80	1600	0.00	0.09	0.18	0.27	0.36	0.44	0.53	0.62	0.71	0.80	0.89	0.98	1.07	1.16	1.25	1.34	1.43	1.52	1.61	1.70	1.79	1.88	1.97	2.06
1800	7.46	7.98	8.49	9.00	9.50	10.00	10.5	11.0	11.4	12.4	13.7	15.0	16.6	16.6	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1800	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0.99	1.09	1.19	1.29	1.39	1.49	1.59	1.69	1.79	1.89	1.99	2.09	2.19	2.29
2000	7.93	8.49	9.03	9.57	10.1	10.6	11.1	11.6	12.1	13.1	14.5	15.8	17.4	17.4	0.00	0.11	0.22	0.33	0.44	0.56	0.67	0.78	0.89	1.00	2000	0.00	0.11	0.22	0.33	0.44	0.56	0.67	0.78	0.89	1.00	1.11	1.22	1.33	1.44	1.55	1.66	1.77	1.88	1.99	2.10	2.21	2.32	2.43	
2200	8.34	8.92	9.50	10.1	10.6	11.2	11.7	12.2	12.7	13.7	15.1	16.4	17.9	17.9	0.00	0.12	0.24	0.37	0.49	0.61	0.73	0.86	0.98	1.10	2200	0.00	0.12	0.24	0.37	0.49	0.61	0.73	0.86	0.98	1.10	1.22	1.34	1.46	1.58	1.70	1.82	1.94	2.06	2.18	2.30	2.42	2.54	2.66	
2400	8.67	9.28	9.88	10.5	11.0	11.6	12.1	12.7	13.2	14.2	15.6	16.8	18.2	18.2	0.00	0.13	0.27	0.40	0.53	0.67	0.80	0.93	1.07	1.20	2400	0.00	0.13	0.27	0.40	0.53	0.67	0.80	0.93	1.07	1.20	1.33	1.46	1.59	1.72	1.85	1.98	2.11	2.24	2.37	2.50	2.63	2.76	2.89	
2600	8.94	9.57	10.2	10.8	11.4	11.9	12.5	13.0	13.5	14.5	15.8	17.0			0.00	0.14	0.29	0.43	0.58	0.72	0.87	1.01	1.16	1.30	2600	0.00	0.14	0.29	0.43	0.58	0.72	0.87	1.01	1.16	1.30	1.44	1.59	1.73	1.87	2.01	2.15	2.29	2.43	2.57	2.71	2.85	2.99	3.13	
2800	9.14	9.78	10.4	11.0	11.6	12.1	12.7	13.2	13.7	14.6	15.9				0.00	0.16	0.31	0.47	0.62	0.78	0.93	1.09	1.25	1.40	2800	0.00	0.16	0.31	0.47	0.62	0.78	0.93	1.09	1.25	1.40	1.55	1.70	1.85	2.00	2.15	2.30	2.45	2.60	2.75	2.90	3.05	3.20	3.35	
3000	9.26	9.90	10.5	11.1	11.7	12.2	12.8	13.3	13.8	14.6					0.00	0.17	0.33	0.50	0.67	0.83	1.00	1.17	1.33	1.50	3000	0.00	0.17	0.33	0.50	0.67	0.83	1.00	1.17	1.33	1.50	1.67	1.83	2.00	2.17	2.33	2.50	2.67	2.83	3.00	3.17	3.33	3.50	3.67	
3200	9.30	9.93	10.5	11.1	11.7	12.2	12.7	13.2	13.6	14.6					0.00	0.18	0.36	0.53	0.71	0.89	1.07	1.24	1.42	1.60	3200	0.00	0.18	0.36	0.53	0.71	0.89	1.07	1.24	1.42	1.60	1.78	1.96	2.14	2.32	2.50	2.68	2.86	3.04	3.22	3.40	3.58	3.76	3.94	
3400	9.25	9.88	10.5	11.0	11.6	12.1	12.5	13.0							0.00	0.19	0.38	0.57	0.76	0.94	1.13	1.32	1.51	1.70	3400	0.00	0.19	0.38	0.57	0.76	0.94	1.13	1.32	1.51	1.70	1.89	2.08	2.27	2.46	2.65	2.84	3.03	3.22	3.41	3.60	3.79	3.98	4.17	
3600	9.12	9.73	10.3	10.8	11.3	11.8									0.00	0.20	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80	3600	0.00	0.20	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80	2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	
3800	8.90	9.48	10.0	10.5											0.00	0.21	0.42	0.63	0.84	1.06	1.27																												



Rated Horsepower per belt for BX Section Tri-Power Molded Notch V-Belts

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Datum Diameter																Additional Horsepower per Belt for Speed Ratio																						
	4.00	4.20	4.40	4.60	4.80	5.00	5.20	5.40	5.60	5.80	6.00	6.20	6.40	6.60	6.80	7.00	7.40	8.00	8.60	9.40	1.00 to 1.02	1.03 to 1.05	1.06 to 1.08	1.09 to 1.11	1.12 to 1.14	1.15 to 1.17	1.18 to 1.20	1.21 to 1.23	1.24 to 1.26	1.27 to 1.29	1.30 to 1.32	1.33 to 1.35	1.36 to 1.38	1.39 to 1.41	1.42 to 1.44	1.45 to 1.47	1.48 to 1.50		
725	3.22	3.43	3.64	3.85	4.06	4.26	4.47	4.67	4.88	5.08	5.28	5.48	5.67	5.87	6.06	6.26	6.64	7.21	7.77	8.50	0.00	0.05	0.09	0.14	0.19	0.23	0.28	0.33	0.39	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90
870	3.69	3.93	4.18	4.42	4.66	4.90	5.14	5.38	5.61	5.84	6.07	6.30	6.53	6.76	6.98	7.20	7.65	8.30	8.94	9.77	0.00	0.06	0.11	0.17	0.22	0.28	0.33	0.39	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	
950	3.94	4.20	4.46	4.73	4.98	5.24	5.50	5.75	6.00	6.25	6.50	6.74	6.98	7.23	7.47	7.70	8.17	8.87	9.55	10.4	0.00	0.06	0.12	0.18	0.24	0.30	0.37	0.43	0.49	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90		
1160	4.55	4.86	5.17	5.48	5.78	6.08	6.38	6.67	6.96	7.25	7.54	7.82	8.10	8.38	8.66	8.93	9.48	10.3	11.0	12.0	0.00	0.07	0.15	0.22	0.30	0.37	0.45	0.52	0.59	0.67	0.74	0.81	0.88	0.95	1.02	1.09	1.16	1.23	
1425	5.28	5.63	5.99	6.34	6.70	7.05	7.39	7.73	8.07	8.41	8.74	9.06	9.39	9.71	10.0	10.3	11.0	11.9	12.7	13.8	0.00	0.09	0.18	0.27	0.37	0.46	0.55	0.64	0.73	0.82	0.91	1.00	1.09	1.18	1.27	1.36	1.45	1.54	
1750	6.04	6.46	6.88	7.30	7.70	8.11	8.50	8.89	9.28	9.66	10.0	10.4	10.8	11.1	11.5	11.8	12.5	13.5	14.5	15.6	0.00	0.11	0.22	0.34	0.45	0.56	0.67	0.79	0.90	1.01	1.12	1.23	1.34	1.45	1.56	1.67	1.78		
2850	8.02	8.59	9.15	9.69	10.2	10.7	11.2	11.7	12.2	12.6	13.1	13.5	13.9	14.3	14.7	15.1	15.7	16.6			0.00	0.18	0.37	0.55	0.73	0.91	1.10	1.28	1.46	1.64	1.82	2.00	2.18	2.36	2.54	2.72			
3450	8.69	9.30	9.89	10.5	11.0	11.5	12.0	12.5	13.0	13.4	13.8	14.2	14.5	14.9	15.2	2.19	2.32	2.52	2.72	2.97	0.00	0.22	0.44	0.66	0.88	1.11	1.33	1.55	1.77	1.99	2.21	2.43	2.65	2.87	3.09	3.31			
200	1.16	1.23	1.30	1.37	1.44	1.51	1.58	1.65	1.72	1.79	1.86	1.92	1.99	2.06	2.13	2.19	2.32	2.52	2.72	2.97	0.00	0.01	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36	0.40	0.44	0.48	0.52	0.56	0.60		
400	2.03	2.16	2.28	2.41	2.54	2.66	2.79	2.91	3.04	3.16	3.29	3.41	3.53	3.65	3.77	3.89	4.13	4.48	4.83	5.29	0.00	0.03	0.05	0.08	0.10	0.13	0.15	0.18	0.21	0.23	0.26	0.29	0.32	0.35	0.38	0.41	0.44	0.47	
600	2.78	2.96	3.14	3.32	3.50	3.68	3.86	4.03	4.20	4.38	4.55	4.72	4.89	5.06	5.22	5.39	5.72	6.21	6.69	7.33	0.00	0.04	0.08	0.12	0.15	0.19	0.23	0.27	0.31	0.35	0.39	0.43	0.47	0.51	0.55	0.59	0.63	0.67	
800	3.46	3.69	3.92	4.15	4.38	4.60	4.82	5.04	5.26	5.48	5.70	5.91	6.12	6.34	6.55	6.75	7.17	7.78	8.38	9.17	0.00	0.05	0.10	0.15	0.21	0.26	0.32	0.38	0.45	0.51	0.58	0.64	0.71	0.78	0.85	0.92	0.99	1.06	
1000	4.09	4.36	4.64	4.91	5.18	5.45	5.71	5.98	6.24	6.49	6.75	7.01	7.26	7.51	7.76	8.01	8.50	9.21	9.92	10.8	0.00	0.06	0.13	0.19	0.26	0.32	0.38	0.45	0.51	0.58	0.65	0.72	0.79	0.86	0.93	1.00	1.07	1.14	
1200	4.66	4.98	5.30	5.61	5.92	6.23	6.54	6.84	7.14	7.43	7.73	8.02	8.31	8.59	8.88	9.16	9.71	10.5	11.3	12.3	0.00	0.08	0.15	0.23	0.31	0.38	0.46	0.54	0.62	0.69	0.77	0.84	0.91	0.98	1.05	1.12	1.19	1.26	
1400	5.20	5.56	5.91	6.26	6.61	6.96	7.30	7.64	7.97	8.30	8.63	8.95	9.27	9.59	9.90	10.2	10.8	11.7	12.6	13.7	0.00	0.09	0.18	0.27	0.36	0.45	0.54	0.63	0.72	0.81	0.90	0.99	1.08	1.17	1.26	1.35	1.44	1.53	
1600	5.69	6.09	6.48	6.87	7.25	7.63	8.01	8.38	8.74	9.10	9.46	9.81	10.2	10.5	10.8	11.2	11.8	12.8	13.7	14.9	0.00	0.10	0.21	0.31	0.41	0.51	0.62	0.72	0.82	0.92	1.02	1.12	1.22	1.32	1.42	1.52	1.62		
1800	6.15	6.58	7.01	7.43	7.85	8.26	8.66	9.06	9.45	9.84	10.2	10.6	11.0	11.3	11.7	12.1	12.7	13.7	14.7	15.9	0.00	0.12	0.23	0.35	0.46	0.58	0.69	0.81	0.92	1.04	1.15	1.26	1.37	1.48	1.59	1.70	1.81		
2000	6.58	7.04	7.50	7.95	8.39	8.83	9.26	9.69	10.1	10.5	10.9	11.3	11.7	12.1	12.5	12.8	13.5	14.6	15.5	16.7	0.00	0.13	0.26	0.38	0.51	0.64	0.77	0.90	1.03	1.15	1.27	1.39	1.51	1.63	1.75	1.87	2.00		
2200	6.97	7.46	7.95	8.43	8.90	9.36	9.81	10.3	10.7	11.1	11.5	12.0	12.4	12.8	13.1	13.5	14.2	15.3	16.2	17.4	0.00	0.14	0.28	0.42	0.56	0.71	0.85	0.99	1.13	1.27	1.41	1.55	1.69	1.83	1.97	2.11	2.25		
2400	7.33	7.85	8.36	8.86	9.35	9.84	10.3	10.8	11.2	11.7	12.1	12.5	12.9	13.3	13.7	14.1	14.8	15.8	16.8	17.8	0.00	0.15	0.31	0.46	0.62	0.77	0.92	1.08	1.23	1.38	1.53	1.68	1.83	1.98	2.13	2.28	2.43	2.58	
2600	7.65	8.20	8.73	9.26	9.77	10.3	10.8	11.2	11.7	12.1	12.6	13.0	13.4	13.8	14.2	14.6	15.3	16.3	17.1		0.00	0.17	0.33	0.50	0.67	0.83	1.00	1.17	1.33	1.50	1.67	1.83	1.99	2.15	2.31	2.47	2.63		
2800	7.95	8.52	9.07	9.61	10.1	10.6	11.1	11.6	12.1	12.6	13.0	13.4	13.8	14.2	14.6	15.0	15.7	16.6			0.00	0.18	0.36	0.54	0.72	0.90	1.08	1.26	1.44	1.62	1.80	1.98	2.16	2.34	2.52	2.70	2.88		
3000	8.21	8.80	9.37	9.92	10.5	11.0	11.5	12.0	12.4	12.9	13.3	13.8	14.2	14.5	14.9	15.3	15.9				0.00	0.19	0.38	0.58	0.77	0.96	1.15	1.35	1.54	1.73	1.92	2.11	2.30	2.49	2.68	2.87	3.06		
3200	8.44	9.04	9.62	10.2	10.7	11.3	11.8	12.2	12.7	13.2	13.6	14.0	14.4	14.8	15.1	15.4	16.0				0.00	0.21	0.41	0.62	0.82	1.03	1.23	1.44	1.64	1.85	2.05	2.25	2.45	2.65	2.85	3.05	3.25		
3400	8.64	9.25	9.84	10.4	11.0	11.5	12.0	12.5	12.9	13.4	13.8	14.2	14.5	14.9	15.2						0.00	0.22	0.44	0.65	0.87	1.09	1.31	1.53	1.74	1.96	2.17	2.38	2.59	2.80	3.01	3.22	3.43		
3600	8.81	9.42	10.0	10.6	11.1	11.7	12.1	12.6	13.1	13.5	13.9	14.2	14.6								0.00	0.23	0.46	0.69	0.92	1.15	1.38	1.61	1.85	2.08	2.31	2.54	2.77	3.00	3.23	3.46	3.69		
3800	8.94	9.56	10.2	10.7	11.3	11.8	12.3	12.7	13.1	13.5	13.9										0.00	0.24	0.49	0.73	0.97	1.22	1.46	1.70	1.95	2.19	2.43	2.67	2.91	3.15	3.39	3.63	3.87		
4000	9.04	9.66	10.2	10.8	11.3	11.8	12.3	12.7	13.1	13.5											0.00	0.26	0.51	0.77	1.03	1.28	1.54	1.79	2.05	2.31	2.56	2.81	3.06	3.31	3.56	3.81	4.06		
4200	9.10	9.72	10.3	10.8	11.4	11.8	12.3	12.7													0.00	0.27	0.54	0.81	1.08	1.35	1.61	1.88	2.15	2.42	2.69	2.96	3.23	3.50	3.77	4.04	4.31		
4400	9.13	9.73	10.3	10.8	11.3	11.8	12.3	12.7													0.00	0.28	0.56	0.85	1.13	1.41	1.69	1.97	2.26	2.54	2.82	3.10	3.38	3.66	3.94	4.22	4.50		
4600	9.12	9.71	10.3	10.8	11.2	11.7															0.00	0.30	0.59	0.89	1.18	1.47	1.77	2.06	2.36	2.65	2.94	3.23	3.52	3.81	4.10	4.39	4.68		
4800	9.07	9.65	10.2	10.7	11.1																0.00	0.31	0.62	0.92	1.23	1.54	1.85	2.15	2.46	2.77	3.07	3.37	3.67	3.97	4.27	4.57	4.87		
5000	8.99	9.54	10.0	10.5																	0.00	0.32	0.64	0.96	1.28	1.60	1.92	2.24	2.56	2.88	3.20	3.52	3.84	4.16	4.48	4.80	5.12		
5200	8.86	9.39	9.86																		0.00	0.33	0.67	1.00	1.33	1.67	2.00	2.33	2.67	3.00	3.33	3.66	3.99	4.32	4.65	4.98	5.31		
5400	8.70	9.20																			0.00	0.35	0.69	1.04	1.38	1.73	2.08	2.42	2.77	3.12	3.46	3.80	4.14	4.48	4.82	5.16	5.50		
5600	8.49																				0.00	0.36	0.72	1.08	1.44	1.													

Table No. B30



Rated Horsepower per belt for B Section Predator V-Belts

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Datum Diameter																RPM of Faster Shaft	Additional Horsepower per Belt for Speed Ratio															
	5.40	5.40	5.60	5.60	5.80	6.00	6.20	6.40	6.60	6.80	7.00	7.40	8.00	8.60	9.40	1.00 to 1.01		1.02 to 1.03	1.04 to 1.05	1.06 to 1.07	1.08 to 1.09	1.10 to 1.11	1.12 to 1.13	1.14 to 1.15	1.16 to 1.17	1.18 to 1.19	1.20 to 1.21	1.22 to 1.23	1.24 to 1.25	1.26 to 1.27	1.28 to 1.29	over	
725	6.50	6.99	7.48	7.98	8.47	8.96	9.44	9.93	10.4	10.9	11.4	12.8	14.3	16.1	18.9	725	1.00	1.02	1.03	1.05	1.06	1.08	1.10	1.11	1.14	1.20	1.29	and over					
870	7.56	8.14	8.72	9.31	9.88	10.5	11.0	11.6	12.2	12.8	13.3	15.0	16.7	18.9	20.4	870	0.00	0.05	0.11	0.16	0.22	0.27	0.33	0.38	0.43	0.52	0.59	0.64	0.70	0.78	0.85	0.96	
950	8.13	8.76	9.39	10.0	10.6	11.3	11.9	12.5	13.1	14.4	16.2	18.0	20.4	24.1	28.4	950	0.00	0.07	0.14	0.21	0.28	0.36	0.43	0.50	0.57	0.64	0.70	0.78	0.85	0.96	1.18	1.92	2.33
1160	9.55	10.3	11.1	11.8	12.6	13.3	14.0	14.8	15.5	17.0	19.1	21.3	24.1	28.4	33.1	1160	0.00	0.09	0.17	0.26	0.35	0.44	0.52	0.61	0.70	0.78	0.85	0.96	1.18	1.92	2.33	3.31	
1425	11.2	12.1	13.0	13.9	14.8	15.7	16.6	17.5	18.3	20.1	22.6	25.1	28.4	33.1	39.1	1425	0.00	0.11	0.21	0.32	0.43	0.53	0.64	0.75	0.85	0.96	1.18	1.92	2.33	3.31	4.27	5.10	
1750	13.1	14.2	15.2	16.3	17.4	18.4	19.4	20.5	21.5	23.5	26.5	29.4	33.1	39.1	45.1	1750	0.00	0.13	0.26	0.39	0.53	0.66	0.79	0.92	1.05	1.18	1.92	2.33	3.31	4.27	5.10	6.04	
2850	17.9	19.4	20.9	22.4	23.8	25.2	26.6	28.0	29.3	31.9	35.6	40.8	45.1	5.10	5.10	2850	0.00	0.21	0.43	0.64	0.86	1.07	1.28	1.50	1.71	1.92	2.33	3.31	4.27	5.10	6.04	7.00	
3450	19.4	21.1	22.7	24.2	25.8	27.3	28.7	30.1	31.5	33.4	36.4	4.08	4.51	5.10	5.10	3450	0.00	0.26	0.52	0.78	1.04	1.29	1.55	1.81	2.07	2.33	3.31	4.27	5.10	6.04	7.00	8.00	
200	2.15	2.30	2.45	2.60	2.75	2.90	3.05	3.19	3.34	3.64	4.08	4.51	5.10	5.10	200	0.00	0.01	0.03	0.04	0.06	0.08	0.09	0.10	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	
400	3.92	4.21	4.49	4.78	5.06	5.35	5.63	5.91	6.19	6.75	7.59	8.42	9.53	9.53	400	0.00	0.03	0.06	0.09	0.12	0.15	0.18	0.21	0.24	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	
600	5.54	5.96	6.37	6.79	7.20	7.61	8.02	8.43	8.84	9.65	10.9	12.1	13.7	13.7	600	0.00	0.04	0.09	0.14	0.18	0.23	0.27	0.31	0.36	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	
800	7.05	7.59	8.13	8.67	9.21	9.74	10.3	10.8	11.3	12.4	14.0	15.5	17.6	17.6	800	0.00	0.06	0.12	0.18	0.24	0.30	0.36	0.42	0.48	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	
1000	8.47	9.13	9.79	10.5	11.1	11.8	12.4	13.1	13.7	15.0	16.9	18.8	21.3	21.3	1000	0.00	0.07	0.15	0.22	0.30	0.38	0.45	0.52	0.60	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	
1200	9.81	10.6	11.4	12.1	12.9	13.7	14.4	15.2	15.9	17.4	19.7	21.9	24.8	24.8	1200	0.00	0.09	0.18	0.27	0.36	0.45	0.54	0.63	0.72	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	
1400	11.1	12.0	12.9	13.7	14.6	15.5	16.3	17.2	18.1	19.8	22.3	24.8	28.0	28.0	1400	0.00	0.10	0.21	0.31	0.42	0.52	0.63	0.73	0.84	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	
1600	12.3	13.3	14.3	15.2	16.2	17.2	18.2	19.1	20.1	22.0	24.7	27.5	31.0	31.0	1600	0.00	0.12	0.24	0.36	0.48	0.60	0.72	0.84	0.96	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	
1800	13.4	14.5	15.6	16.6	17.7	18.8	19.8	20.9	21.9	24.0	27.0	30.0	33.8	33.8	1800	0.00	0.13	0.27	0.40	0.54	0.67	0.81	0.94	1.08	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	
2000	14.4	15.6	16.8	18.0	19.1	20.3	21.4	22.5	23.7	25.9	29.1	32.2	36.2	36.2	2000	0.00	0.15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	
2200	15.4	16.7	17.9	19.2	20.4	21.6	22.9	24.1	25.3	27.6	31.0	34.3	38.4	38.4	2200	0.00	0.16	0.33	0.50	0.66	0.83	0.99	1.15	1.32	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	
2400	16.3	17.6	19.0	20.3	21.6	22.9	24.2	25.4	26.7	29.1	32.7	36.0	40.3	40.3	2400	0.00	0.18	0.36	0.54	0.72	0.90	1.08	1.26	1.44	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	
2600	17.1	18.5	19.9	21.3	22.7	24.0	25.4	26.7	28.0	30.5	34.1	37.6	42.0	42.0	2600	0.00	0.19	0.39	0.58	0.78	0.97	1.17	1.36	1.56	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	
2800	17.8	19.3	20.7	22.2	23.6	25.0	26.4	27.8	29.1	31.7	35.4	39.1	43.8	43.8	2800	0.00	0.21	0.42	0.63	0.84	1.05	1.26	1.47	1.68	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	
3000	18.4	19.9	21.5	23.0	24.4	25.9	27.3	28.7	30.0	32.6	36.4	40.1	44.8	44.8	3000	0.00	0.22	0.45	0.67	0.90	1.13	1.35	1.57	1.80	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	
3200	18.9	20.5	22.1	23.6	25.1	26.6	28.0	29.4	30.8	33.4	37.1	40.8	44.5	44.5	3200	0.00	0.24	0.48	0.72	0.96	1.20	1.44	1.68	1.92	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	
3400	19.3	21.0	22.6	24.1	25.7	27.1	28.6	30.0	31.4	34.0	37.6	41.2	44.8	44.8	3400	0.00	0.25	0.51	0.76	1.02	1.28	1.53	1.78	2.04	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	
3600	19.6	21.3	22.9	24.5	26.0	27.5	29.0	30.5	32.0	34.5	38.1	41.7	45.3	45.3	3600	0.00	0.27	0.54	0.81	1.08	1.35	1.62	1.89	2.16	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	
3800	19.8	21.5	23.2	24.8	26.4	28.0	29.6	31.2	32.8	35.4	39.0	42.6	46.2	46.2	3800	0.00	0.28	0.57	0.85	1.14	1.42	1.71	1.99	2.28	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	
4000	19.9	21.6	23.3	25.0	26.7	28.4	30.1	31.8	33.5	36.1	39.7	43.3	46.9	46.9	4000	0.00	0.30	0.60	0.90	1.20	1.50	1.80	2.10	2.40	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	
4200	19.9	21.6	23.3	25.0	26.7	28.4	30.1	31.8	33.5	36.1	39.7	43.3	46.9	46.9	4200	0.00	0.31	0.63	0.94	1.26	1.57	1.89	2.20	2.52	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	
4400	19.9	21.6	23.3	25.0	26.7	28.4	30.1	31.8	33.5	36.1	39.7	43.3	46.9	46.9	4400	0.00	0.33	0.66	0.99	1.32	1.65	1.98	2.31	2.64	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	
4600	19.9	21.6	23.3	25.0	26.7	28.4	30.1	31.8	33.5	36.1	39.7	43.3	46.9	46.9	4600	0.00	0.34	0.69	1.03	1.38	1.72	2.07	2.41	2.76	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	
4800	19.9	21.6	23.3	25.0	26.7	28.4	30.1	31.8	33.5	36.1	39.7	43.3	46.9	46.9	4800	0.00	0.36	0.72	1.08	1.44	1.80	2.16	2.52	2.88	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	
5000	19.9	21.6	23.3	25.0	26.7	28.4	30.1	31.8	33.5	36.1	39.7	43.3	46.9	46.9	5000	0.00	0.37	0.75	1.13	1.50	1.88	2.25	2.62	3.00	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.37	
5200	19.9	21.6	23.3	25.0	26.7	28.4	30.1	31.8	33.5	36.1	39.7	43.3	46.9	46.9	5200	0.00	0.39	0.78	1.17	1.56	1.95	2.34	2.73	3.12	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	
5400	19.9	21.6	23.3	25.0	26.7	28.4	30.1	31.8	33.5	36.1	39.7	43.3	46.9	46.9	5400	0.00	0.40	0.81	1.22	1.62	2.03	2.43	2.83	3.24	3.64	3.64	3.64	3.64	3.64	3.64	3.64	3.64	
5600	19.9	21.6	23.3	25.0	26.7	28.4	30.1	31.8	33.5	36.1	39.7	43.3	46.9	46.9	5600	0.00	0.42	0.84	1.26	1.68	2.10	2.52	2.94	3.36	3.78	3.78	3.78	3.78	3.78	3.78	3.78	3.78	

Drives for rpm-diameter combinations where no horsepower is shown may be practical if all conditions are known. See your local Gates representative

Table No. B31



R o a s t e r h a t	Rated Horsepower per Belt for C Section Hi-Power II V-Belts and Hi-PowerII PowerBand Belts									
	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8	0.7	0.6
575	915	996	1080	1166	1253	1339	1425	1511	1597	1683
69	116	124	134	143	151	161	170	178	187	195
725	112	129	139	148	157	166	175	184	193	202
87	126	137	149	159	171	181	191	201	211	221
95	135	147	158	170	182	194	206	218	230	242
116	155	168	182	195	208	223	236	250	264	279
1425	175	191	207	223	239	255	271	287	303	319
175	193	209	225	241	257	273	289	305	321	337
1	2.9	2.26	2.43	2.6	2.76	3.1	3.43	3.75	4.1	4.4
2	3.8	4.12	4.43	4.75	5.1	5.48	5.86	6.24	6.62	6.99
3	5.36	5.81	6.27	6.72	7.17	7.63	8.09	8.55	9.01	9.47
4	6.81	7.4	7.99	8.57	9.15	9.74	10.32	10.91	11.5	12.14
5	8.18	8.89	9.6	10.3	11	11.7	12.4	13.1	13.8	14.5
6	9.47	10.3	11.1	12	12.8	13.6	14.4	15.2	16	16.8
7	10.7	11.6	12.6	13.5	14.4	15.4	16.2	17.1	18	18.8
8	11.8	12.9	13.9	15	16	17	18	19	20	21
9	12.9	14.1	15.2	16.4	17.5	18.6	19.7	20.8	21.9	23
10	14	15.2	16.4	17.6	18.8	20	21.1	22.2	23.3	24.4
11	14.9	16.2	17.5	18.8	20	21.1	22.2	23.3	24.4	25.5
12	15.8	17.2	18.6	19.9	21.2	22.5	23.8	25.1	26.4	27.7
13	16.6	18.1	19.5	20.9	22.3	23.7	25.1	26.5	27.9	29.3
14	17.3	18.9	20.3	21.8	23.2	24.6	26	27.4	28.8	30.2
15	18	19.6	21.1	22.6	24	25.4	26.8	28.2	29.6	31
16	18.6	20.2	21.7	23.2	24.6	26	27.4	28.8	30.2	31.6
17	19.1	20.7	22.3	23.7	25.1	26.5	27.9	29.3	30.7	32.1
18	19.5	21.1	22.7	24.1	25.5	26.9	28.3	29.7	31.1	32.5
19	19.8	21.5	23	24.4	25.7	27.1	28.5	29.9	31.3	32.7
20	20.1	21.7	23.2	24.6	25.8	27.2	28.6	30	31.4	32.8
21	20.2	21.8	23.2	24.6	25.7					
22	20.3	21.8	23.2	24.4						
23	20.2	21.7	23							
24	20.1	21.4								
25	19.8	21.1								
26	19.4									
27										
28										
29										
30										
31										
32										
33										

*Diameters below recommended RMA minimum for classical (A, B, etc. non-notched) V-belts. Use of non-notched V-belts can result in reduced belt performance and loss of energy efficiency. See Table No. 59 on Page 220.

Table No. B32



Rated Horsepower per Belt for CX Section Tri-Power® Molded Notch V-Belts

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Datum Diameter															RPM of Faster Shaft	Additional Horsepower per Belt for Speed Ratio														
	7.00	7.50	8.00	8.50	9.00	9.50	10.00	10.50	11.00	12.00	13.00	14.00	16.00	1.00 to 1.02	1.03 to 1.07		1.08 to 1.13	1.14 to 1.21	1.22 to 1.31	1.31 to 1.44	1.45 to 1.65	1.65 to 2.02	2.02 to 3.00	3.00 over							
575	8.10	8.75	9.40	10.0	10.7	11.3	11.9	12.5	13.1	14.3	15.5	16.6	18.9	575	0.00	0.07	0.14	0.21	0.28	0.35	0.42	0.49	0.55	0.62							
690	9.35	10.1	10.9	11.6	12.3	13.1	13.8	14.5	15.2	16.5	17.9	19.2	21.6	690	0.00	0.08	0.17	0.25	0.33	0.42	0.50	0.58	0.67	0.75							
725	9.72	10.5	11.3	12.1	12.8	13.6	14.3	15.0	15.8	17.2	18.5	19.9	22.4	725	0.00	0.09	0.17	0.26	0.35	0.44	0.52	0.61	0.70	0.79							
870	11.2	12.1	13.0	13.9	14.7	15.6	16.4	17.3	18.1	19.7	21.2	22.7	25.5	870	0.00	0.11	0.21	0.31	0.42	0.52	0.63	0.73	0.84	0.94							
950	12.0	12.9	13.9	14.8	15.8	16.7	17.6	18.4	19.3	21.0	22.6	24.1	27.0	950	0.00	0.11	0.23	0.34	0.46	0.57	0.69	0.80	0.92	1.03							
1160	13.9	15.0	16.1	17.2	18.2	19.2	20.3	21.2	22.2	24.0	25.8	27.4	30.4	1160	0.00	0.14	0.28	0.42	0.56	0.70	0.84	0.98	1.12	1.26							
1425	16.1	17.3	18.6	19.8	20.9	22.1	23.2	24.2	25.3	27.2	29.0	30.6	33.3	1425	0.00	0.17	0.34	0.52	0.69	0.86	1.03	1.20	1.37	1.55							
1750	18.4	19.8	21.1	22.4	23.7	24.9	26.0	27.1	28.1	30.0	31.5			1750	0.00	0.21	0.42	0.63	0.84	1.06	1.27	1.48	1.69	1.90							
100	1.89	2.03	2.18	2.33	2.47	2.61	2.76	2.90	3.04	3.32	3.59	3.86	4.40	100	0.00	0.01	0.02	0.04	0.05	0.06	0.07	0.08	0.10	0.11							
200	3.40	3.67	3.94	4.20	4.46	4.72	4.98	5.24	5.49	6.00	6.50	6.99	7.96	200	0.00	0.02	0.05	0.07	0.10	0.12	0.14	0.17	0.19	0.22							
300	4.77	5.15	5.53	5.90	6.27	6.64	7.00	7.36	7.72	8.43	9.13	9.82	11.2	300	0.00	0.04	0.07	0.11	0.14	0.18	0.22	0.25	0.29	0.33							
400	6.04	6.52	7.01	7.48	7.95	8.42	8.88	9.34	9.80	10.7	11.6	12.4	14.2	400	0.00	0.05	0.10	0.14	0.19	0.24	0.29	0.34	0.39	0.43							
500	7.24	7.82	8.40	8.97	9.54	10.1	10.7	11.2	11.7	12.8	13.9	14.9	16.9	500	0.00	0.06	0.12	0.18	0.24	0.30	0.36	0.42	0.48	0.54							
600	8.38	9.05	9.72	10.4	11.0	11.7	12.3	13.0	13.6	14.8	16.0	17.2	19.5	600	0.00	0.07	0.14	0.22	0.29	0.36	0.43	0.51	0.58	0.65							
700	9.46	10.2	11.0	11.7	12.5	13.2	13.9	14.6	15.3	16.7	18.1	19.4	21.9	700	0.00	0.08	0.17	0.25	0.34	0.42	0.51	0.59	0.68	0.76							
800	10.5	11.4	12.2	13.0	13.8	14.6	15.4	16.2	17.0	18.5	20.0	21.4	24.1	800	0.00	0.10	0.19	0.29	0.39	0.48	0.58	0.68	0.77	0.87							
900	11.5	12.4	13.3	14.2	15.1	16.0	16.9	17.7	18.5	20.2	21.7	23.2	26.1	900	0.00	0.11	0.22	0.33	0.43	0.54	0.65	0.76	0.87	0.98							
1000	12.4	13.5	14.4	15.4	16.4	17.3	18.2	19.1	20.0	21.7	23.4	25.0	27.9	1000	0.00	0.12	0.24	0.36	0.48	0.60	0.72	0.84	0.96	1.09							
1100	13.4	14.4	15.5	16.5	17.5	18.5	19.5	20.5	21.4	23.2	24.9	26.6	29.6	1100	0.00	0.13	0.27	0.40	0.53	0.66	0.80	0.93	1.06	1.19							
1200	14.2	15.4	16.5	17.6	18.7	19.7	20.7	21.7	22.7	24.6	26.3	28.0	31.0	1200	0.00	0.14	0.29	0.43	0.58	0.72	0.87	1.01	1.16	1.30							
1300	15.1	16.3	17.4	18.6	19.7	20.8	21.9	22.9	23.9	25.8	27.6	29.3	32.2	1300	0.00	0.16	0.31	0.47	0.63	0.78	0.94	1.10	1.25	1.41							
1400	15.9	17.1	18.4	19.5	20.7	21.8	22.9	24.0	25.0	26.9	28.7	30.4	33.1	1400	0.00	0.17	0.34	0.51	0.67	0.84	1.01	1.18	1.35	1.52							
1500	16.6	17.9	19.2	20.4	21.6	22.8	23.9	25.0	26.0	28.0	29.7	31.3	33.9	1500	0.00	0.18	0.36	0.54	0.72	0.90	1.09	1.27	1.45	1.63							
1600	17.3	18.7	20.0	21.3	22.5	23.7	24.8	25.9	26.9	28.9	30.6	32.1		1600	0.00	0.19	0.39	0.58	0.77	0.96	1.16	1.35	1.54	1.74							
1700	18.0	19.4	20.8	22.1	23.3	24.5	25.6	26.7	27.8	29.6	31.3	32.6		1700	0.00	0.21	0.41	0.62	0.82	1.03	1.23	1.43	1.64	1.85							
1800	18.7	20.1	21.5	22.8	24.1	25.3	26.4	27.5	28.5	30.3	31.8			1800	0.00	0.22	0.43	0.65	0.87	1.09	1.30	1.52	1.74	1.95							
1900	19.3	20.7	22.1	23.5	24.7	25.9	27.0	28.1	29.1	30.8				1900	0.00	0.23	0.46	0.69	0.92	1.15	1.37	1.60	1.83	2.06							
2000	19.9	21.3	22.7	24.1	25.3	26.5	27.6	28.6	29.6	31.1				2000	0.00	0.24	0.48	0.72	0.96	1.21	1.45	1.69	1.93	2.17							
2100	20.4	21.9	23.3	24.6	25.9	27.0	28.1	29.1	29.9					2100	0.00	0.25	0.51	0.76	1.01	1.27	1.52	1.77	2.03	2.28							
2200	20.9	22.4	23.8	25.1	26.3	27.5	28.5	29.4						2200	0.00	0.27	0.53	0.80	1.06	1.33	1.59	1.86	2.12	2.38							
2300	21.3	22.8	24.2	25.5	26.7	27.8	28.8							2300	0.00	0.28	0.56	0.83	1.11	1.39	1.66	1.94	2.22	2.50							
2400	21.7	23.2	24.6	25.9	27.0	28.1								2400	0.00	0.29	0.58	0.87	1.16	1.45	1.74	2.03	2.31	2.60							
2500	22.1	23.6	25.0	26.2	27.3	28.2								2500	0.00	0.30	0.60	0.90	1.21	1.51	1.81	2.11	2.41	2.71							
2600	22.4	23.9	25.2	26.4	27.4									2600	0.00	0.31	0.63	0.94	1.25	1.57	1.88	2.19	2.51	2.82							
2700	22.7	24.1	25.4	26.6										2700	0.00	0.33	0.65	0.98	1.30	1.63	1.95	2.28	2.60	2.93							
2800	22.9	24.3	25.6											2800	0.00	0.34	0.68	1.01	1.35	1.69	2.03	2.36	2.70	3.04							
2900	23.1	24.5	25.7											2900	0.00	0.35	0.70	1.05	1.40	1.75	2.10	2.45	2.80	3.15							
3000	23.3	24.6												3000	0.00	0.36	0.72	1.09	1.45	1.81	2.17	2.53	2.89	3.26							
3100	23.4	24.6												3100	0.00	0.37	0.75	1.12	1.49	1.87	2.24	2.62	2.99	3.36							
3200	23.4													3200	0.00	0.39	0.77	1.16	1.54	1.93	2.31	2.70	3.09	3.47							
3300	23.4													3300	0.00	0.40	0.80	1.19	1.59	1.99	2.39	2.79	3.18	3.58							

Drives for rpm-diameter combinations where no horsepower is shown may be practical if all conditions are known. See your local Gates representative.

Table No. B33



Rated Horsepower per belt for C Section Predator V-Belts and Predator PowerBand Belts

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Datum Diameter										RPM of Faster Shaft	Additional Horsepower per Belt for Speed Ratio																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	9.00	9.50	10.00	10.50	11.00	12.00	13.00	14.00	16.00	1.00 to 1.01		1.02 to 1.03	1.04 to 1.05	1.06 to 1.07	1.08 to 1.09	1.10 to 1.11	1.12 to 1.13	1.14 to 1.15	1.16 to 1.17	1.18 to 1.19	1.20 to 1.21	1.22 to 1.23	1.24 to 1.25	1.26 to 1.27	1.28 to 1.29	1.30 to 1.31	1.32 to 1.33	1.34 to 1.35	1.36 to 1.37	1.38 to 1.39	1.40 to 1.41	1.42 to 1.43	1.44 to 1.45	1.46 to 1.47	1.48 to 1.49	1.50 to 1.51	1.52 to 1.53	1.54 to 1.55	1.56 to 1.57	1.58 to 1.59	1.60 to 1.61	1.62 to 1.63	1.64 to 1.65	1.66 to 1.67	1.68 to 1.69	1.70 to 1.71	1.72 to 1.73	1.74 to 1.75	1.76 to 1.77	1.78 to 1.79	1.80 to 1.81	1.82 to 1.83	1.84 to 1.85	1.86 to 1.87	1.88 to 1.89	1.90 to 1.91	1.92 to 1.93	1.94 to 1.95	1.96 to 1.97	1.98 to 1.99	2.00 to 2.01	2.02 to 2.03	2.04 to 2.05	2.06 to 2.07	2.08 to 2.09	2.10 to 2.11	2.12 to 2.13	2.14 to 2.15	2.16 to 2.17	2.18 to 2.19	2.20 to 2.21	2.22 to 2.23	2.24 to 2.25	2.26 to 2.27	2.28 to 2.29	2.30 to 2.31	2.32 to 2.33	2.34 to 2.35	2.36 to 2.37	2.38 to 2.39	2.40 to 2.41	2.42 to 2.43	2.44 to 2.45	2.46 to 2.47	2.48 to 2.49	2.50 to 2.51	2.52 to 2.53	2.54 to 2.55	2.56 to 2.57	2.58 to 2.59	2.60 to 2.61	2.62 to 2.63	2.64 to 2.65	2.66 to 2.67	2.68 to 2.69	2.70 to 2.71	2.72 to 2.73	2.74 to 2.75	2.76 to 2.77	2.78 to 2.79	2.80 to 2.81	2.82 to 2.83	2.84 to 2.85	2.86 to 2.87	2.88 to 2.89	2.90 to 2.91	2.92 to 2.93	2.94 to 2.95	2.96 to 2.97	2.98 to 2.99	3.00 to 3.01	3.02 to 3.03	3.04 to 3.05	3.06 to 3.07	3.08 to 3.09	3.10 to 3.11	3.12 to 3.13	3.14 to 3.15	3.16 to 3.17	3.18 to 3.19	3.20 to 3.21	3.22 to 3.23	3.24 to 3.25	3.26 to 3.27	3.28 to 3.29	3.30 to 3.31	3.32 to 3.33	3.34 to 3.35	3.36 to 3.37	3.38 to 3.39	3.40 to 3.41	3.42 to 3.43	3.44 to 3.45	3.46 to 3.47	3.48 to 3.49	3.50 to 3.51	3.52 to 3.53	3.54 to 3.55	3.56 to 3.57	3.58 to 3.59	3.60 to 3.61	3.62 to 3.63	3.64 to 3.65	3.66 to 3.67	3.68 to 3.69	3.70 to 3.71	3.72 to 3.73	3.74 to 3.75	3.76 to 3.77	3.78 to 3.79	3.80 to 3.81	3.82 to 3.83	3.84 to 3.85	3.86 to 3.87	3.88 to 3.89	3.90 to 3.91	3.92 to 3.93	3.94 to 3.95	3.96 to 3.97	3.98 to 3.99	4.00 to 4.01	4.02 to 4.03	4.04 to 4.05	4.06 to 4.07	4.08 to 4.09	4.10 to 4.11	4.12 to 4.13	4.14 to 4.15	4.16 to 4.17	4.18 to 4.19	4.20 to 4.21	4.22 to 4.23	4.24 to 4.25	4.26 to 4.27	4.28 to 4.29	4.30 to 4.31	4.32 to 4.33	4.34 to 4.35	4.36 to 4.37	4.38 to 4.39	4.40 to 4.41	4.42 to 4.43	4.44 to 4.45	4.46 to 4.47	4.48 to 4.49	4.50 to 4.51	4.52 to 4.53	4.54 to 4.55	4.56 to 4.57	4.58 to 4.59	4.60 to 4.61	4.62 to 4.63	4.64 to 4.65	4.66 to 4.67	4.68 to 4.69	4.70 to 4.71	4.72 to 4.73	4.74 to 4.75	4.76 to 4.77	4.78 to 4.79	4.80 to 4.81	4.82 to 4.83	4.84 to 4.85	4.86 to 4.87	4.88 to 4.89	4.90 to 4.91	4.92 to 4.93	4.94 to 4.95	4.96 to 4.97	4.98 to 4.99	5.00 to 5.01	5.02 to 5.03	5.04 to 5.05	5.06 to 5.07	5.08 to 5.09	5.10 to 5.11	5.12 to 5.13	5.14 to 5.15	5.16 to 5.17	5.18 to 5.19	5.20 to 5.21	5.22 to 5.23	5.24 to 5.25	5.26 to 5.27	5.28 to 5.29	5.30 to 5.31	5.32 to 5.33	5.34 to 5.35	5.36 to 5.37	5.38 to 5.39	5.40 to 5.41	5.42 to 5.43	5.44 to 5.45	5.46 to 5.47	5.48 to 5.49	5.50 to 5.51	5.52 to 5.53	5.54 to 5.55	5.56 to 5.57	5.58 to 5.59	5.60 to 5.61	5.62 to 5.63	5.64 to 5.65	5.66 to 5.67	5.68 to 5.69	5.70 to 5.71	5.72 to 5.73	5.74 to 5.75	5.76 to 5.77	5.78 to 5.79	5.80 to 5.81	5.82 to 5.83	5.84 to 5.85	5.86 to 5.87	5.88 to 5.89	5.90 to 5.91	5.92 to 5.93	5.94 to 5.95	5.96 to 5.97	5.98 to 5.99	6.00 to 6.01	6.02 to 6.03	6.04 to 6.05	6.06 to 6.07	6.08 to 6.09	6.10 to 6.11	6.12 to 6.13	6.14 to 6.15	6.16 to 6.17	6.18 to 6.19	6.20 to 6.21	6.22 to 6.23	6.24 to 6.25	6.26 to 6.27	6.28 to 6.29	6.30 to 6.31	6.32 to 6.33	6.34 to 6.35	6.36 to 6.37	6.38 to 6.39	6.40 to 6.41	6.42 to 6.43	6.44 to 6.45	6.46 to 6.47	6.48 to 6.49	6.50 to 6.51	6.52 to 6.53	6.54 to 6.55	6.56 to 6.57	6.58 to 6.59	6.60 to 6.61	6.62 to 6.63	6.64 to 6.65	6.66 to 6.67	6.68 to 6.69	6.70 to 6.71	6.72 to 6.73	6.74 to 6.75	6.76 to 6.77	6.78 to 6.79	6.80 to 6.81	6.82 to 6.83	6.84 to 6.85	6.86 to 6.87	6.88 to 6.89	6.90 to 6.91	6.92 to 6.93	6.94 to 6.95	6.96 to 6.97	6.98 to 6.99	7.00 to 7.01	7.02 to 7.03	7.04 to 7.05	7.06 to 7.07	7.08 to 7.09	7.10 to 7.11	7.12 to 7.13	7.14 to 7.15	7.16 to 7.17	7.18 to 7.19	7.20 to 7.21	7.22 to 7.23	7.24 to 7.25	7.26 to 7.27	7.28 to 7.29	7.30 to 7.31	7.32 to 7.33	7.34 to 7.35	7.36 to 7.37	7.38 to 7.39	7.40 to 7.41	7.42 to 7.43	7.44 to 7.45	7.46 to 7.47	7.48 to 7.49	7.50 to 7.51	7.52 to 7.53	7.54 to 7.55	7.56 to 7.57	7.58 to 7.59	7.60 to 7.61	7.62 to 7.63	7.64 to 7.65	7.66 to 7.67	7.68 to 7.69	7.70 to 7.71	7.72 to 7.73	7.74 to 7.75	7.76 to 7.77	7.78 to 7.79	7.80 to 7.81	7.82 to 7.83	7.84 to 7.85	7.86 to 7.87	7.88 to 7.89	7.90 to 7.91	7.92 to 7.93	7.94 to 7.95	7.96 to 7.97	7.98 to 7.99	8.00 to 8.01	8.02 to 8.03	8.04 to 8.05	8.06 to 8.07	8.08 to 8.09	8.10 to 8.11	8.12 to 8.13	8.14 to 8.15	8.16 to 8.17	8.18 to 8.19	8.20 to 8.21	8.22 to 8.23	8.24 to 8.25	8.26 to 8.27	8.28 to 8.29	8.30 to 8.31	8.32 to 8.33	8.34 to 8.35	8.36 to 8.37	8.38 to 8.39	8.40 to 8.41	8.42 to 8.43	8.44 to 8.45	8.46 to 8.47	8.48 to 8.49	8.50 to 8.51	8.52 to 8.53	8.54 to 8.55	8.56 to 8.57	8.58 to 8.59	8.60 to 8.61	8.62 to 8.63	8.64 to 8.65	8.66 to 8.67	8.68 to 8.69	8.70 to 8.71	8.72 to 8.73	8.74 to 8.75	8.76 to 8.77	8.78 to 8.79	8.80 to 8.81	8.82 to 8.83	8.84 to 8.85	8.86 to 8.87	8.88 to 8.89	8.90 to 8.91	8.92 to 8.93	8.94 to 8.95	8.96 to 8.97	8.98 to 8.99	9.00 to 9.01	9.02 to 9.03	9.04 to 9.05	9.06 to 9.07	9.08 to 9.09	9.10 to 9.11	9.12 to 9.13	9.14 to 9.15	9.16 to 9.17	9.18 to 9.19	9.20 to 9.21	9.22 to 9.23	9.24 to 9.25	9.26 to 9.27	9.28 to 9.29	9.30 to 9.31	9.32 to 9.33	9.34 to 9.35	9.36 to 9.37	9.38 to 9.39	9.40 to 9.41	9.42 to 9.43	9.44 to 9.45	9.46 to 9.47	9.48 to 9.49	9.50 to 9.51	9.52 to 9.53	9.54 to 9.55	9.56 to 9.57	9.58 to 9.59	9.60 to 9.61	9.62 to 9.63	9.64 to 9.65	9.66 to 9.67	9.68 to 9.69	9.70 to 9.71	9.72 to 9.73	9.74 to 9.75	9.76 to 9.77	9.78 to 9.79	9.80 to 9.81	9.82 to 9.83	9.84 to 9.85	9.86 to 9.87	9.88 to 9.89	9.90 to 9.91	9.92 to 9.93	9.94 to 9.95	9.96 to 9.97	9.98 to 9.99	10.00 to 10.01	10.02 to 10.03	10.04 to 10.05	10.06 to 10.07	10.08 to 10.09	10.10 to 10.11	10.12 to 10.13	10.14 to 10.15	10.16 to 10.17	10.18 to 10.19	10.20 to 10.21	10.22 to 10.23	10.24 to 10.25	10.26 to 10.27	10.28 to 10.29	10.30 to 10.31	10.32 to 10.33	10.34 to 10.35	10.36 to 10.37	10.38 to 10.39	10.40 to 10.41	10.42 to 10.43	10.44 to 10.45	10.46 to 10.47	10.48 to 10.49	10.50 to 10.51	10.52 to 10.53	10.54 to 10.55	10.56 to 10.57	10.58 to 10.59	10.60 to 10.61	10.62 to 10.63	10.64 to 10.65	10.66 to 10.67	10.68 to 10.69	10.70 to 10.71	10.72 to 10.73	10.74 to 10.75	10.76 to 10.77	10.78 to 10.79	10.80 to 10.81	10.82 to 10.83	10.84 to 10.85	10.86 to 10.87	10.88 to 10.89	10.90 to 10.91	10.92 to 10.93	10.94 to 10.95	10.96 to 10.97	10.98 to 10.99	11.00 to 11.01	11.02 to 11.03	11.04 to 11.05	11.06 to 11.07	11.08 to 11.09	11.10 to 11.11	11.12 to 11.13	11.14 to 11.15	11.16 to 11.17	11.18 to 11.19	11.20 to 11.21	11.22 to 11.23	11.24 to 11.25	11.26 to 11.27	11.28 to 11.29	11.30 to 11.31	11.32 to 11.33	11.34 to 11.35	11.36 to 11.37	11.38 to 11.39	11.40 to 11.41	11.42 to 11.43	11.44 to 11.45	11.46 to 11.47	11.48 to 11.49	11.50 to 11.51	11.52 to 11.53	11.54 to 11.55	11.56 to 11.57	11.58 to 11.59	11.60 to 11.61	11.62 to 11.63	11.64 to 11.65	11.66 to 11.67	11.68 to 11.69	11.70 to 11.71	11.72 to 11.73	11.74 to 11.75	11.76 to 11.77	11.78 to 11.79	11.80 to 11.81	11.82 to 11.83	11.84 to 11.85	11.86 to 11.87	11.88 to 11.89	11.90 to 11.91	11.92 to 11.93	11.94 to 11.95	11.96 to 11.97	11.98 to 11.99	12.00 to 12.01	12.02 to 12.03	12.04 to 12.05	12.06 to 12.07	12.08 to 12.09	12.10 to 12.11	12.12 to 12.13	12.14 to 12.15	12.16 to 12.17	12.18 to 12.19	12.20 to 12.21	12.22 to 12.23	12.24 to 12.25	12.26 to 12.27	12.28 to 12.29	12.30 to 12.31	12.32 to 12.33	12.34 to 12.35	12.36 to 12.37	12.38 to 12.39	12.40 to 12.41	12.42 to 12.43	12.44 to 12.45	12.46 to 12.47	12.48 to 12.49	12.50 to 12.51	12.52 to 12.53	12.54 to 12.55	12.56 to 12.57	12.58 to 12.59	12.60 to 12.61	12.62 to 12.63	12.64 to 12.65	12.66 to 12.67	12.68 to 12.69	12.70 to 12.71	12.72 to 12.73	12.74 to 12.75	12.76 to 12.77	12.78 to 12.79	12.80 to 12.81	12.82 to 12.83	12.84 to 12.85	12.86 to 12.87	12.88 to 12.89	12.90 to 12.91	12.92 to 12.93	12.94 to 12.95	12.96 to 12.97	12.98 to 12.99	13.00 to 13.01	13.02 to 13.03	13.04 to 13.05	13.06 to 13.07	13.08 to 13.09	13.10 to 13.11	13.12 to 13.13	13.14 to 13.15	13.16 to 13.17	13.18 to 13.19	13.20 to 13.21	13.22 to 13.23	13.24 to 13.25	13.26 to 13.27	13.28 to 13.29	13.30 to 13.31	13.32 to 13.33	13.34 to 13.35	13.36 to 13.37	13.38 to 13.39	13.40 to 13.41	13.42 to 13.43	13.44 to 13.45	13.46 to 13.47	13.48 to 13.49	13.50 to 13.51	13.52 to 13.53	13.54 to 13.55	13.56 to 13.57	13.58 to 13.59	13.60 to 13.61	13.62 to 13.63	13.64 to 13.65	13.66 to 13.67	13.68 to 13.69	13.70 to 13.71	13.72 to 13.73	13.74 to 13.75	13.76 to 13.77	13.78 to 13.79	13.80 to 13.81	13.82 to 13.83	13.84 to 13.85	13.86 to 13.87	13.88 to 13.89	13.90 to 13.91	13.92 to 13.93	13.94 to 13.95	13.96 to 13.97	13.98 to 13.99	14.00 to 14.01	14.02 to 14.03	14.04 to 14.05	14.06 to 14.07	14.08 to 14.09	14.10 to 14.11	14.12 to 14.13	14.14 to 14.15	14.16 to 14.17	14.18 to 14.19	14.20 to 14.21	14.22 to 14.23	14.24 to 14.25	14.26 to 14.27	14.28 to 14.29	14.30 to 14.31	14.32 to 14.33	14.34 to 14.35	14.36 to 14.37	14.38 to 14.39	14.40 to 14.41	14.42 to 14.43	14.44 to 14.45	14.46 to 14.47	14.48 to 14.49	14.50 to 14.51	14.52 to 14.53	14.54 to 14.55	14.56 to 14.57	14.58 to 14.59	14.60 to 14.61	14.62 to 14.63	14.64 to 14.65	14.66 to 14.67	14.68 to 14.69	14.70 to 14.71	14.72 to 14.73	14.74 to 14.75	14.76 to 14.77	14.78 to 14.79	14.80 to 14.81	14.82 to 14.83	14.84 to 14.85	14.86 to 14.87	14.88 to 14.89	14.90 to 14.91	14.92 to 14.93	14.94 to 14.95	14.96 to 14.97	14.98 to 14.99	15.00 to 15.01	15.02 to 15.03	15.04 to 15.05	15.06 to 15.07	15.08 to 15.09	15.10 to 15.11	15.12 to 15.13	15.14 to 15.15	15.16 to 15.17	15.18 to 15.19	15.20 to 15.21	15.22 to 15.23	15.24 to 15.25	15.26 to 15.27	15.28 to 15.29	15.30 to 15.31	15.32 to 15.33	15.34 to 15.35	15.36 to 15.37	15.38 to 15.39	15.40 to 15.41	15.42 to 15.43	15.44 to 15.45	15.46 to 15.47	15.48 to 15.49	15.50 to 15.51	15.52 to 15.53	15.54 to 15.55	15.56 to 15.57	15.58 to 15.59	15.60 to 15.61	15.62 to 15.63	15.64 to 15.65	15.66 to 15.67	15.68 to 15.69	15.70 to 15.71	15.72 to 15.73	15.74 to 15.75	15.76 to 15.77	15.78 to 15.79	15.80 to 15.81	15.82 to 15.83	15.84 to 15.85	15.86 to 15.87	15.88 to 15.89	15.90 to 15.91	15.92 to 15.93	15.94 to 15.95	15.96 to 15.97	15.98 to 15.99	16.00 to 16.01	16.02 to 16.03	16.04 to 16.05	16.06 to 16.07	16.08 to 16.09

Table No. B34



Rated Horsepower per Belt for D Section Hi-Power® II V-Belts and Hi-Power® II PowerBand Belts

RPM of Faster Shaft	Basic Horsepower per Belt for Small Sheave Datum Diameter										RPM of Faster Shaft	Additional Horsepower per Belt for Speed Ratio									
	13.00	13.50	14.00	14.50	15.00	15.50	16.00	17.00	18.00	20.00		22.00	1.00 to 1.01	1.02 to 1.03	1.04 to 1.06	1.07 to 1.08	1.09 to 1.12	1.13 to 1.16	1.17 to 1.22	1.23 to 1.33	1.51 over
435	17.3	18.4	19.5	20.6	21.7	22.8	23.9	26.1	28.2	32.4	36.5	0.00	0.16	0.33	0.49	0.65	0.81	0.98	1.14	1.30	1.46
485	18.8	20.0	21.3	22.5	23.7	24.9	26.1	28.4	30.8	35.3	39.7	0.00	0.18	0.36	0.55	0.73	0.91	1.09	1.27	1.45	1.63
575	21.4	22.8	24.2	25.6	27.0	28.3	29.7	32.4	35.0	40.1	44.9	0.00	0.22	0.43	0.65	0.86	1.08	1.29	1.50	1.72	1.93
690	24.4	26.0	27.6	29.2	30.8	32.3	33.8	36.8	39.7	45.4	50.6	0.00	0.26	0.52	0.78	1.03	1.29	1.55	1.80	2.06	2.32
725	25.2	26.9	28.6	30.2	31.8	33.4	35.0	38.1	41.0	46.8	52.1	0.00	0.27	0.54	0.81	1.08	1.36	1.63	1.90	2.17	2.44
870	28.4	30.3	32.1	33.9	35.7	37.4	39.2	42.5	45.7	51.7	57.1	0.00	0.33	0.65	0.98	1.30	1.63	1.95	2.28	2.60	2.93
950	29.9	31.8	33.8	35.6	37.5	39.3	41.1	44.5	47.7	53.7	58.8	0.00	0.36	0.71	1.07	1.42	1.78	2.13	2.48	2.84	3.20
1160	32.8	34.9	37.0	38.9	40.8	42.7	44.5	47.8	50.8	56.0	60.0	0.00	0.43	0.87	1.30	1.73	2.17	2.60	3.03	3.47	3.90
50	2.78	2.95	3.11	3.27	3.43	3.59	3.75	4.06	4.38	5.01	5.63	0.00	0.02	0.04	0.06	0.07	0.09	0.11	0.13	0.15	0.17
100	5.08	5.38	5.69	5.99	6.29	6.59	6.89	7.49	8.09	9.27	10.4	0.00	0.04	0.07	0.11	0.15	0.19	0.22	0.26	0.30	0.34
150	7.18	7.62	8.06	8.50	8.94	9.37	9.80	10.7	11.5	13.2	14.9	0.00	0.06	0.11	0.17	0.22	0.28	0.34	0.39	0.45	0.50
200	9.16	9.73	10.3	10.9	11.4	12.0	12.6	13.7	14.8	17.0	19.1	0.00	0.07	0.15	0.22	0.30	0.37	0.45	0.52	0.60	0.67
250	11.0	11.7	12.4	13.1	13.8	14.5	15.2	16.5	17.9	20.6	23.2	0.00	0.09	0.19	0.28	0.37	0.47	0.56	0.65	0.75	0.84
300	12.8	13.6	14.5	15.3	16.1	16.9	17.7	19.3	20.8	24.0	27.0	0.00	0.11	0.22	0.34	0.45	0.56	0.67	0.78	0.90	1.01
350	14.5	15.5	16.4	17.3	18.3	19.2	20.1	21.9	23.7	27.2	30.7	0.00	0.13	0.26	0.39	0.52	0.65	0.79	0.92	1.05	1.18
400	16.2	17.2	18.3	19.3	20.3	21.4	22.4	24.4	26.4	30.3	34.2	0.00	0.15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35
450	17.8	18.9	20.1	21.2	22.3	23.5	24.6	26.8	29.0	33.3	37.5	0.00	0.17	0.34	0.51	0.67	0.84	1.01	1.18	1.35	1.51
500	19.3	20.5	21.8	23.0	24.3	25.5	26.7	29.1	31.5	36.1	40.6	0.00	0.19	0.37	0.56	0.75	0.94	1.12	1.31	1.50	1.68
550	20.7	22.1	23.4	24.8	26.1	27.4	28.7	31.3	33.8	38.8	43.5	0.00	0.21	0.41	0.62	0.82	1.03	1.23	1.44	1.65	1.85
600	22.1	23.5	25.0	26.4	27.8	29.2	30.6	33.4	36.1	41.3	46.3	0.00	0.22	0.45	0.67	0.90	1.12	1.35	1.57	1.80	2.02
650	23.4	24.9	26.5	28.0	29.5	31.0	32.4	35.3	38.2	43.6	48.8	0.00	0.24	0.49	0.73	0.97	1.22	1.46	1.70	1.95	2.19
700	24.6	26.3	27.9	29.5	31.1	32.6	34.2	37.2	40.1	45.8	51.1	0.00	0.26	0.52	0.79	1.05	1.31	1.57	1.83	2.09	2.36
750	25.8	27.5	29.2	30.9	32.5	34.2	35.8	38.9	41.9	47.7	53.1	0.00	0.28	0.56	0.84	1.12	1.40	1.68	1.96	2.24	2.52
800	26.9	28.7	30.5	32.2	33.9	35.6	37.3	40.5	43.6	49.5	55.0	0.00	0.30	0.60	0.90	1.20	1.50	1.80	2.09	2.39	2.69
850	28.0	29.8	31.7	33.4	35.2	36.9	38.6	42.0	45.1	51.1	56.5	0.00	0.32	0.64	0.96	1.27	1.59	1.91	2.22	2.54	2.86
900	29.0	30.9	32.7	34.6	36.4	38.2	39.9	43.3	46.5	52.5	57.8	0.00	0.34	0.67	1.01	1.35	1.68	2.02	2.35	2.69	3.03
950	29.9	31.8	33.8	35.6	37.5	39.3	41.1	44.5	47.7	53.7	58.8	0.00	0.36	0.71	1.07	1.42	1.78	2.13	2.48	2.84	3.20
1000	30.7	32.7	34.7	36.6	38.5	40.3	42.1	45.5	48.7	54.6	59.6	0.00	0.37	0.75	1.12	1.50	1.87	2.24	2.62	2.99	3.36
1050	31.4	33.5	35.5	37.4	39.3	41.2	43.0	46.4	49.6	55.3	60.0	0.00	0.39	0.79	1.18	1.57	1.96	2.36	2.75	3.14	3.53
1100	32.1	34.2	36.2	38.2	40.1	41.9	43.7	47.1	50.3	55.8	60.0	0.00	0.41	0.82	1.24	1.64	2.06	2.47	2.88	3.29	3.70
1150	32.7	34.8	36.8	38.8	40.7	42.6	44.4	47.7	50.8	56.0	60.0	0.00	0.43	0.86	1.29	1.72	2.15	2.58	3.01	3.44	3.87
1200	33.2	35.3	37.4	39.3	41.2	43.1	44.8	48.1	51.1	56.0	60.0	0.00	0.45	0.90	1.35	1.79	2.24	2.69	3.14	3.59	4.04
1250	33.6	35.8	37.8	39.8	41.6	43.4	45.2	48.3	51.2	56.0	60.0	0.00	0.47	0.94	1.40	1.87	2.34	2.81	3.27	3.74	4.21
1300	34.0	36.1	38.1	40.1	41.9	43.7	45.3	48.4	51.0	56.0	60.0	0.00	0.49	0.97	1.46	1.94	2.43	2.92	3.40	3.89	4.37
1350	34.2	36.3	38.3	40.2	42.0	43.8	45.4	48.3	51.0	56.0	60.0	0.00	0.51	1.01	1.52	2.02	2.52	3.03	3.53	4.04	4.54
1400	34.4	36.4	38.4	40.3	42.1	43.7	45.2	47.9	50.8	56.0	60.0	0.00	0.52	1.05	1.57	2.09	2.62	3.14	3.66	4.19	4.71
1450	34.4	36.5	38.4	40.2	41.9	43.5	44.9	47.9	50.8	56.0	60.0	0.00	0.54	1.09	1.63	2.17	2.71	3.26	3.79	4.34	4.88
1500	34.4	36.4	38.3	40.0	41.6	43.1	43.1	45.2	48.3	51.2	56.0	0.00	0.56	1.12	1.69	2.24	2.81	3.37	3.92	4.49	5.05
1550	34.2	36.2	38.0	39.7	41.2	42.7	44.2	47.1	50.0	55.3	60.0	0.00	0.58	1.16	1.74	2.32	2.90	3.48	4.05	4.64	5.22
1600	34.0	35.9	37.6	39.2	40.7	42.2	43.7	46.6	49.5	54.8	60.0	0.00	0.60	1.20	1.80	2.39	2.99	3.59	4.18	4.79	5.38
1650	33.6	35.4	37.1	38.7	40.2	41.7	43.2	46.1	49.0	54.3	60.0	0.00	0.62	1.24	1.85	2.47	3.09	3.7	4.32	4.94	5.55
1700	33.2	34.9	36.4	38.0	39.5	41.0	42.5	45.4	48.3	53.6	60.0	0.00	0.64	1.27	1.91	2.54	3.18	3.82	4.45	5.09	5.72
1750	32.6	34.2	35.7	37.2	38.7	40.2	41.7	44.6	47.5	52.8	60.0	0.00	0.65	1.31	1.97	2.62	3.27	3.93	4.58	5.24	5.89
1800	31.9	33.5	35.0	36.5	38.0	39.5	41.0	43.9	46.8	52.1	60.0	0.00	0.67	1.35	2.02	2.69	3.37	4.04	4.71	5.39	6.06

Drives for rpm-diameter combinations where no horsepower is shown may be practical if all conditions are known. See your local Gates representative

SECTION C **Metal Specifications**

- Narrow Section Sheave Specifications
 - Sheave Specification Tables
 - Super HC 3V Section Sheaves
 - Super HC 5V Section Sheaves
 - Super HC 8V Section Sheaves
- Classical Section Sheave Specifications
 - Sheave Specification Tables
 - Multi-Duty A/B Combination Section Sheaves
 - Multi-Duty C Section Sheaves
 - Multi Duty D Section Sheaves
- General Sheave Specifications
 - Sheave Groove Information
 - Shaft and Hub Keyway and Key Sizes
 - QD Bushings
 - QD Type Sheave Installation and Removal

Gates Super HC[®] Sheaves

For 3VX, 5VX, 5V and 8V Super HC[®] V-Belt, Super HC Molded Notch V-Belt, Super HC PowerBand[®] Belt and Super HC Molded Notch PowerBand Belt Drives

and

Gates Hi-Power[®] II Multi-Duty[®] Sheaves

For A, B, C and D Hi-Power[®] II V-Belt, Hi-Power II PowerBand Belt and Tri-Power[®] Molded Notch V-Belt Drives



Type QD Stock Sheaves

Easy On, Easy Off. A Type QD Sheave, with a full split in the bushing and with a precision, tapered fit between the sheave hub and the bushing, is easy to slide on any standard size shaft or on any shaft which may vary slightly from standard. The pull-up bolts then pull the rim onto the QD Bushing to complete the sheave installation assembly.

Remove these bolts, and they also serve as jackscrews to release the bushing's tight grip on the shaft for quick, easy removal of the rim and the bushing. No forcing or heavy tools are necessary.

Stay Tight, Run True. In the inherent Type QD Sheave design, the sheave hub and the split, tapered bushing are precisely "mated"—exactly engineered to fit as an integral unit. This produces a positive, press fit on the shaft, there is no sheave wobble and all QD Sheaves stay tight, run true.

Mount Two Different Ways. The normal mounting position for the Type QD Sheave is to install the bushing flange next to the motor or bearing. To mount, simply insert the pull-up bolts through the sheave hub and into the bushing flange.

All Gates Type QD Sheaves using J or smaller bushings may also be reversed mounted. This alternate mounting position often enables the sheave rim to be mounted closer to the bearing. The exception to this rule is Type E design sheaves which are reverse mount ONLY.

Made-To-Order Sheaves

Made-to-Order. These sheaves are furnished, in a minimum of delivery time, on special order. They are not carried in stock.

Precision Of Manufacture. Gates made-to-order sheaves are true running and accurately grooved. They are built with the same degree of precision manufacture that is used in producing stock sheaves.

Bores and Keyseats. Nominal shaft-size, straight bores, with standard keyseats, are regularly furnished. Also, these sheaves are available with split QD bushings. Split sheaves and solid rim split hub sheaves can be furnished when diameters and bore permit.

Gates Super HC™ and Hi-Power™ II Sheaves

General Information

Availability and Delivery

Stock Sheaves

Stock Sheaves—Type QD Sheaves—are quickly available to you through your Gates V-Belt distributor. Normally he will carry this type of sheave line in his own stock, but delivery of any Stock Sheave is possible from a nationwide network of stocking distributors and Gates regional warehouses.

Before you select a Type QD Stock Sheave, check the supply of the Gates V-Belt distributor who serves your area.

Visit www.gates.com/distributors to find a distributor in your area.

Made-to-Order Sheaves

Delivery times for made-to-order sheaves vary, depending upon how special the construction is. Estimated delivery times can be furnished by your Gates V-Belt distributor.

How To Order Sheaves and Bushings

To Order Stock Type QD Sheaves and Bushings

Specify the quantity of sheaves required, the number of grooves, V-Belt cross section size and nomenclature* diameter, OD Sheaves and the bushing bore diameter. To order bushings separately, specify the quantity, bushing letter(s), OD bushings and bore size.

**For example: Ten 4-3V-6.9" QD Sheaves, 1¼" Bore.
Three SK QD Bushings, 1½" Bore.**

OR

**For example: Ten 4-B-6.8" QD Sheaves, 1¼" Bore.
Three SF QD Bushings, 1½" Bore.**

To Order Made-to-Order Sheaves

When ordering special, made-to-order sheaves, send a print (preferably) or specify:

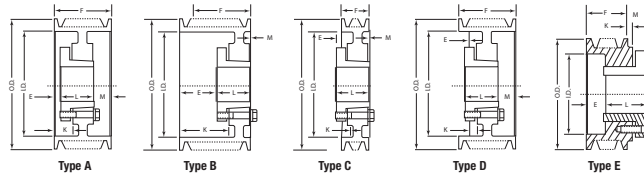
Nomenclature* diameter, number and size of grooves (3V, 5V, 8V or A, B, C and D), type of hub (Bored to size, QD, etc.), hub length and location, bore and keyway dimensions, split or solid rim and hub, WR²) (poundfeet²) if extra flywheel effect required.

*Outside diameter for 3V, 5V, 8V or Datum Diameter for A, B, C and D.

Balance and Sheave Rim Speeds

Gates stock sheaves and bushings are given a static balance that is satisfactory for rim speeds up to 6,500 feet per minute for Super HC, HiPower® II and TriPower® Molded Notch Belts. When sheaves will be subjected to speeds above these limits, the actual calculated speeds should be detailed on the sheave order so that the sheave supplier can furnish the required balancing and the proper material.

If you are in doubt as to the requirements of a "problem" drive, call your local Gates Industrial V-Belt distributor for his expertise, backed up by factory-trained engineers.



Design Type Suffix indicates rim construction:
 1 = Solid Style
 2 = Web Style
 3 = Arm Style

Table No. C1

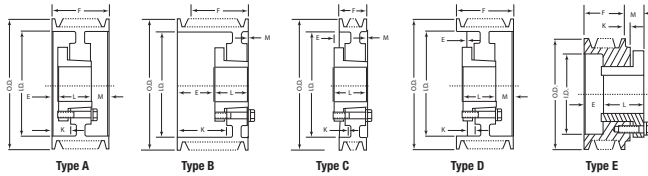
Super HC® QD® Sheaves

3V - 1 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD1/3V2.20	2.20	2.20	E1	1.13	0.59	0.13	1.00	0.91	JA	1,250	0.6
QD1/3V2.35	2.35	2.35	E1	1.13	0.59	0.13	1.00	0.91	JA	1,250	0.8
QD1/3V2.50	2.50	2.50	E1	1.13	0.59	0.13	1.00	0.91	JA	1,250	0.9
QD1/3V2.65	2.65	2.65	D1	0.69	0.41	0.31	1.00	0.09	JA	1,250	0.6
QD1/3V2.80	2.80	2.80	D1	0.69	0.41	0.31	1.00	0.09	JA	1,250	0.7
QD1/3V3.00	3.00	3.00	D1	0.69	0.41	0.31	1.00	0.09	JA	1,250	0.8
QD1/3V3.15	3.15	3.15	D1	0.69	0.41	0.31	1.00	0.09	JA	1,250	0.9
QD1/3V3.35	3.35	3.35	D1	0.69	0.41	0.31	1.00	0.09	JA	1,250	1.1
QD1/3V3.65	3.65	3.65	C1	0.69	0.56	0.31	1.25	0.00	SH	1,688	1.4
QD1/3V4.12	4.12	4.12	C1	0.69	0.56	0.31	1.25	0.00	SH	1,688	1.9
QD1/3V4.50	4.50	4.50	C1	0.69	0.56	0.31	1.25	0.00	SH	1,688	2.2
QD1/3V4.75	4.75	4.75	C1	0.69	0.56	0.31	1.25	0.00	SH	1,688	2.6
QD1/3V5.00	5.00	5.00	C1	0.69	0.56	0.31	1.25	0.00	SH	1,688	2.9
QD1/3V5.30	5.30	5.30	C1	0.69	0.56	0.25	1.25	0.00	SH	1,688	3.3
QD1/3V5.60	5.60	5.60	C1	0.69	0.56	0.25	1.25	0.00	SH	1,688	3.8
QD1/3V6.00	6.00	6.00	C2	0.69	0.56	0.25	1.25	0.00	SH	1,688	3.5
QD1/3V6.50	6.50	6.50	C2	0.69	0.56	0.25	1.25	0.00	SH	1,688	3.9
QD1/3V6.90	6.90	6.90	C2	0.69	0.56	0.00	1.25	0.00	SH	1,688	4.3
QD1/3V8.00	8.00	8.00	C2	0.69	0.63	0.13	1.31	0.00	SDS	2,000	5.9
QD1/3V10.60	10.60	10.60	D3	0.75	0.63	0.13	1.31	0.06	SDS	2,000	7.4
QD1/3V14.00	14.00	14.00	C3	0.81	0.72	0.00	1.88	0.34	SK	2,625	11.0
QD1/3V19.00	19.00	19.00	C3	0.81	0.72	0.00	1.88	0.34	SK	2,625	18.6

3V - 2 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD2/3V2.20	2.20	2.20	E1	1.53	1.00	0.13	1.00	0.91	JA	1,250	0.7
QD2/3V2.35	2.35	2.35	E1	1.53	1.00	0.13	1.00	0.91	JA	1,250	1.0
QD2/3V2.50	2.50	2.50	E1	1.53	1.00	0.69	1.00	0.91	JA	1,250	1.1
QD2/3V2.65	2.65	2.65	D1	1.09	0.34	0.69	1.00	0.44	JA	1,250	0.8
QD2/3V2.80	2.80	2.80	D1	1.09	0.34	0.69	1.00	0.44	JA	1,250	1.0
QD2/3V3.00	3.00	3.00	D1	1.09	0.34	0.69	1.00	0.44	JA	1,250	1.2
QD2/3V3.15	3.15	3.15	D1	1.09	0.34	0.69	1.00	0.44	JA	1,250	1.4
QD2/3V3.35	3.35	3.35	D1	1.09	0.44	0.69	1.25	0.28	SH	1,688	1.3
QD2/3V3.65	3.65	3.65	D1	1.09	0.44	0.69	1.25	0.28	SH	1,688	1.7
QD2/3V4.12	4.12	4.12	D1	1.09	0.25	0.69	1.25	0.09	SH	1,688	2.2
QD2/3V4.50	4.50	4.50	D1	1.09	0.25	0.69	1.25	0.09	SH	1,688	2.8
QD2/3V4.75	4.75	4.75	D1	1.09	0.25	0.25	1.25	0.09	SH	1,688	3.2
QD2/3V5.00	5.00	5.00	D1	1.09	0.25	0.25	1.25	0.09	SH	1,688	3.6
QD2/3V5.30	5.30	5.30	D1	1.09	0.25	0.25	1.25	0.09	SH	1,688	4.0
QD2/3V5.60	5.60	5.60	D1	1.09	0.25	0.25	1.25	0.09	SH	1,688	4.6
QD2/3V6.00	6.00	6.00	D2	1.09	0.25	0.25	1.25	0.09	SH	1,688	5.3
QD2/3V6.50	6.50	6.50	D1	1.09	0.31	0.25	1.31	0.09	SDS	2,000	6.0
QD2/3V6.90	6.90	6.90	D2	1.09	0.31	0.13	1.31	0.09	SDS	2,000	5.7
QD2/3V8.00	8.00	8.00	D2	1.09	0.31	0.13	1.31	0.09	SDS	2,000	5.3
QD2/3V10.60	10.60	10.60	C3	1.09	0.47	0.00	1.88	0.31	SK	2,625	11.1
QD2/3V14.00	14.00	14.00	C3	1.09	0.47	0.00	1.88	0.31	SK	2,625	17.2
QD2/3V19.00	19.00	19.00	C3	1.09	0.47	0.13	1.88	0.31	SK	2,625	22.0
QD2/3V25.00	25.00	25.00	C3	1.09	0.44	0.13	2.00	0.47	SF	2,938	38.0

3V - 3 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD3/3V2.50	2.50	2.50	E1	1.94	1.41	0.81	1.00	0.91	JA	1,250	1.4
QD3/3V2.65	2.65	2.65	E1	1.50	0.84	0.81	1.00	0.34	JA	1,250	1.1
QD3/3V2.80	2.80	2.80	E1	1.50	0.84	0.81	1.00	0.34	JA	1,250	1.3
QD3/3V3.00	3.00	3.00	E1	1.88	1.19	0.81	1.25	0.94	SH	1,688	1.6
QD3/3V3.15	3.15	3.15	E1	1.88	1.19	0.81	1.25	0.94	SH	1,688	2.0
QD3/3V3.35	3.35	3.35	D1	1.50	0.44	0.81	1.25	0.69	SH	1,688	1.7
QD3/3V3.65	3.65	3.65	D1	1.50	0.44	0.63	1.25	0.69	SH	1,688	2.3
QD3/3V4.12	4.12	4.12	A1	1.50	0.13	0.63	1.25	0.13	SH	1,688	2.7
QD3/3V4.50	4.50	4.50	A1	1.50	0.06	0.63	1.31	0.13	SDS	2,000	3.1
QD3/3V4.75	4.75	4.75	A1	1.50	0.06	0.63	1.31	0.13	SDS	2,000	3.6
QD3/3V5.00	5.00	5.00	A1	1.50	0.06	0.63	1.31	0.13	SDS	2,000	4.0
QD3/3V5.30	5.30	5.30	A1	1.50	0.06	0.63	1.31	0.13	SDS	2,000	4.6
QD3/3V5.60	5.60	5.60	A1	1.50	0.06	0.63	1.31	0.13	SDS	2,000	5.2
QD3/3V6.00	6.00	6.00	A1	1.50	0.06	0.63	1.31	0.13	SDS	2,000	6.0
QD3/3V6.50	6.50	6.50	D1	1.50	0.06	0.50	1.31	0.13	SDS	2,000	5.8
QD3/3V6.90	6.90	6.90	A2	1.50	0.06	0.81	1.31	0.13	SDS	2,000	6.3
QD3/3V8.00	8.00	8.00	D2	1.50	0.47	0.81	1.88	0.09	SK	2,625	9.9
QD3/3V10.60	10.60	10.60	D3	1.50	0.47	0.94	1.88	0.09	SK	2,625	12.6
QD3/3V14.00	14.00	14.00	D3	1.50	0.47	0.94	1.88	0.09	SK	2,625	19.0
QD3/3V19.00	19.00	19.00	C3	1.50	0.44	0.94	2.00	0.06	SF	2,938	33.0
QD3/3V25.00	25.00	25.00	C3	1.50	0.44	0.94	2.00	0.06	SF	2,938	42.0
QD3/3V33.50	33.50	33.50	C3	1.50	0.44	0.94	2.00	0.06	SF	2,938	62.0

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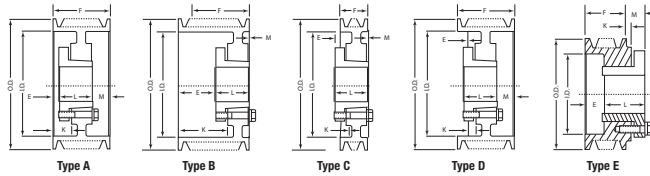
Design Type Suffix indicates rim construction:
 1 = Solid Style
 2 = Web Style
 3 = Arm Style

Table No. C1

Super HC® QD® Sheaves

3V - 4 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD4/3V2.65	2.65	2.65	E1	1.91	1.25	0.94	1.00	0.34	JA	1.250	1.6
QD4/3V2.80	2.80	2.80	E1	1.91	1.25	0.94	1.00	0.34	JA	1.250	1.6
QD4/3V3.00	3.00	3.00	E1	2.28	1.59	0.88	1.25	0.94	SH	1.688	1.9
QD4/3V3.15	3.15	3.15	E1	2.28	1.59	0.88	1.25	0.94	SH	1.688	2.3
QD4/3V3.35	3.35	3.35	D1	1.91	0.44	0.63	1.25	1.09	SH	1.688	2.2
QD4/3V3.65	3.65	3.65	D1	1.91	0.44	0.63	1.25	1.09	SH	1.688	2.9
QD4/3V4.12	4.12	4.12	A1	1.91	0.25	0.13	1.25	0.41	SH	1.688	3.2
QD4/3V4.50	4.50	4.50	A1	1.91	0.19	0.13	1.31	0.41	SDS	2.000	3.4
QD4/3V4.75	4.75	4.75	A1	1.91	0.19	1.31	1.31	0.41	SDS	2.000	4.0
QD4/3V5.00	5.00	5.00	A1	1.91	0.19	1.31	1.31	0.41	SDS	2.000	4.6
QD4/3V5.30	5.30	5.30	A1	1.91	0.19	1.31	1.31	0.41	SDS	2.000	5.1
QD4/3V5.60	5.60	5.60	A1	1.91	0.19	1.31	1.31	0.41	SDS	2.000	5.7
QD4/3V6.00	6.00	6.00	D1	1.91	0.09	1.31	1.88	0.13	SK	2.625	7.7
QD4/3V6.50	6.50	6.50	D1	1.91	0.09	0.88	1.88	0.13	SK	2.625	9.2
QD4/3V6.90	6.90	6.90	D1	1.91	0.09	0.88	1.88	0.13	SK	2.625	10.8
QD4/3V8.00	8.00	8.00	D2	1.91	0.09	0.88	1.88	0.13	SK	2.625	11.7
QD4/3V10.60	10.60	10.60	D3	1.91	0.09	1.00	1.88	0.13	SK	2.625	15.3
QD4/3V14.00	14.00	14.00	D3	1.91	0.09	1.00	1.88	0.13	SK	2.625	22.0
QD4/3V19.00	19.00	19.00	C3	1.91	0.06	1.00	2.00	0.03	SF	2.938	36.0
QD4/3V25.00	25.00	25.00	C3	1.91	0.06	0.13	2.00	0.03	SF	2.938	54.0
QD4/3V33.50	33.50	33.50	C3	1.91	0.41	0.13	2.63	0.31	E	3.500	96.0
3V - 5 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD5/3V4.75	4.75	4.75	A1	2.31	0.19	1.31	1.31	0.81	SDS	2.000	4.6
QD5/3V5.00	5.00	5.00	A1	2.31	0.19	1.31	1.31	0.81	SDS	2.000	5.2
QD5/3V5.30	5.30	5.30	A1	2.31	0.22	1.31	1.88	0.22	SK	2.625	6.2
QD5/3V5.60	5.60	5.60	A1	2.31	0.22	1.31	1.88	0.22	SK	2.625	7.0
QD5/3V6.00	6.00	6.00	A1	2.31	0.22	1.31	1.88	0.22	SK	2.625	8.4
QD5/3V6.50	6.50	6.50	A1	2.31	0.22	1.13	1.88	0.22	SK	2.625	10.0
QD5/3V6.90	6.90	6.90	A1	2.31	0.22	1.13	1.88	0.22	SK	2.625	11.5
QD5/3V8.00	8.00	8.00	A2	2.31	0.22	1.25	1.88	0.22	SK	2.625	13.5
QD5/3V10.60	10.60	10.60	A3	2.31	0.22	1.25	1.88	0.22	SK	2.625	16.8
QD5/3V14.00	14.00	14.00	A3	2.31	0.19	1.25	2.00	0.13	SF	2.938	27.0
QD5/3V19.00	19.00	19.00	A3	2.31	0.19	1.06	2.00	0.13	SF	2.938	43.0
QD5/3V25.00	25.00	25.00	C3	2.31	0.28	0.13	2.63	0.03	E	3.500	64.0
QD5/3V33.50	33.50	33.50	C3	2.31	0.28	0.13	2.63	0.03	E	3.500	103.0
3V - 6 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD6/3V4.75	4.75	4.75	E1	2.72	1.44	1.44	1.88	0.59	SK	2.625	5.2
QD6/3V5.00	5.00	5.00	E1	2.72	1.44	1.44	1.88	0.59	SK	2.625	5.8
QD6/3V5.30	5.30	5.30	A1	2.72	0.59	1.44	1.88	0.25	SK	2.625	6.9
QD6/3V5.60	5.60	5.60	A1	2.72	0.59	1.44	1.88	0.25	SK	2.625	7.8
QD6/3V6.00	6.00	6.00	A1	2.72	0.59	1.44	1.88	0.25	SK	2.625	9.2
QD6/3V6.50	6.50	6.50	A1	2.72	0.59	1.50	1.88	0.25	SK	2.625	10.9
QD6/3V6.90	6.90	6.90	A1	2.72	0.59	1.25	1.88	0.25	SK	2.625	12.3
QD6/3V8.00	8.00	8.00	A2	2.72	0.16	1.25	1.88	0.69	SK	2.625	14.6
QD6/3V10.60	10.60	10.60	A3	2.72	0.19	1.25	2.00	0.53	SF	2.938	19.0
QD6/3V14.00	14.00	14.00	A3	2.72	0.19	1.31	2.00	0.53	SF	2.938	29.0
QD6/3V19.00	19.00	19.00	B3	2.72	0.09	1.31	2.63	0.00	E	3.500	50.0
QD6/3V25.00	25.00	25.00	B3	2.72	0.09	0.69	2.63	0.00	E	3.500	78.0
QD6/3V33.50	33.50	33.50	B3	2.72	0.09	0.19	2.63	0.00	E	3.500	129.0
3V - 8 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD8/3V4.75	4.75	4.75	E1	3.53	2.25	0.69	1.88	0.59	SK	2.625	6.3
QD8/3V5.00	5.00	5.00	E1	3.53	2.25	0.69	1.88	0.59	SK	2.625	7.3
QD8/3V5.30	5.30	5.30	A1	3.53	0.59	0.69	1.88	1.06	SK	2.625	8.3
QD8/3V5.60	5.60	5.60	A1	3.53	0.59	0.69	1.88	1.06	SK	2.625	9.1
QD8/3V6.00	6.00	6.00	A1	3.53	0.59	0.44	1.88	1.06	SK	2.625	11.0
QD8/3V6.50	6.50	6.50	A1	3.53	0.59	0.44	1.88	1.06	SK	2.625	12.6
QD8/3V6.90	6.90	6.90	A1	3.53	0.59	0.44	1.88	1.06	SK	2.625	15.0
QD8/3V8.00	8.00	8.00	A1	3.53	0.44	0.44	2.00	1.09	SF	2.938	19.0
QD8/3V10.60	10.60	10.60	A3	3.53	0.44	0.44	2.00	1.09	SF	2.938	22.0
QD8/3V14.00	14.00	14.00	A3	3.53	0.34	0.44	2.63	0.56	E	3.500	43.0
QD8/3V19.00	19.00	19.00	A3	3.53	0.34	0.44	2.63	0.56	E	3.500	62.0
QD8/3V25.00	25.00	25.00	A3	3.53	0.34	0.44	2.63	0.56	E	3.500	93.0
QD8/3V33.50	33.50	33.50	B3	3.53	0.00	0.44	3.63	0.09	F	4.000	140.0

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Design Type Suffix indicates rim construction:
 1 = Solid Style
 2 = Web Style
 3 = Arm Style

Table No. C1

Super HC® QD® Sheaves

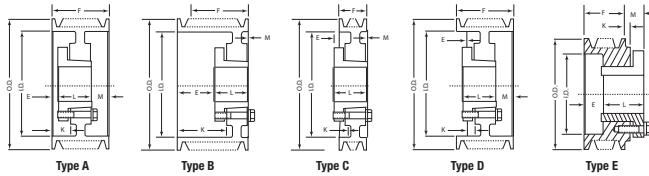
3V - 10 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD10/3V4.75	4.75	4.75	E1	4.34	3.06	0.44	1.88	0.59	SK	2.625	7.5
QD10/3V5.00	5.00	5.00	E1	4.34	3.06	0.44	1.88	0.59	SK	2.625	8.5
QD10/3V5.30	5.30	5.30	A1	4.34	0.72	0.44	1.88	1.75	SK	2.625	9.5
QD10/3V5.60	5.60	5.60	A1	4.34	0.72	0.44	1.88	1.75	SK	2.625	10.7
QD10/3V6.00	6.00	6.00	A1	4.34	0.72	0.44	1.88	1.75	SK	2.625	12.4
QD10/3V6.50	6.50	6.50	A1	4.34	0.72	0.44	1.88	1.75	SK	2.625	14.2
QD10/3V6.90	6.90	6.90	A1	4.34	0.72	0.44	1.88	1.75	SK	2.625	16.1
QD10/3V8.00	8.00	8.00	A1	4.34	0.81	0.44	2.00	1.53	SF	2.938	21.0
QD10/3V10.60	10.60	10.60	A2	4.34	0.34	0.44	2.63	1.38	E	3.500	33.0
QD10/3V14.00	14.00	14.00	A3	4.34	0.34	0.44	2.63	1.38	E	3.500	48.0
QD10/3V19.00	19.00	19.00	A3	4.34	0.34	0.44	2.63	1.38	E	3.500	71.0
QD10/3V25.00	25.00	25.00	A3	4.34	0.25	0.75	3.63	0.47	F	4.000	116.0
QD10/3V33.50	33.50	33.50	A3	4.34	0.25	0.75	3.63	0.47	F	4.000	172.0

Super HC® QD® Sheaves

5V - 2 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD2/5V4.40	4.40	4.40	A1	1.69	0.13	0.00	1.25	0.31	SH	1.688	3.2
QD2/5V4.65	4.65	4.65	E1	1.69	0.81	0.00	1.31	0.44	SDS	2.000	3.4
QD2/5V4.90	4.90	4.90	A1	1.69	0.06	1.06	1.31	0.31	SDS	2.000	3.7
QD2/5V5.20	5.20	5.20	A1	1.69	0.06	1.06	1.31	0.31	SDS	2.000	4.4
QD2/5V5.50	5.50	5.50	A1	1.69	0.06	1.06	1.31	0.31	SDS	2.000	5.1
QD2/5V5.90	5.90	5.90	A1	1.69	0.06	1.06	1.31	0.31	SDS	2.000	5.9
QD2/5V6.30	6.30	6.30	D1	1.69	0.28	1.06	1.88	0.09	SK	2.625	7.6
QD2/5V6.70	6.70	6.70	D1	1.69	0.28	1.06	1.88	0.09	SK	2.625	8.9
QD2/5V7.10	7.10	7.10	D1	1.69	0.28	1.00	1.88	0.09	SK	2.625	10.3
QD2/5V7.50	7.50	7.50	D1	1.69	0.28	1.00	1.88	0.09	SK	2.625	11.9
QD2/5V8.00	8.00	8.00	D1	1.69	0.28	1.00	1.88	0.09	SK	2.625	13.8
QD2/5V8.50	8.50	8.50	D2	1.69	0.28	1.00	1.88	0.09	SK	2.625	12.5
QD2/5V9.00	9.00	9.00	D2	1.69	0.28	1.00	1.88	0.09	SK	2.625	13.7
QD2/5V9.25	9.25	9.25	D2	1.69	0.28	1.00	1.88	0.09	SK	2.625	14.1
QD2/5V9.75	9.75	9.75	D3	1.69	0.28	1.00	1.88	0.09	SK	2.625	12.6
QD2/5V10.30	10.30	10.30	D3	1.69	0.28	1.00	1.88	0.09	SK	2.625	14.8
QD2/5V10.90	10.90	10.90	D3	1.69	0.28	1.00	1.88	0.09	SK	2.625	17.0
QD2/5V11.30	11.30	11.30	D3	1.69	0.28	1.00	1.88	0.09	SK	2.625	16.3
QD2/5V11.80	11.80	11.80	D3	1.69	0.28	1.00	1.88	0.09	SK	2.625	17.1
QD2/5V12.50	12.50	12.50	C3	1.69	0.25	0.75	2.00	0.06	SF	2.938	18.8
QD2/5V13.20	13.20	13.20	C3	1.69	0.25	0.75	2.00	0.06	SF	2.938	21.0
QD2/5V14.00	14.00	14.00	C3	1.69	0.25	0.75	2.00	0.06	SF	2.938	23.0
QD2/5V15.00	15.00	15.00	C3	1.69	0.25	0.75	2.00	0.06	SF	2.938	25.0
QD2/5V16.00	16.00	16.00	C3	1.69	0.25	0.75	2.00	0.06	SF	2.938	28.0
QD2/5V18.70	18.70	18.70	C3	1.69	0.25	0.75	2.00	0.06	SF	2.938	37.0
QD2/5V21.20	21.20	21.20	C3	1.69	0.25	0.75	2.00	0.06	SF	2.938	42.0
QD2/5V23.60	23.60	23.60	C3	1.69	0.16	0.75	2.63	0.78	E	3.500	54.0
QD2/5V28.00	28.00	28.00	C3	1.69	0.16	0.75	2.63	0.78	E	3.500	69.0

5V - 3 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD3/5V4.40	4.40	4.40	E1	2.38	1.69	0.56	1.31	0.63	SDS	2.000	4.2
QD3/5V4.65	4.65	4.65	E1	2.38	1.69	0.56	1.31	0.63	SDS	2.000	4.8
QD3/5V4.90	4.90	4.90	A1	2.38	0.44	0.56	1.31	0.63	SDS	2.000	5.0
QD3/5V5.20	5.20	5.20	A1	2.38	0.44	0.00	1.31	0.63	SDS	2.000	5.6
QD3/5V5.50	5.50	5.50	A1	2.38	0.44	0.00	1.31	0.63	SDS	2.000	6.4
QD3/5V5.90	5.90	5.90	A1	2.38	0.44	1.31	1.31	0.63	SDS	2.000	7.2
QD3/5V6.30	6.30	6.30	A1	2.38	0.34	1.31	1.88	0.16	SK	2.625	9.1
QD3/5V6.70	6.70	6.70	A1	2.38	0.34	1.31	1.88	0.16	SK	2.625	10.6
QD3/5V7.10	7.10	7.10	A1	2.38	0.31	1.31	2.00	0.06	SF	2.938	11.8
QD3/5V7.50	7.50	7.50	A1	2.38	0.31	1.31	2.00	0.06	SF	2.938	13.5
QD3/5V8.00	8.00	8.00	A1	2.38	0.31	1.31	2.00	0.06	SF	2.938	15.6
QD3/5V8.50	8.50	8.50	A1	2.38	0.31	1.06	2.00	0.06	SF	2.938	17.6
QD3/5V9.00	9.00	9.00	A1	2.38	0.31	1.06	2.00	0.06	SF	2.938	20.0
QD3/5V9.25	9.25	9.25	A2	2.38	0.31	1.44	2.00	0.06	SF	2.938	17.4
QD3/5V9.75	9.75	9.75	A2	2.38	0.31	1.44	2.00	0.06	SF	2.938	19.6
QD3/5V10.30	10.30	10.30	A2	2.38	0.31	1.44	2.00	0.06	SF	2.938	22.0
QD3/5V10.90	10.90	10.90	A2	2.38	0.31	1.44	2.00	0.06	SF	2.938	23.0
QD3/5V11.30	11.30	11.30	A3	2.38	0.31	1.44	2.00	0.06	SF	2.938	22.0
QD3/5V11.80	11.80	11.80	A3	2.38	0.31	1.44	2.00	0.06	SF	2.938	24.0
QD3/5V12.50	12.50	12.50	C3	2.38	0.16	1.44	2.63	0.09	E	3.500	28.0
QD3/5V13.20	13.20	13.20	C3	2.38	0.16	1.44	2.63	0.09	E	3.500	30.0
QD3/5V14.00	14.00	14.00	C3	2.38	0.16	1.44	2.63	0.09	E	3.500	33.0
QD3/5V15.00	15.00	15.00	C3	2.38	0.16	1.44	2.63	0.09	E	3.500	32.0
QD3/5V16.00	16.00	16.00	C3	2.38	0.16	1.44	2.63	0.09	E	3.500	38.0
QD3/5V18.70	18.70	18.70	C3	2.38	0.16	1.44	2.63	0.09	E	3.500	47.0
QD3/5V21.20	21.20	21.20	C3	2.38	0.16	1.44	2.63	0.09	E	3.500	55.0
QD3/5V23.60	23.60	23.60	C3	2.38	0.16	1.44	2.63	0.09	E	3.500	68.0
QD3/5V28.00	28.00	28.00	C3	2.38	0.16	1.25	2.63	0.09	E	3.500	95.0
QD3/5V31.50	31.50	31.50	C3	2.38	0.50	1.25	3.63	0.75	F	4.000	115.0
QD3/5V37.50	37.50	37.50	C3	2.38	0.50	0.88	3.63	0.75	F	4.000	146.0
QD3/5V50.00	50.00	50.00	C3	2.38	0.50	0.88	3.63	0.75	F	4.000	254.0

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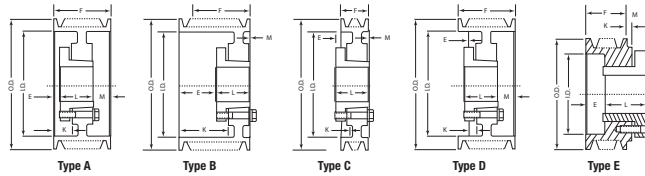
Design Type Suffix indicates rim construction:
 1 = Solid Style
 2 = Web Style
 3 = Arm Style

Table No. C1

Super HC® QD® Sheaves

5V - 4 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD4/5V4.40	4.40	4.40	E1	3.06	1.88	0.88	1.81	0.63	SD	2,000	5.2
QD4/5V4.65	4.65	4.65	E1	3.06	1.88	0.88	1.81	0.63	SD	2,000	5.9
QD4/5V4.90	4.90	4.90	A1	3.06	0.69	0.69	1.81	0.56	SD	2,000	6.5
QD4/5V5.20	5.20	5.20	A1	3.06	0.69	0.00	1.81	0.56	SD	2,000	7.5
QD4/5V5.50	5.50	5.50	A1	3.06	0.69	0.00	1.81	0.56	SD	2,000	8.6
QD4/5V5.90	5.90	5.90	A1	3.06	0.69	1.31	1.81	0.56	SD	2,000	9.8
QD4/5V6.30	6.30	6.30	A1	3.06	0.59	1.31	1.88	0.59	SK	2,625	10.7
QD4/5V6.70	6.70	6.70	A1	3.06	0.59	1.31	1.88	0.59	SK	2,625	12.3
QD4/5V7.10	7.10	7.10	A1	3.06	0.38	1.31	2.00	0.69	SF	2,938	13.5
QD4/5V7.50	7.50	7.50	A1	3.06	0.38	1.31	2.00	0.69	SF	2,938	15.6
QD4/5V8.00	8.00	8.00	B1	3.06	0.53	1.31	2.63	0.09	E	3,500	17.9
QD4/5V8.50	8.50	8.50	B1	3.06	0.53	1.38	2.63	0.09	E	3,500	21.0
QD4/5V9.00	9.00	9.00	B1	3.06	0.53	1.38	2.63	0.09	E	3,500	24.0
QD4/5V9.25	9.25	9.25	B1	3.06	0.53	1.75	2.63	0.09	E	3,500	25.0
QD4/5V9.75	9.75	9.75	B2	3.06	0.53	1.75	2.63	0.09	E	3,500	30.0
QD4/5V10.30	10.30	10.30	B2	3.06	0.53	1.75	2.63	0.09	E	3,500	27.0
QD4/5V10.90	10.90	10.90	B2	3.06	0.53	1.75	2.63	0.09	E	3,500	29.0
QD4/5V11.30	11.30	11.30	B2	3.06	0.53	1.75	2.63	0.09	E	3,500	33.0
QD4/5V11.80	11.80	11.80	B2	3.06	0.53	1.75	2.63	0.09	E	3,500	35.0
QD4/5V12.50	12.50	12.50	B3	3.06	0.53	1.75	2.63	0.09	E	3,500	35.0
QD4/5V13.20	13.20	13.20	B3	3.06	0.53	1.75	2.63	0.09	E	3,500	36.0
QD4/5V14.00	14.00	14.00	B3	3.06	0.53	1.75	2.63	0.09	E	3,500	38.0
QD4/5V15.00	15.00	15.00	B3	3.06	0.53	1.75	2.63	0.09	E	3,500	41.0
QD4/5V16.00	16.00	16.00	B3	3.06	0.53	1.75	2.63	0.09	E	3,500	44.0
QD4/5V18.70	18.70	18.70	A3	3.06	0.34	1.75	2.63	0.09	E	3,500	55.0
QD4/5V21.20	21.20	21.20	A3	3.06	0.34	1.75	2.63	0.09	E	3,500	67.0
QD4/5V23.60	23.60	23.60	C3	3.06	0.19	1.75	3.63	0.38	F	4,000	87.0
QD4/5V28.00	28.00	28.00	C3	3.06	0.19	1.31	3.63	0.38	F	4,000	110.0
QD4/5V31.50	31.50	31.50	C3	3.06	0.19	1.31	3.63	0.38	F	4,000	132.0
QD4/5V37.50	37.50	37.50	C3	3.06	0.19	1.31	3.63	0.38	F	4,000	182.0
QD4/5V50.00	50.00	50.00	C3	3.06	0.56	1.31	4.50	0.88	J	4,500	285.0
5V - 5 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD5/5V4.40	4.40	4.40	E1	3.75	2.56	1.00	1.81	0.63	SD	2,000	6.2
QD5/5V4.65	4.65	4.65	E1	3.75	2.56	1.00	1.81	0.63	SD	2,000	7.0
QD5/5V4.90	4.90	4.90	A1	3.75	0.69	1.00	1.81	1.25	SD	2,000	7.4
QD5/5V5.20	5.20	5.20	A1	3.75	0.69	0.00	1.81	1.25	SD	2,000	8.7
QD5/5V5.50	5.50	5.50	A1	3.75	0.69	0.00	1.81	1.25	SD	2,000	9.9
QD5/5V5.90	5.90	5.90	A1	3.75	0.59	1.31	1.88	1.28	SK	2,625	10.4
QD5/5V6.30	6.30	6.30	A1	3.75	0.59	1.31	1.88	1.28	SK	2,625	12.1
QD5/5V6.70	6.70	6.70	A1	3.75	0.63	1.31	2.00	1.13	SF	2,938	13.3
QD5/5V7.10	7.10	7.10	A1	3.75	0.69	1.31	2.00	1.06	SF	2,938	15.4
QD5/5V7.50	7.50	7.50	A1	3.75	0.69	1.31	2.00	1.06	SF	2,938	17.5
QD5/5V8.00	8.00	8.00	A1	3.75	0.84	1.63	2.63	0.28	E	3,500	20.0
QD5/5V8.50	8.50	8.50	A1	3.75	0.84	1.63	2.63	0.28	E	3,500	24.0
QD5/5V9.00	9.00	9.00	A1	3.75	0.84	1.63	2.63	0.28	E	3,500	26.0
QD5/5V9.25	9.25	9.25	A1	3.75	0.84	2.00	2.63	0.28	E	3,500	29.0
QD5/5V9.75	9.75	9.75	A2	3.75	0.84	2.00	2.63	0.28	E	3,500	32.0
QD5/5V10.30	10.30	10.30	A2	3.75	0.84	2.00	2.63	0.28	E	3,500	30.0
QD5/5V10.90	10.90	10.90	A2	3.75	0.84	2.00	2.63	0.28	E	3,500	33.0
QD5/5V11.30	11.30	11.30	A2	3.75	0.84	2.00	2.63	0.28	E	3,500	36.0
QD5/5V11.80	11.80	11.80	A2	3.75	0.84	2.00	2.63	0.28	E	3,500	38.0
QD5/5V12.50	12.50	12.50	A3	3.75	0.84	2.00	2.63	0.28	E	3,500	37.0
QD5/5V13.20	13.20	13.20	A3	3.75	0.84	2.00	2.63	0.28	E	3,500	41.0
QD5/5V14.00	14.00	14.00	A3	3.75	0.84	2.00	2.63	0.28	E	3,500	44.0
QD5/5V15.00	15.00	15.00	A3	3.75	0.84	2.06	2.63	0.28	E	3,500	47.0
QD5/5V16.00	16.00	16.00	A3	3.75	0.84	2.06	2.63	0.28	E	3,500	50.0
QD5/5V18.70	18.70	18.70	B3	3.75	0.25	2.06	3.63	0.13	F	4,000	75.0
QD5/5V21.20	21.20	21.20	B3	3.75	0.25	2.06	3.63	0.13	F	4,000	85.0
QD5/5V23.60	23.60	23.60	B3	3.75	0.25	2.06	3.63	0.13	F	4,000	99.0
QD5/5V28.00	28.00	28.00	B3	3.75	0.25	1.31	3.63	0.13	F	4,000	131.0
QD5/5V31.50	31.50	31.50	C3	3.75	0.25	1.31	4.50	0.50	J	4,500	154.0
QD5/5V37.50	37.50	37.50	C3	3.75	0.25	1.31	4.50	0.50	J	4,500	215.0
QD5/5V50.00	50.00	50.00	C3	3.75	0.25	1.31	4.50	0.50	J	4,500	314.0

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Design Type Suffix indicates rim construction:
 1 = Solid Style
 2 = Web Style
 3 = Arm Style

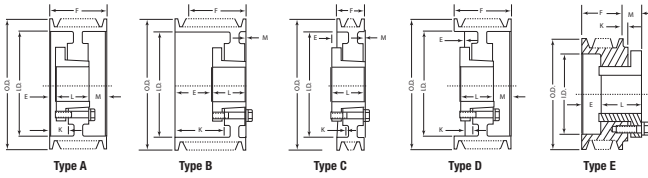
Table No. C1

Super HC® QD® Sheaves

5V - 6 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD6/5V4.40	4.40	4.40	E1	4.44	3.25	1.31	1.81	0.63	SD	2.000	7.1
QD6/5V4.65	4.65	4.65	E1	4.44	3.25	1.31	1.81	0.63	SD	2.000	8.0
QD6/5V4.90	4.90	4.90	A1	4.44	0.69	0.50	1.81	1.94	SD	2.000	8.5
QD6/5V5.20	5.20	5.20	A1	4.44	0.69	1.63	1.81	1.94	SD	2.000	9.9
QD6/5V5.50	5.50	5.50	A1	4.44	0.69	1.63	1.81	1.94	SD	2.000	11.2
QD6/5V5.90	5.90	5.90	A1	4.44	0.59	2.00	1.88	1.97	SK	2.625	11.8
QD6/5V6.30	6.30	6.30	A1	4.44	0.59	2.00	1.88	1.97	SK	2.625	13.6
QD6/5V6.70	6.70	6.70	A1	4.44	0.94	2.00	2.00	1.50	SF	2.938	15.0
QD6/5V7.10	7.10	7.10	A1	4.44	0.94	2.00	2.00	1.50	SF	2.938	17.2
QD6/5V7.50	7.50	7.50	A1	4.44	0.94	2.00	2.00	1.50	SF	2.938	19.6
QD6/5V8.00	8.00	8.00	A1	4.35	1.09	2.56	2.63	0.72	E	3.500	22.0
QD6/5V8.50	8.50	8.50	A1	4.44	1.09	2.56	2.63	0.72	E	3.500	26.0
QD6/5V9.00	9.00	9.00	A1	4.38	1.09	2.56	2.63	0.66	E	3.500	30.0
QD6/5V9.25	9.25	9.25	A1	4.44	1.09	2.56	2.63	0.72	E	3.500	30.0
QD6/5V9.75	9.75	9.75	A1	4.44	1.09	2.56	2.63	0.72	E	3.500	34.0
QD6/5V10.30	10.30	10.30	A2	4.44	1.09	2.56	2.63	0.72	E	3.500	34.0
QD6/5V10.90	10.90	10.90	A2	4.44	1.09	2.56	2.63	0.72	E	3.500	38.0
QD6/5V11.30	11.30	11.30	A2	4.44	1.09	2.56	2.63	0.72	E	3.500	41.0
QD6/5V11.80	11.80	11.80	A2	4.44	1.09	2.56	2.63	0.72	E	3.500	43.0
QD6/5V12.50	12.50	12.50	B2	4.44	1.00	1.31	3.63	0.19	F	4.000	54.0
QD6/5V13.20	13.20	13.20	B2	4.44	1.00	1.31	3.63	0.19	F	4.000	59.0
QD6/5V14.00	14.00	14.00	B2	4.44	1.00	1.31	3.63	0.19	F	4.000	64.0
QD6/5V15.00	15.00	15.00	B3	4.44	1.00	1.31	3.63	0.19	F	4.000	61.0
QD6/5V16.00	16.00	16.00	B3	4.44	1.00	1.31	3.63	0.19	F	4.000	66.0
QD6/5V18.70	18.70	18.70	A3	4.44	0.25	1.94	3.63	0.56	F	4.000	81.0
QD6/5V21.20	21.20	21.20	A3	4.44	0.25	0.50	3.63	0.56	F	4.000	96.0
QD6/5V23.60	23.60	23.60	B3	4.44	0.06	2.13	4.50	0.13	J	4.500	115.0
QD6/5V28.00	28.00	28.00	B3	4.44	0.06	2.13	4.50	0.13	J	4.500	149.0
QD6/5V31.50	31.50	31.50	B3	4.44	0.06	2.50	4.50	0.13	J	4.500	178.0
QD6/5V37.50	37.50	37.50	B3	4.44	0.06	2.50	4.50	0.13	J	4.500	237.0
QD6/5V50.00	50.00	50.00	C3	4.44	0.97	2.50	6.75	1.34	M	5.500	426.0

5V - 7 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD7/5V7.10	7.10	7.10	A1	5.13	0.94	2.56	2.00	2.19	SF	2.938	18.8
QD7/5V7.50	7.50	7.50	A1	5.13	0.94	2.56	2.00	2.19	SF	2.938	22.0
QD7/5V8.00	8.00	8.00	A1	5.13	1.09	2.56	2.63	1.41	E	3.500	25.0
QD7/5V8.50	8.50	8.50	A1	5.13	1.09	2.56	2.63	1.41	E	3.500	28.0
QD7/5V9.00	9.00	9.00	A1	5.13	1.09	2.56	2.63	1.41	E	3.500	32.0
QD7/5V9.25	9.25	9.25	A1	5.13	1.09	2.56	2.63	1.41	E	3.500	33.0
QD7/5V9.75	9.75	9.75	A1	5.13	1.09	2.56	2.63	1.41	E	3.500	37.0
QD7/5V10.30	10.30	10.30	B1	5.13	1.50	2.56	3.63	0.00	F	4.000	49.0
QD7/5V10.90	10.90	10.90	B1	5.13	1.50	2.56	3.63	0.00	F	4.000	55.0
QD7/5V11.30	11.30	11.30	B1	5.13	1.50	2.56	3.63	0.00	F	4.000	62.0
QD7/5V11.80	11.80	11.80	B2	5.13	1.50	2.56	3.63	0.00	F	4.000	52.0
QD7/5V12.50	12.50	12.50	B2	5.13	1.50	1.56	3.63	0.00	F	4.000	58.0
QD7/5V13.20	13.20	13.20	B2	5.13	1.50	1.56	3.63	0.00	F	4.000	63.0
QD7/5V14.00	14.00	14.00	B2	5.13	1.50	1.56	3.63	0.00	F	4.000	67.0
QD7/5V15.00	15.00	15.00	B3	5.13	1.50	1.56	3.63	0.00	F	4.000	66.0
QD7/5V16.00	16.00	16.00	B3	5.13	1.50	1.94	3.63	0.00	F	4.000	71.0
QD7/5V18.70	18.70	18.70	A3	5.13	0.25	1.94	3.63	1.25	F	4.000	88.0
QD7/5V21.20	21.20	21.20	A3	5.13	0.06	1.94	4.50	0.56	J	4.500	113.0
QD7/5V23.60	23.60	23.60	A3	5.13	0.06	2.50	4.50	0.56	J	4.500	123.0
QD7/5V28.00	28.00	28.00	A3	5.13	0.06	2.50	4.50	0.56	J	4.500	162.0
QD7/5V31.50	31.50	31.50	A3	5.13	0.06	2.50	4.50	0.56	J	4.500	192.0
QD7/5V37.50	37.50	37.50	B3	5.13	0.47	2.56	6.75	2.09	M	5.500	304.0
QD7/5V50.00	50.00	50.00	C3	5.13	0.97	2.56	6.75	0.66	M	5.500	477.0

Heavy Duty V-Belt Drive Design Manual



Design Type Suffix indicates rim construction:
 1 = Solid Style
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 3 = Arm Style

Table No. C1

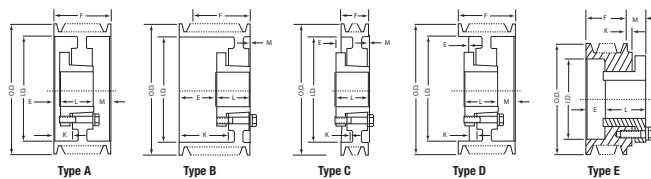
Super HC® QD® Sheaves

5V - 8 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD8/5V7.10	7.10	7.10	A1	5.81	1.44	2.56	2.00	2.38	SF	2.938	21.0
QD8/5V7.50	7.50	7.50	A1	5.81	1.44	2.56	2.00	2.38	SF	2.938	24.0
QD8/5V8.00	8.00	8.00	A1	5.81	1.59	2.56	2.63	1.59	E	3.500	27.0
QD8/5V8.50	8.50	8.50	A1	5.81	1.59	2.56	2.63	1.59	E	3.500	31.0
QD8/5V9.00	9.00	9.00	A1	5.81	1.59	2.56	2.63	1.59	E	3.500	34.0
QD8/5V9.25	9.25	9.25	A1	5.81	1.50	2.56	3.63	0.69	F	4.000	40.0
QD8/5V9.75	9.75	9.75	A1	5.81	1.50	2.56	3.63	0.69	F	4.000	45.0
QD8/5V10.30	10.30	10.30	A1	5.81	1.50	3.56	3.63	0.69	F	4.000	52.0
QD8/5V10.90	10.90	10.90	A1	5.81	1.50	3.56	3.63	0.69	F	4.000	59.0
QD8/5V11.30	11.30	11.30	A1	5.81	1.50	1.56	3.63	0.69	F	4.000	65.0
QD8/5V11.80	11.80	11.80	A2	5.81	1.50	1.56	3.63	0.69	F	4.000	56.0
QD8/5V12.50	12.50	12.50	A2	5.81	1.50	1.56	3.63	0.69	F	4.000	62.0
QD8/5V13.20	13.20	13.20	A2	5.81	1.50	1.94	3.63	0.69	F	4.000	67.0
QD8/5V14.00	14.00	14.00	A2	5.81	1.50	1.94	3.63	0.69	F	4.000	71.0
QD8/5V15.00	15.00	15.00	A3	5.81	1.50	1.94	3.63	0.69	F	4.000	70.0
QD8/5V16.00	16.00	16.00	A3	5.81	1.50	1.94	3.63	0.69	F	4.000	76.0
QD8/5V18.70	18.70	18.70	A3	5.81	0.31	3.25	4.50	1.00	J	4.500	103.0
QD8/5V21.20	21.20	21.20	A3	5.81	0.31	3.25	4.50	1.00	J	4.500	120.0
QD8/5V23.60	23.60	23.60	A3	5.81	0.31	3.31	4.50	1.00	J	4.500	138.0
QD8/5V28.00	28.00	28.00	A3	5.81	0.31	3.31	4.50	1.00	J	4.500	171.0
QD8/5V31.50	31.50	31.50	B3	5.81	0.47	3.31	6.75	1.41	M	5.500	253.0
QD8/5V37.50	37.50	37.50	B3	5.81	0.47	3.31	6.75	1.41	M	5.500	322.0
QD8/5V50.00	50.00	50.00	B3	5.81	0.47	3.31	6.75	1.41	M	5.500	488.0

5V - 9 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD9/5V8.00	8.00	8.00	A1	6.50	1.59	3.31	2.63	2.28	E	3.500	29.0
QD9/5V8.50	8.50	8.50	A1	6.50	1.59	3.31	2.63	2.28	E	3.500	33.0
QD9/5V9.00	9.00	9.00	A1	6.50	1.59	3.56	2.63	2.28	E	3.500	37.0
QD9/5V9.25	9.25	9.25	A1	6.50	1.50	3.56	3.63	1.38	F	4.000	42.0
QD9/5V9.75	9.75	9.75	A1	6.50	1.50	3.56	3.63	1.38	F	4.000	48.0
QD9/5V10.30	10.30	10.30	A1	6.50	1.50	3.56	3.63	1.38	F	4.000	55.0
QD9/5V10.90	10.90	10.90	A1	6.50	1.50	3.56	3.63	1.38	F	4.000	61.0
QD9/5V11.30	11.30	11.30	A1	6.50	1.50	1.56	3.63	1.38	F	4.000	69.0
QD9/5V11.80	11.80	11.80	A2	6.50	1.50	1.56	3.63	1.38	F	4.000	60.0
QD9/5V12.50	12.50	12.50	A2	6.50	1.50	1.94	3.63	1.38	F	4.000	66.0
QD9/5V13.20	13.20	13.20	A2	6.50	1.50	1.94	3.63	1.38	F	4.000	72.0
QD9/5V14.00	14.00	14.00	A2	6.50	1.50	1.94	3.63	1.38	F	4.000	78.0
QD9/5V15.00	15.00	15.00	B2	6.50	2.31	1.94	4.50	0.31	J	4.500	91.0
QD9/5V16.00	16.00	16.00	B3	6.50	2.31	1.94	4.50	0.31	J	4.500	91.0
QD9/5V18.70	18.70	18.70	A3	6.50	0.31	1.19	4.50	1.69	J	4.500	110.0
QD9/5V21.20	21.20	21.20	A3	6.50	0.31	1.19	4.50	1.69	J	4.500	127.0
QD9/5V23.60	23.60	23.60	A3	6.50	0.31	1.19	4.50	1.69	J	4.500	145.0
QD9/5V28.00	28.00	28.00	B3	6.50	0.47	1.19	6.75	0.72	M	5.500	230.0
QD9/5V31.50	31.50	31.50	B3	6.50	0.47	1.19	6.75	0.72	M	5.500	281.0
QD9/5V37.50	37.50	37.50	B3	6.50	0.47	1.19	6.75	0.72	M	5.500	335.0
QD9/5V50.00	50.00	50.00	B3	6.50	0.47	1.19	6.75	0.72	M	5.500	520.0

5V - 10 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD10/5V8.00	8.00	8.00	A1	7.19	2.34	1.19	2.63	2.22	E	3.500	32.0
QD10/5V8.50	8.50	8.50	A1	7.19	2.34	1.44	2.63	2.22	E	3.500	35.0
QD10/5V9.00	9.00	9.00	A1	7.19	2.25	1.44	3.63	1.31	F	4.000	43.0
QD10/5V9.25	9.25	9.25	A1	7.19	2.25	1.44	3.63	1.31	F	4.000	46.0
QD10/5V9.75	9.75	9.75	A1	7.19	2.25	0.81	3.63	1.31	F	4.000	51.0
QD10/5V10.30	10.30	10.30	A1	7.19	2.25	0.81	3.63	1.31	F	4.000	57.0
QD10/5V10.90	10.90	10.90	A1	7.19	2.25	0.81	3.63	1.31	F	4.000	64.0
QD10/5V11.30	11.30	11.30	A1	7.19	2.25	0.81	3.63	1.31	F	4.000	72.0
QD10/5V11.80	11.80	11.80	A2	7.19	2.25	0.81	3.63	1.31	F	4.000	64.0
QD10/5V12.50	12.50	12.50	A2	7.19	2.31	0.81	4.50	0.38	J	4.500	76.0
QD10/5V13.20	13.20	13.20	A2	7.19	2.31	2.31	4.50	0.38	J	4.500	80.0
QD10/5V14.00	14.00	14.00	A2	7.19	2.31	2.31	4.50	0.38	J	4.500	88.0
QD10/5V15.00	15.00	15.00	A2	7.19	2.31	2.31	4.50	0.38	J	4.500	96.0
QD10/5V16.00	16.00	16.00	A3	7.19	2.31	2.31	4.50	0.38	J	4.500	99.0
QD10/5V18.70	18.70	18.70	A3	7.19	0.31	2.31	4.50	2.38	J	4.500	120.0
QD10/5V21.20	21.20	21.20	A3	7.19	0.31	2.00	4.50	2.38	J	4.500	141.0
QD10/5V23.60	23.60	23.60	B3	7.19	0.47	2.00	6.75	0.03	M	5.500	208.0
QD10/5V28.00	28.00	28.00	B3	7.19	0.47	2.00	6.75	0.03	M	5.500	250.0
QD10/5V31.50	31.50	31.50	B3	7.19	0.47	2.00	6.75	0.03	M	5.500	286.0
QD10/5V37.50	37.50	37.50	B3	7.19	0.47	2.00	6.75	0.03	M	5.500	375.0
QD10/5V50.00	50.00	50.00	B3	7.19	0.47	2.94	6.75	0.03	M	5.500	590.0

Heavy Duty V-Belt Drive Design Manual



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Table No. C1

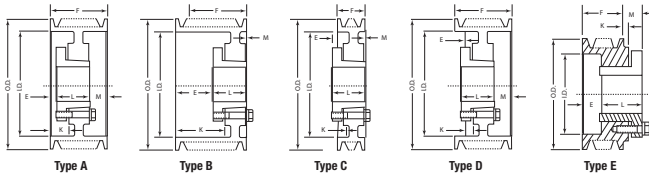
Super HC® QD® Sheaves

8V - 4 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD4/8V12.50	12.50	12.50	A1	4.88	0.13	1.94	3.63	1.13	F	4,000	75.0
QD4/8V13.20	13.20	13.20	A2	4.88	0.13	1.94	3.63	1.13	F	4,000	68.0
QD4/8V14.00	14.00	14.00	A2	4.88	0.13	1.94	3.63	1.13	F	4,000	74.0
QD4/8V15.00	15.00	15.00	A2	4.88	0.13	1.94	3.63	1.13	F	4,000	81.0
QD4/8V16.00	16.00	16.00	A2	4.88	0.13	0.94	3.63	1.13	F	4,000	88.0
QD4/8V17.00	17.00	17.00	A2	4.88	0.13	0.94	3.63	1.13	F	4,000	99.0
QD4/8V18.00	18.00	18.00	A2	4.88	0.13	2.31	3.63	1.13	F	4,000	108.0
QD4/8V19.00	19.00	19.00	A2	4.88	0.13	2.31	3.63	1.13	F	4,000	117.0
QD4/8V20.00	20.00	20.00	A3	4.88	0.19	2.31	4.50	0.19	J	4,500	116.0
QD4/8V21.20	21.20	21.20	A3	4.88	0.19	2.56	4.50	0.19	J	4,500	127.0
QD4/8V22.40	22.40	22.40	A3	4.88	0.19	2.56	4.50	0.19	J	4,500	138.0
QD4/8V24.80	24.80	24.80	C3	4.88	0.66	2.56	6.75	1.22	M	5,500	213.0
QD4/8V30.00	30.00	30.00	C3	4.88	0.66	2.56	6.75	1.22	M	5,500	243.0
QD4/8V35.50	35.50	35.50	C3	4.88	0.66	2.56	6.75	1.22	M	5,500	300.0
QD4/8V40.00	40.00	40.00	C3	4.88	0.66	2.94	6.75	1.22	M	5,500	376.0
QD4/8V44.50	44.50	44.50	C3	4.88	0.66	2.94	6.75	1.22	M	5,500	424.0
QD4/8V53.00	53.00	53.00	C3	4.88	0.66	2.94	6.75	1.22	M	5,500	515.0

8V - 5 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD5/8V12.50	12.50	12.50	A1	6.00	1.25	1.94	3.63	1.13	F	4,000	83.0
QD5/8V13.20	13.20	13.20	A2	6.00	1.25	1.94	3.63	1.13	F	4,000	78.0
QD5/8V14.00	14.00	14.00	A2	6.00	1.25	1.13	3.63	1.13	F	4,000	85.0
QD5/8V15.00	15.00	15.00	A2	6.00	1.25	1.13	3.63	1.13	F	4,000	93.0
QD5/8V16.00	16.00	16.00	A2	6.00	1.25	1.13	3.63	1.13	F	4,000	102.0
QD5/8V17.00	17.00	17.00	A2	6.00	0.75	1.13	4.50	0.75	J	4,500	121.0
QD5/8V18.00	18.00	18.00	A2	6.00	0.75	2.00	4.50	0.75	J	4,500	137.0
QD5/8V19.00	19.00	19.00	A2	6.00	0.75	2.00	4.50	0.75	J	4,500	149.0
QD5/8V20.00	20.00	20.00	A2	6.00	0.75	3.56	4.50	0.75	J	4,500	152.0
QD5/8V21.20	21.20	21.20	A2	6.00	0.75	3.56	4.50	0.75	J	4,500	168.0
QD5/8V22.40	22.40	22.40	B2	6.00	1.47	3.56	6.75	2.22	M	5,500	220.0
QD5/8V24.80	24.80	24.80	B3	6.00	0.47	3.56	6.75	1.22	M	5,500	232.0
QD5/8V30.00	30.00	30.00	B3	6.00	0.47	3.56	6.75	1.22	M	5,500	293.0
QD5/8V35.50	35.50	35.50	B3	6.00	0.47	3.94	6.75	1.22	M	5,500	362.0
QD5/8V40.00	40.00	40.00	B3	6.00	0.47	3.94	6.75	1.22	M	5,500	395.0
QD5/8V44.50	44.50	44.50	C3	6.00	0.75	3.94	8.13	1.38	N	5,938	530.0
QD5/8V53.00	53.00	53.00	C3	6.00	0.75	3.94	8.13	1.38	N	5,938	630.0

8V - 6 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD6/8V12.50	12.50	12.50	A1	7.13	1.25	3.94	3.63	2.25	F	4,000	91.0
QD6/8V13.20	13.20	13.20	A2	7.13	1.25	3.94	3.63	2.25	F	4,000	86.0
QD6/8V14.00	14.00	14.00	A2	7.13	1.25	2.25	3.63	2.25	F	4,000	94.0
QD6/8V15.00	15.00	15.00	A2	7.13	1.31	2.25	4.50	1.31	J	4,500	109.0
QD6/8V16.00	16.00	16.00	A2	7.13	1.31	2.25	4.50	1.31	J	4,500	125.0
QD6/8V17.00	17.00	17.00	A2	7.13	1.31	2.25	4.50	1.31	J	4,500	133.0
QD6/8V18.00	18.00	18.00	A2	7.13	1.31	2.63	4.50	1.31	J	4,500	149.0
QD6/8V19.00	19.00	19.00	A2	7.13	1.31	2.63	4.50	1.31	J	4,500	162.0
QD6/8V20.00	20.00	20.00	B2	7.13	1.47	2.63	6.75	1.09	M	5,500	208.0
QD6/8V21.20	21.20	21.20	B2	7.13	1.47	2.25	6.75	1.09	M	5,500	229.0
QD6/8V22.40	22.40	22.40	B2	7.13	1.47	3.56	6.75	1.09	M	5,500	237.0
QD6/8V24.80	24.80	24.80	B3	7.13	0.47	3.56	6.75	0.09	M	5,500	255.0
QD6/8V30.00	30.00	30.00	B3	7.13	0.47	3.56	6.75	0.09	M	5,500	320.0
QD6/8V35.50	35.50	35.50	C3	7.13	0.56	3.94	8.13	0.44	N	5,938	469.0
QD6/8V40.00	40.00	40.00	C3	7.13	0.56	3.94	8.13	0.44	N	5,938	498.0
QD6/8V44.50	44.50	44.50	C3	7.13	0.56	3.94	8.13	0.44	N	5,938	570.0
QD6/8V53.00	53.00	53.00	C3	7.13	0.56	3.94	8.13	0.44	N	5,938	710.0
QD6/8V63.00	63.00	63.00	B3	7.13	0.13	3.94	9.38	2.38	P	7,000	925.0
QD6/8V71.00	71.00	71.00	B3	7.13	0.13	3.94	9.38	2.38	P	7,000	1100.0

Heavy Duty V-Belt Drive Design Manual



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Table No. C1

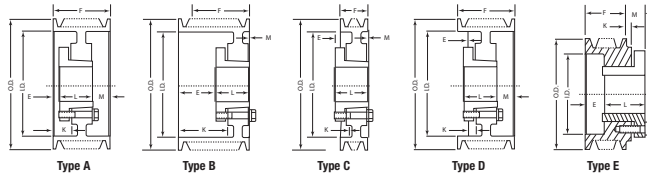
Super HC® QD® Sheaves

8V - 8 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD8/8V12.50	12.50	12.50	A1	9.38	2.31	3.94	4.50	2.56	J	4,500	113.0
QD8/8V13.20	13.20	13.20	A1	9.38	2.31	2.25	4.50	2.56	J	4,500	126.0
QD8/8V14.00	14.00	14.00	A2	9.38	2.31	2.25	4.50	2.56	J	4,500	116.0
QD8/8V15.00	15.00	15.00	A2	9.38	2.31	2.25	4.50	2.56	J	4,500	130.0
QD8/8V16.00	16.00	16.00	A2	9.38	2.31	2.63	4.50	2.56	J	4,500	146.0
QD8/8V17.00	17.00	17.00	A2	9.38	2.47	2.63	6.75	0.16	M	5,500	202.0
QD8/8V18.00	18.00	18.00	A2	9.38	2.47	2.63	6.75	0.16	M	5,500	215.0
QD8/8V19.00	19.00	19.00	A2	9.38	2.47	2.63	6.75	0.16	M	5,500	234.0
QD8/8V20.00	20.00	20.00	A2	9.38	2.47	2.63	6.75	0.16	M	5,500	251.0
QD8/8V21.20	21.20	21.20	A2	9.38	2.47	2.63	6.75	0.16	M	5,500	272.0
QD8/8V22.40	22.40	22.40	A2	9.38	2.47	3.94	6.75	0.16	M	5,500	282.0
QD8/8V24.80	24.80	24.80	A3	9.38	0.56	3.94	8.13	0.69	N	5,938	320.0
QD8/8V30.00	30.00	30.00	A3	9.38	0.56	3.94	8.13	0.69	N	5,938	400.0
QD8/8V35.50	35.50	35.50	A3	9.38	0.56	3.94	8.13	0.69	N	5,938	530.0
QD8/8V40.00	40.00	40.00	A3	9.38	0.56	3.94	8.13	0.69	N	5,938	620.0
QD8/8V44.50	44.50	44.50	B3	9.38	0.75	3.94	9.38	0.75	P	7,000	760.0
QD8/8V53.00	53.00	53.00	B3	9.38	0.75	3.94	9.38	0.75	P	7,000	890.0
QD8/8V63.00	63.00	63.00	B3	9.38	0.75	2.25	9.38	0.75	P	7,000	1160.0
QD8/8V71.00	71.00	71.00	B3	9.38	0.00	2.25	11.38	2.00	W	7,250	1525.0

8V - 10 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD10/8V12.50	12.50	12.50	A1	11.63	2.31	2.25	4.50	4.81	J	4,500	130.0
QD10/8V13.20	13.20	13.20	A1	11.63	2.31	2.25	4.50	4.81	J	4,500	146.0
QD10/8V14.00	14.00	14.00	A2	11.63	2.31	2.25	4.50	4.81	J	4,500	165.0
QD10/8V15.00	15.00	15.00	A1	11.63	2.47	2.63	6.75	2.41	M	5,500	222.0
QD10/8V16.00	16.00	16.00	A2	11.63	2.47	2.63	6.75	2.41	M	5,500	260.0
QD10/8V17.00	17.00	17.00	A2	11.63	2.47	2.63	6.75	2.41	M	5,500	258.0
QD10/8V18.00	18.00	18.00	A2	11.63	2.47	2.63	6.75	2.41	M	5,500	277.0
QD10/8V19.00	19.00	19.00	A2	11.63	2.47	2.88	6.75	2.41	M	5,500	269.0
QD10/8V20.00	20.00	20.00	A2	11.63	2.47	2.88	6.75	2.41	M	5,500	280.0
QD10/8V21.20	21.20	21.20	A2	11.63	2.47	2.88	6.75	2.41	M	5,500	303.0
QD10/8V22.40	22.40	22.40	A2	11.63	0.56	2.25	8.13	2.94	N	5,938	362.0
QD10/8V24.80	24.80	24.80	A2	11.63	0.56	2.25	8.13	2.94	N	5,938	420.0
QD10/8V30.00	30.00	30.00	A3	11.63	0.56	2.25	8.13	2.94	N	5,938	465.0
QD10/8V35.50	35.50	35.50	A3	11.63	0.75	2.63	9.38	1.50	P	7,000	625.0
QD10/8V40.00	40.00	40.00	A3	11.63	0.75	2.63	9.38	1.50	P	7,000	755.0
QD10/8V44.50	44.50	44.50	A3	11.63	0.75	2.63	9.38	1.50	P	7,000	840.0
QD10/8V53.00	53.00	53.00	A3	11.63	0.75	2.63	9.38	1.50	P	7,000	1035.0
QD10/8V63.00	63.00	63.00	B3	11.63	0.38	2.63	11.38	0.13	W	7,250	1460.0
QD10/8V71.00	71.00	71.00	B3	11.63	0.38	2.63	11.38	0.13	W	7,250	1665.0

8V - 12 Groove											
Part Number	Outside Dia. (in)	Pitch Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
QD12/8V12.50	12.50	12.50	A1	13.88	2.47	3.94	6.75	4.66	M	5,500	161.0
QD12/8V13.20	13.20	13.20	A1	13.88	2.47	3.94	6.75	4.66	M	5,500	183.0
QD12/8V14.00	14.00	14.00	A1	13.88	2.47	3.94	6.75	4.66	M	5,500	204.0
QD12/8V15.00	15.00	15.00	A1	13.88	2.47	3.94	6.75	4.66	M	5,500	243.0
QD12/8V16.00	16.00	16.00	A1	13.88	2.47	3.94	6.75	4.66	M	5,500	282.0
QD12/8V17.00	17.00	17.00	A2	13.88	2.47	3.94	6.75	4.66	M	5,500	282.0
QD12/8V18.00	18.00	18.00	A2	13.88	2.47	3.94	6.75	4.66	M	5,500	300.0
QD12/8V19.00	19.00	19.00	A2	13.88	0.56	2.25	8.13	5.19	N	5,938	354.0
QD12/8V20.00	20.00	20.00	A2	13.88	0.56	2.25	8.13	5.19	N	5,938	353.0
QD12/8V21.20	21.20	21.20	A2	13.88	0.56	2.25	8.13	5.19	N	5,938	363.0
QD12/8V22.40	22.40	22.40	A2	13.88	0.56	2.25	8.13	5.19	N	5,938	395.0
QD12/8V24.80	24.80	24.80	A2	13.88	0.56	2.25	8.13	5.19	N	5,938	459.0
QD12/8V30.00	30.00	30.00	A3	13.88	0.75	2.63	9.38	3.75	P	7,000	585.0
QD12/8V35.50	35.50	35.50	A3	13.88	0.75	2.63	9.38	3.75	P	7,000	735.0
QD12/8V40.00	40.00	40.00	A3	13.88	0.75	2.63	9.38	3.75	P	7,000	840.0
QD12/8V44.50	44.50	44.50	A3	13.88	0.75	2.63	9.38	3.75	P	7,000	1010.0
QD12/8V53.00	53.00	53.00	A3	13.88	0.63	2.88	11.38	1.88	W	7,250	1290.0
QD12/8V63.00	63.00	63.00	A3	13.88	0.63	2.88	11.38	1.88	W	7,250	1585.0
QD12/8V71.00	71.00	71.00	A3	13.88	0.63	2.88	11.38	1.88	W	7,250	1980.0

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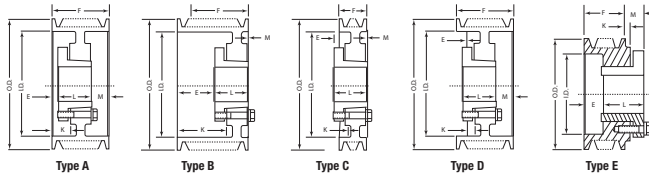
Design Type Suffix indicates rim construction:
 1 = Solid Style
 2 = Web Style
 3 = Arm Style

Table No. C2

Hi-Power® II QD® Sheaves

Part Number	A Datum Dia. (in)	B Datum Dia. (in)	Outside Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
					F	E	K	L	M			
A or B - 1 Groove												
QD1A3.0/B3.4	3.0	3.4	3.75	D1	0.88	0.50	0.06	1.25	0.13	SH	1.688	345.8
QD1A3.2/B3.6	3.2	3.6	3.95	D1	0.88	0.50	0.06	1.25	0.13	SH	1.688	346.6
QD1A3.4/B3.8	3.4	3.8	4.15	D1	0.88	0.50	0.06	1.25	0.13	SH	1.688	347.4
QD1A3.6/B4.0	3.6	4.0	4.35	C1	0.88	0.25	0.31	1.25	0.13	SH	1.688	324.0
QD1A3.8/B4.2	3.8	4.2	4.55	C1	0.88	0.25	0.31	1.25	0.13	SH	1.688	324.8
QD1A4.0/B4.4	4.0	4.4	4.75	C1	0.88	0.25	0.31	1.25	0.13	SH	1.688	325.6
QD1A4.2/B4.6	4.2	4.6	4.95	C1	0.88	0.31	0.31	1.31	0.13	SDS	2.000	326.4
QD1A4.4/B4.8	4.4	4.8	5.15	C1	0.88	0.31	0.31	1.31	0.13	SDS	2.000	327.2
QD1A4.6/B5.0	4.6	5.0	5.35	C1	0.88	0.31	0.31	1.31	0.13	SDS	2.000	327.9
QD1A4.8/B5.2	4.8	5.2	5.55	C1	0.88	0.31	0.31	1.31	0.13	SDS	2.000	328.7
QD1A5.0/B5.4	5.0	5.4	5.75	C1	0.88	0.31	0.31	1.31	0.13	SDS	2.000	329.5
QD1A5.2/B5.6	5.2	5.6	5.95	C1	0.88	0.31	0.31	1.31	0.13	SDS	2.000	330.3
QD1A5.4/B5.8	5.4	5.8	6.15	C1	0.88	0.31	0.31	1.31	0.13	SDS	2.000	331.0
QD1A5.6/B6.0	5.6	6.0	6.35	C1	0.88	0.31	0.31	1.31	0.13	SDS	2.000	331.8
QD1A5.8/B6.2	5.8	6.2	6.55	C1	0.88	0.31	0.31	1.31	0.13	SDS	2.000	332.6
QD1A6.0/B6.4	6.0	6.4	6.75	C1	0.88	0.31	0.31	1.31	0.13	SDS	2.000	333.4
QD1A6.2/B6.6	6.2	6.6	6.95	C1	1.00	0.31	0.31	1.31	0.00	SDS	2.000	334.2
QD1A6.4/B6.8	6.4	6.8	7.15	C1	1.00	0.31	0.31	1.31	0.00	SDS	2.000	334.9
QD1A6.6/B7.0	6.6	7.0	7.35	D2	1.00	0.50	0.13	1.31	0.19	SDS	2.000	359.0
QD1A7.0/B7.4	7.0	7.4	7.75	D2	1.00	0.50	0.13	1.31	0.19	SDS	2.000	359.8
QD1A7.6/B8.0	7.6	8.0	8.35	D2	1.00	0.50	0.13	1.31	0.19	SDS	2.000	360.6
QD1A8.2/B8.6	8.2	8.6	8.95	D2	1.00	0.50	0.13	1.31	0.19	SDS	2.000	361.4
QD1A9.0/B9.4	9.0	9.4	9.75	D3	1.00	0.50	0.13	1.31	0.19	SDS	2.000	362.1
QD1A10.6/B11.0	10.6	11.0	11.35	D3	1.00	0.50	0.13	1.31	0.19	SDS	2.000	356.7
QD1A12.0/B12.4	12.0	12.4	12.75	D3	1.00	0.50	0.13	1.31	0.19	SDS	2.000	357.5
QD1A13.2/B13.6	13.2	13.6	13.95	D3	1.00	0.50	0.13	1.31	0.19	SDS	2.000	358.2
QD1A15.0/B15.4	15.0	15.4	15.75	C3	1.00	0.59	0.13	1.88	0.28	SK	2.625	320.9
QD1A15.6/B16.0	15.6	16.0	16.35	C3	1.00	0.59	0.13	1.88	0.28	SK	2.625	321.7
QD1A18.0/B18.4	18.0	18.4	18.75	C3	1.00	0.59	0.13	1.88	0.28	SK	2.625	322.5
QD1A19.6/B20.0	19.6	20.0	20.35	C3	1.00	0.59	0.13	1.88	0.28	SK	2.625	323.3
QD1A24.6/B25.0	24.6	25.0	25.35	C3	1.00	0.31	0.38	2.00	0.69	SF	2.938	319.4
QD1A29.6/B30.0	29.6	30.0	30.35	C3	1.00	0.69	0.00	2.00	0.31	SF	2.938	320.2
A or B - 2 Groove												
QD2A3.0/B3.4	3.0	3.4	3.75	E1	1.75	1.06	0.00	1.25	0.56	SH	1.688	395.6
QD2A3.2/B3.6	3.2	3.6	3.95	E1	1.75	0.88	0.19	1.25	0.38	SH	1.688	419.6
QD2A3.4/B3.8	3.4	3.8	4.15	E1	1.75	0.88	0.19	1.25	0.38	SH	1.688	426.6
QD2A3.6/B4.0	3.6	4.0	4.35	A1	1.75	0.13	0.69	1.25	0.38	SH	1.688	372.2
QD2A3.8/B4.2	3.8	4.2	4.55	A1	1.75	0.13	0.69	1.25	0.38	SH	1.688	373.0
QD2A4.0/B4.4	4.0	4.4	4.75	A1	1.75	0.13	0.69	1.25	0.38	SH	1.688	373.8
QD2A4.2/B4.6	4.2	4.6	4.95	A1	1.75	0.06	0.69	1.31	0.38	SDS	2.000	374.6
QD2A4.4/B4.8	4.4	4.8	5.15	A1	1.75	0.06	0.69	1.31	0.38	SDS	2.000	375.3
QD2A4.6/B5.0	4.6	5.0	5.35	A1	1.75	0.06	0.69	1.31	0.38	SDS	2.000	376.1
QD2A4.8/B5.2	4.8	5.2	5.55	A1	1.75	0.06	0.69	1.31	0.38	SDS	2.000	376.9
QD2A5.0/B5.4	5.0	5.4	5.75	A1	1.75	0.06	0.69	1.31	0.38	SDS	2.000	377.7
QD2A5.2/B5.6	5.2	5.6	5.95	A1	1.75	0.06	0.69	1.31	0.38	SDS	2.000	378.5
QD2A5.2/B5.6	5.2	5.6	5.95	0	1.75	0.69	0.69	2.00	0.44	SF	2.938	383.9
QD2A5.4/B5.8	5.4	5.8	6.15	A1	1.75	0.06	0.69	1.31	0.38	SDS	2.000	379.2
QD2A5.6/B6.0	5.6	6.0	6.35	0	1.75	0.31	0.69	2.00	0.06	SF	2.938	337.3
QD2A5.6/B6.0	5.6	6.0	6.35	A1	1.75	0.06	0.69	1.31	0.38	SDS	2.000	380.0
QD2A5.8/B6.2	5.8	6.2	6.55	A1	1.75	0.06	0.69	1.31	0.38	SDS	2.000	380.8
QD2A6.0/B6.4	6.0	6.4	6.75	A1	1.75	0.06	0.69	1.31	0.38	SDS	2.000	381.6
QD2A6.2/B6.6	6.2	6.6	6.95	A1	1.75	0.06	0.69	1.31	0.38	SDS	2.000	382.3
QD2A6.4/B6.8	6.4	6.8	7.15	0	1.75	0.31	0.69	2.00	0.06	SF	2.938	341.1
QD2A6.4/B6.8	6.4	6.8	7.15	A1	1.75	0.06	0.69	1.31	0.38	SDS	2.000	383.1
QD2A6.6/B7.0	6.6	7.0	7.35	0	1.75	0.31	0.50	2.00	0.06	SF	2.938	341.9
QD2A6.6/B7.0	6.6	7.0	7.35	D1	1.75	0.22	0.50	1.88	0.09	SK	2.625	345.0
QD2A7.0/B7.4	7.0	7.4	7.75	D2	1.75	0.28	0.44	1.88	0.16	SK	2.625	352.8
QD2A7.6/B8.0	7.6	8.0	8.35	0	1.75	0.31	0.44	2.00	0.06	SF	2.938	342.7
QD2A7.6/B8.0	7.6	8.0	8.35	D2	1.75	0.28	0.44	1.88	0.16	SK	2.625	353.6
QD2A8.2/B8.6	8.2	8.6	8.95	0	1.75	0.31	0.44	2.00	0.06	SF	2.938	343.5
QD2A8.2/B8.6	8.2	8.6	8.95	D2	1.75	0.28	0.44	1.88	0.16	SK	2.625	354.4
QD2A9.0/B9.4	9.0	9.4	9.75	0	1.75	0.31	0.44	2.00	0.06	SF	2.938	344.3
QD2A9.0/B9.4	9.0	9.4	9.75	D3	1.75	0.28	0.44	1.88	0.16	SK	2.625	355.1
QD2A10.6/B11.0	10.6	11.0	11.35	0	1.75	0.31	0.44	2.00	0.06	SF	2.938	335.7
QD2A10.6/B11.0	10.6	11.0	11.35	D3	1.75	0.28	0.44	1.88	0.16	SK	2.625	348.1
QD2A12.0/B12.4	12.0	12.4	12.75	D3	1.75	0.28	0.44	1.88	0.16	SK	2.625	348.9
QD2A13.2/B13.6	13.2	13.6	13.95	D3	1.75	0.28	0.44	1.88	0.16	SK	2.625	349.7
QD2A15.0/B15.4	15.0	15.4	15.75	0	1.75	0.31	0.44	2.00	0.06	SF	2.938	336.5
QD2A15.0/B15.4	15.0	15.4	15.75	D3	1.75	0.28	0.44	1.88	0.16	SK	2.625	350.5
QD2A15.6/B16.0	15.6	16.0	16.35	D3	1.75	0.28	0.44	1.88	0.16	SK	2.625	351.3
QD2A18.0/B18.4	18.0	18.4	18.75	D3	1.75	0.28	0.44	1.88	0.16	SK	2.625	352.0
QD2A19.6/B20.0	19.6	20.0	20.35	C3	1.75	0.31	0.38	2.00	0.06	SF	2.938	338.0
QD2A24.6/B25.0	24.6	25.0	25.35	D3	1.75	0.31	0.38	2.00	0.06	SF	2.938	338.8
QD2A29.6/B30.0	29.6	30.0	30.35	D3	1.75	0.31	0.38	2.00	0.06	SF	2.938	339.6
QD2A37.6/B38.0	37.6	38.0	38.35	D3	1.75	0.31	0.38	2.00	0.06	SF	2.938	340.4

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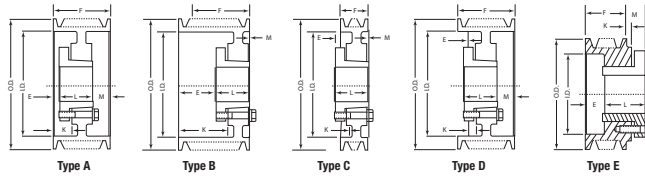
Design Type Suffix indicates rim construction:
 1 = Solid Style
 2 = Web Style
 3 = Arm Style

Table No. C2

Hi-Power® II QD® Sheaves

Part Number	A Datum Dia. (in)	B Datum Dia. (in)	Outside Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
					F	E	K	L	M			
A or B - 3 Groove												
QD3A3.0/B3.4	3.0	3.4	3.75	E1	2.50	1.81	0.00	1.25	0.56	SH	1.688	396.3
QD3A3.2/B3.6	3.2	3.6	3.95	E1	2.50	1.63	0.19	1.25	0.38	SH	1.688	420.4
QD3A3.4/B3.8	3.4	3.8	4.15	E1	2.50	1.63	0.19	1.25	0.38	SH	1.688	430.5
QD3A3.6/B4.0	3.6	4.0	4.35	A1	2.50	0.50	1.06	1.25	0.75	SH	1.688	406.4
QD3A3.8/B4.2	3.8	4.2	4.55	A1	2.50	0.50	1.06	1.25	0.75	SH	1.688	407.2
QD3A4.0/B4.4	4.0	4.4	4.75	A1	2.50	0.50	1.06	1.25	0.75	SH	1.688	408.0
QD3A4.2/B4.6	4.2	4.6	4.95	A1	2.50	0.44	1.06	1.81	0.25	SD	2.000	362.9
QD3A4.4/B4.8	4.4	4.8	5.15	A1	2.50	0.44	1.06	1.81	0.25	SD	2.000	363.7
QD3A4.6/B5.0	4.6	5.0	5.35	A1	2.50	0.44	1.06	1.81	0.25	SD	2.000	364.5
QD3A4.8/B5.2	4.8	5.2	5.55	A1	2.50	0.44	1.06	1.81	0.25	SD	2.000	365.2
QD3A5.0/B5.4	5.0	5.4	5.75	A1	2.50	0.44	1.06	1.81	0.25	SD	2.000	366.0
QD3A5.2/B5.6	5.2	5.6	5.95	A1	2.50	0.44	1.06	1.81	0.25	SD	2.000	366.8
QD3A5.2/B5.6	5.2	5.6	5.95	0	2.50	0.69	1.06	2.00	1.19	SF	2.938	439.1
QD3A5.4/B5.8	5.4	5.8	6.15	A1	2.50	0.44	1.06	1.81	0.25	SD	2.000	367.6
QD3A5.6/B6.0	5.6	6.0	6.35	A2	2.50	0.44	1.06	1.81	0.25	SD	2.000	368.4
QD3A5.6/B6.0	5.6	6.0	6.35	0	2.50	0.06	1.06	2.00	0.56	SF	2.938	390.9
QD3A5.8/B6.2	5.8	6.2	6.55	A1	2.50	0.44	1.06	1.81	0.25	SD	2.000	369.1
QD3A6.0/B6.4	6.0	6.4	6.75	A1	2.50	0.44	1.06	1.81	0.25	SD	2.000	369.9
QD3A6.2/B6.6	6.2	6.6	6.95	A1	2.50	0.44	1.06	1.81	0.25	SD	2.000	370.7
QD3A6.4/B6.8	6.4	6.8	7.15	A2	2.50	0.44	1.06	1.81	0.25	SD	2.000	371.5
QD3A6.4/B6.8	6.4	6.8	7.15	0	2.50	0.06	1.06	2.00	0.56	SF	2.938	391.7
QD3A6.6/B7.0	6.6	7.0	7.35	0	2.50	0.06	0.69	2.00	0.56	SF	2.938	392.4
QD3A6.6/B7.0	6.6	7.0	7.35	D2	2.50	0.03	0.69	1.88	0.66	SK	2.625	402.5
QD3A7.0/B7.4	7.0	7.4	7.75	D2	2.50	0.03	0.69	1.88	0.66	SK	2.625	403.3
QD3A7.0/B7.4	7.6	8.0	8.35	0	2.50	0.06	0.69	2.00	0.56	SF	2.938	393.2
QD3A7.6/B8.0	7.6	8.0	8.35	D2	2.50	0.03	0.69	1.88	0.66	SK	2.625	404.1
QD3A8.2/B8.6	8.2	8.6	8.95	0	2.50	0.06	0.69	2.00	0.56	SF	2.938	394.0
QD3A8.2/B8.6	8.2	8.6	8.95	D2	2.50	0.03	0.69	1.88	0.66	SK	2.625	404.9
QD3A9.0/B9.4	9.0	9.4	9.75	0	2.50	0.06	0.69	2.00	0.56	SF	2.938	394.8
QD3A9.0/B9.4	9.0	9.4	9.75	D3	2.50	0.03	0.69	1.88	0.66	SK	2.625	405.7
QD3A10.6/B11.0	10.6	11.0	11.35	0	2.50	0.06	0.69	2.00	0.56	SF	2.938	389.3
QD3A10.6/B11.0	10.6	11.0	11.35	D3	2.50	0.03	0.69	1.88	0.66	SK	2.625	397.9
QD3A12.0/B12.4	12.0	12.4	12.75	D3	2.50	0.03	0.69	1.88	0.66	SK	2.625	398.7
QD3A13.2/B13.6	13.2	13.6	13.95	D3	2.50	0.03	0.69	1.88	0.66	SK	2.625	399.4
QD3A15.0/B15.4	15.0	15.4	15.75	0	2.50	0.06	0.69	2.00	0.56	SF	2.938	390.1
QD3A15.0/B15.4	15.0	15.4	15.75	D3	2.50	0.03	0.69	1.88	0.66	SK	2.625	400.2
QD3A15.6/B16.0	15.6	16.0	16.35	D3	2.50	0.03	0.69	1.88	0.66	SK	2.625	401.0
QD3A18.0/B18.4	18.0	18.4	18.75	C3	2.50	0.03	0.69	1.88	0.66	SK	2.625	401.8
QD3A19.6/B20.0	19.6	20.0	20.35	D3	2.50	0.06	0.63	2.00	0.56	SF	2.938	387.0
QD3A24.6/B25.0	24.6	25.0	25.35	D3	2.50	0.06	0.63	2.00	0.56	SF	2.938	387.8
QD3A29.6/B30.0	29.6	30.0	30.35	D3	2.50	0.06	0.63	2.00	0.56	SF	2.938	388.6
QD3A37.6/B38.0	37.6	38.0	38.35	D3	2.50	0.28	0.63	2.63	0.16	E	3.500	355.9
A or B - 4 Groove												
QD4A3.0/B3.4	3.0	3.4	3.75	E1	3.25	2.38	0.44	1.81	0.94	SD	2.000	397.1
QD4A3.2/B3.6	3.2	3.6	3.95	E1	3.25	2.38	0.44	1.81	0.94	SD	2.000	421.2
QD4A3.4/B3.8	3.4	3.8	4.15	E1	3.25	2.38	0.31	1.81	0.94	SD	2.000	437.5
QD4A3.6/B4.0	3.6	4.0	4.35	E1	3.25	2.06	0.00	1.81	0.63	SD	2.000	505.9
QD4A3.8/B4.2	3.8	4.2	4.55	E1	3.25	2.06	0.00	1.81	0.63	SD	2.000	508.3
QD4A4.0/B4.4	4.0	4.4	4.75	E1	3.25	2.06	0.00	1.81	0.63	SD	2.000	514.5
QD4A4.2/B4.6	4.2	4.6	4.95	A1	3.25	0.69	1.31	1.81	0.75	SD	2.000	408.8
QD4A4.4/B4.8	4.4	4.8	5.15	A1	3.25	0.69	1.31	1.81	0.75	SD	2.000	409.5
QD4A4.6/B5.0	4.6	5.0	5.35	A1	3.25	0.69	1.31	1.81	0.75	SD	2.000	410.3
QD4A4.8/B5.2	4.8	5.2	5.55	A1	3.25	0.69	1.31	1.81	0.75	SD	2.000	411.1
QD4A5.0/B5.4	5.0	5.4	5.75	A1	3.25	0.69	1.31	1.81	0.75	SD	2.000	411.9
QD4A5.2/B5.6	5.2	5.6	5.95	A1	3.25	0.69	1.31	1.81	0.75	SD	2.000	412.7
QD4A5.4/B5.8	5.4	5.8	6.15	A1	3.25	0.69	1.31	1.81	0.75	SD	2.000	413.4
QD4A5.6/B6.0	5.6	6.0	6.35	A1	3.25	0.69	1.31	1.81	0.75	SD	2.000	414.2
QD4A5.8/B6.2	5.8	6.2	6.55	A1	3.25	0.69	1.31	1.81	0.75	SD	2.000	415.0
QD4A6.0/B6.4	6.0	6.4	6.75	A1	3.25	0.69	1.31	1.81	0.75	SD	2.000	415.8
QD4A6.2/B6.6	6.2	6.6	6.95	A1	3.25	0.69	1.31	1.81	0.75	SD	2.000	416.5
QD4A6.4/B6.8	6.4	6.8	7.15	A1	3.25	0.69	1.31	1.81	0.75	SD	2.000	417.3
QD4A6.6/B7.0	6.6	7.0	7.35	A1	3.25	0.28	1.00	1.88	1.09	SK	2.625	433.6
QD4A7.0/B7.4	7.0	7.4	7.75	A2	3.25	0.28	1.00	1.88	1.09	SK	2.625	434.4
QD4A7.6/B8.0	7.6	8.0	8.35	A2	3.25	0.28	1.00	1.88	1.09	SK	2.625	435.2
QD4A8.2/B8.6	8.2	8.6	8.95	A2	3.25	0.28	1.00	1.88	1.09	SK	2.625	436.0
QD4A9.0/B9.4	9.0	9.4	9.75	A2	3.25	0.28	1.00	1.88	1.09	SK	2.625	436.7
QD4A10.6/B11.0	10.6	11.0	11.35	A3	3.25	0.28	1.00	1.88	1.09	SK	2.625	431.3
QD4A12.0/B12.4	12.0	12.4	12.75	A3	3.25	0.28	1.00	1.88	1.09	SK	2.625	432.1
QD4A13.2/B13.6	13.2	13.6	13.95	A3	3.25	0.28	1.00	1.88	1.09	SK	2.625	432.9
QD4A15.0/B15.4	15.0	15.4	15.75	A3	3.25	0.31	1.00	2.00	0.94	SF	2.938	422.0
QD4A15.6/B16.0	15.6	16.0	16.35	A3	3.25	0.31	1.00	2.00	0.94	SF	2.938	422.8
QD4A18.0/B18.4	18.0	18.4	18.75	A3	3.25	0.31	1.00	2.00	0.94	SF	2.938	423.5
QD4A19.6/B20.0	19.6	20.0	20.35	A3	3.25	0.31	1.00	2.00	0.94	SF	2.938	424.3
QD4A24.6/B25.0	24.6	25.0	25.35	A3	3.25	0.09	1.00	2.63	0.53	E	3.500	384.7
QD4A29.6/B30.0	29.6	30.0	30.35	A3	3.25	0.09	1.00	2.63	0.53	E	3.500	385.4
QD4A37.6/B38.0	37.6	38.0	38.35	A3	3.25	0.09	1.00	2.63	0.53	E	3.500	386.2

Heavy Duty V-Belt Drive Design Manual



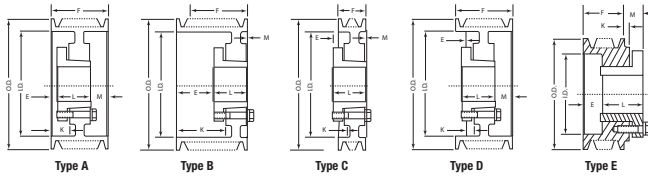
Design Type Suffix indicates rim construction:
 1 = Solid Style
 2 = Web Style
 3 = Arm Style

Table No. C2

Hi-Power® II QD® Sheaves

Part Number	A Datum Dia. (in)	B Datum Dia. (in)	Outside Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
					F	E	K	L	M			
A or B - 5 Groove												
QD5A3.0/B3.4	3.0	3.4	3.75	E1	4.00	3.13	0.31	1.81	0.94	SD	2,000	418.1
QD5A3.2/B3.6	3.2	3.6	3.95	E1	4.00	3.13	0.31	1.81	0.94	SD	2,000	425.1
QD5A3.4/B3.8	3.4	3.8	4.15	E1	4.00	3.13	0.31	1.81	0.94	SD	2,000	438.3
QD5A3.6/B4.0	3.6	4.0	4.35	E1	4.00	2.81	0.00	1.81	0.63	SD	2,000	506.7
QD5A3.8/B4.2	3.8	4.2	4.55	E1	4.00	2.81	0.00	1.81	0.63	SD	2,000	509.0
QD5A4.0/B4.4	4.0	4.4	4.75	E1	4.00	2.81	0.00	1.81	0.63	SD	2,000	515.3
QD5A4.2/B4.6	4.2	4.6	4.95	A1	4.00	0.69	1.31	1.81	1.50	SD	2,000	449.2
QD5A4.4/B4.8	4.4	4.8	5.15	A1	4.00	0.69	1.31	1.81	1.50	SD	2,000	450.0
QD5A4.6/B5.0	4.6	5.0	5.35	A1	4.00	0.69	1.31	1.81	1.50	SD	2,000	450.7
QD5A4.8/B5.2	4.8	5.2	5.55	A1	4.00	0.69	1.31	1.81	1.50	SD	2,000	451.5
QD5A5.0/B5.4	5.0	5.4	5.75	A1	4.00	0.59	1.31	1.88	1.53	SK	2,625	452.3
QD5A5.2/B5.6	5.2	5.6	5.95	A1	4.00	0.59	1.31	1.88	1.53	SK	2,625	453.1
QD5A5.4/B5.8	5.4	5.8	6.15	A1	4.00	0.59	1.31	1.88	1.53	SK	2,625	453.8
QD5A5.6/B6.0	5.6	6.0	6.35	A1	4.00	0.59	1.31	1.88	1.53	SK	2,625	454.6
QD5A5.8/B6.2	5.8	6.2	6.55	A1	4.00	0.59	1.31	1.88	1.53	SK	2,625	455.4
QD5A6.0/B6.4	6.0	6.4	6.75	A1	4.00	0.59	1.31	1.88	1.53	SK	2,625	456.2
QD5A6.2/B6.6	6.2	6.6	6.95	A1	4.00	0.59	1.31	1.88	1.53	SK	2,625	457.0
QD5A6.4/B6.8	6.4	6.8	7.15	A1	4.00	0.59	1.31	1.88	1.53	SK	2,625	457.7
QD5A6.6/B7.0	6.6	7.0	7.35	A1	4.00	0.63	1.31	2.00	1.38	SF	2,938	445.3
QD5A7.0/B7.4	7.0	7.4	7.75	A1	4.00	0.63	1.31	2.00	1.38	SF	2,938	446.1
QD5A7.6/B8.0	7.6	8.0	8.35	A1	4.00	0.63	1.31	2.00	1.38	SF	2,938	446.9
QD5A8.2/B8.6	8.2	8.6	8.95	A2	4.00	0.63	1.31	2.00	1.38	SF	2,938	447.6
QD5A9.0/B9.4	9.0	9.4	9.75	A3	4.00	0.63	1.31	2.00	1.38	SF	2,938	448.4
QD5A10.6/B11.0	10.6	11.0	11.35	A3	4.00	0.63	1.31	2.00	1.38	SF	2,938	440.6
QD5A12.0/B12.4	12.0	12.4	12.75	A3	4.00	0.63	1.31	2.00	1.38	SF	2,938	441.4
QD5A13.2/B13.6	13.2	13.6	13.95	A3	4.00	0.63	1.31	2.00	1.38	SF	2,938	442.2
QD5A15.0/B15.4	15.0	15.4	15.75	A3	4.00	0.63	1.31	2.00	1.38	SF	2,938	443.0
QD5A15.6/B16.0	15.6	16.0	16.35	A3	4.00	0.63	1.31	2.00	1.38	SF	2,938	443.7
QD5A18.0/B18.4	18.0	18.4	18.75	A3	4.00	0.63	1.31	2.00	1.38	SF	2,938	444.5
QD5A19.6/B20.0	19.6	20.0	20.35	A3	4.00	0.34	1.25	2.63	1.03	E	3,500	427.4
QD5A24.6/B25.0	24.6	25.0	25.35	A3	4.00	0.34	1.25	2.63	1.03	E	3,500	428.2
QD5A29.6/B30.0	29.6	30.0	30.35	A3	4.00	0.34	1.25	2.63	1.03	E	3,500	429.0
QD5A37.6/B38.0	37.6	38.0	38.35	A3	4.00	0.34	1.25	2.63	1.03	E	3,500	429.8
A or B - 6 Groove												
QD6A3.0/B3.4	3.0	3.4	3.75	E1	4.75	3.88	0.31	1.81	0.94	SD	2,000	418.9
QD6A3.2/B3.6	3.2	3.6	3.95	E1	4.75	3.88	0.31	1.81	0.94	SD	2,000	425.9
QD6A3.4/B3.8	3.4	3.8	4.15	E1	4.75	3.88	0.31	1.81	0.94	SD	2,000	439.9
QD6A3.6/B4.0	3.6	4.0	4.35	E1	4.75	3.56	0.00	1.81	0.63	SD	2,000	507.5
QD6A3.8/B4.2	3.8	4.2	4.55	E1	4.75	3.44	0.00	1.81	0.63	SD	2,000	513.7
QD6A4.0/B4.4	4.0	4.4	4.75	E1	4.75	3.56	0.00	1.81	0.63	SD	2,000	516.0
QD6A4.2/B4.6	4.2	4.6	4.95	A1	4.75	0.69	1.31	1.81	2.25	SD	2,000	484.9
QD6A4.4/B4.8	4.4	4.8	5.15	A1	4.75	0.69	1.31	1.81	2.25	SD	2,000	485.7
QD6A4.6/B5.0	4.6	5.0	5.35	A1	4.75	0.69	1.31	1.81	2.25	SD	2,000	486.5
QD6A4.8/B5.2	4.8	5.2	5.55	A1	4.75	0.69	1.31	1.81	2.25	SD	2,000	487.3
QD6A5.0/B5.4	5.0	5.4	5.75	A1	4.75	0.59	1.31	1.88	2.28	SK	2,625	488.0
QD6A5.2/B5.6	5.2	5.6	5.95	A1	4.75	0.59	1.31	1.88	2.28	SK	2,625	488.8
QD6A5.4/B5.8	5.4	5.8	6.15	A1	4.75	0.59	1.31	1.88	2.28	SK	2,625	489.6
QD6A5.6/B6.0	5.6	6.0	6.35	A1	4.75	0.59	1.31	1.88	2.28	SK	2,625	490.4
QD6A5.8/B6.2	5.8	6.2	6.55	A1	4.75	0.59	1.31	1.88	2.28	SK	2,625	491.2
QD6A6.0/B6.4	6.0	6.4	6.75	A1	4.75	0.59	1.31	1.88	2.28	SK	2,625	491.9
QD6A6.2/B6.6	6.2	6.6	6.95	A1	4.75	0.59	1.31	1.88	2.28	SK	2,625	492.7
QD6A6.4/B6.8	6.4	6.8	7.15	A1	4.75	0.59	1.31	1.88	2.28	SK	2,625	493.5
QD6A6.6/B7.0	6.6	7.0	7.35	A1	4.75	1.00	1.69	2.00	1.75	SF	2,938	470.2
QD6A7.0/B7.4	7.0	7.4	7.75	A1	4.75	1.00	1.69	2.00	1.75	SF	2,938	470.9
QD6A7.6/B8.0	7.6	8.0	8.35	A1	4.75	1.00	1.69	2.00	1.75	SF	2,938	471.7
QD6A8.2/B8.6	8.2	8.6	8.95	A1	4.75	1.00	1.69	2.00	1.75	SF	2,938	472.5
QD6A9.0/B9.4	9.0	9.4	9.75	A2	4.75	1.00	1.69	2.00	1.75	SF	2,938	473.3
QD6A10.6/B11.0	10.6	11.0	11.35	A3	4.75	1.00	1.69	2.00	1.75	SF	2,938	465.5
QD6A12.0/B12.4	12.0	12.4	12.75	A3	4.75	1.00	1.69	2.00	1.75	SF	2,938	466.3
QD6A13.2/B13.6	13.2	13.6	13.95	A3	4.75	1.00	1.69	2.00	1.75	SF	2,938	467.1
QD6A15.0/B15.4	15.0	15.4	15.75	A3	4.75	1.00	1.69	2.00	1.75	SF	2,938	467.8
QD6A15.6/B16.0	15.6	16.0	16.35	A3	4.75	1.00	1.69	2.00	1.75	SF	2,938	468.6
QD6A18.0/B18.4	18.0	18.4	18.75	A3	4.75	1.00	1.69	2.00	1.75	SF	2,938	469.4
QD6A19.6/B20.0	19.6	20.0	20.35	A3	4.75	0.47	1.38	2.63	1.66	E	3,500	462.4
QD6A24.6/B25.0	24.6	25.0	25.35	A3	4.75	0.47	1.38	2.63	1.66	E	3,500	463.2
QD6A29.6/B30.0	29.6	30.0	30.35	A3	4.75	0.47	1.38	2.63	1.66	E	3,500	464.0
QD6A37.6/B38.0	37.6	38.0	38.35	A3	4.75	0.47	1.38	2.63	1.66	E	3,500	464.7
A or B - 7 Groove												
QD7A5.0/B5.4	5.0	5.4	5.75	A1	5.50	1.09	1.81	1.88	2.53	SK	2,625	503.6
QD7A5.2/B5.6	5.2	5.6	5.95	A1	5.50	1.09	1.81	1.88	2.53	SK	2,625	504.4
QD7A5.4/B5.8	5.4	5.8	6.15	A1	5.50	1.09	1.81	1.88	2.53	SK	2,625	505.1
QD7A5.6/B6.0	5.6	6.0	6.35	A1	5.50	1.13	1.81	2.00	2.38	SF	2,938	494.3
QD7A5.8/B6.2	5.8	6.2	6.55	A1	5.50	1.13	1.81	2.00	2.38	SF	2,938	495.0
QD7A6.0/B6.4	6.0	6.4	6.75	A1	5.50	1.13	1.81	2.00	2.38	SF	2,938	495.8
QD7A6.2/B6.6	6.2	6.6	6.95	A1	5.50	1.13	1.81	2.00	2.38	SF	2,938	496.6
QD7A6.4/B6.8	6.4	6.8	7.15	A1	5.50	1.13	1.81	2.00	2.38	SF	2,938	497.4
QD7A6.6/B7.0	6.6	7.0	7.35	A1	5.50	1.13	1.81	2.00	2.38	SF	2,938	498.2
QD7A7.0/B7.4	7.0	7.4	7.75	A1	5.50	1.13	1.81	2.00	2.38	SF	2,938	498.9
QD7A8.2/B8.6	8.2	8.6	8.95	A1	5.50	1.09	2.00	2.63	1.78	E	3,500	477.9
QD7A9.0/B9.4	9.0	9.4	9.75	A2	5.50	1.09	2.00	2.63	1.78	E	3,500	478.7
QD7A10.6/B11.0	10.6	11.0	11.35	A2	5.50	1.09	2.00	2.63	1.78	E	3,500	474.1
QD7A12.0/B12.4	12.0	12.4	12.75	A2	5.50	1.09	2.00	2.63	1.78	E	3,500	474.8
QD7A13.2/B13.6	13.2	13.6	13.95	A3	5.50	1.09	2.00	2.63	1.78	E	3,500	475.6
QD7A15.0/B15.4	15.0	15.4	15.75	A3	5.50	1.09	2.00	2.63	1.78	E	3,500	476.4
QD7A15.6/B16.0	15.6	16.0	16.35	A3	5.50	1.09	2.00	2.63	1.78	E	3,500	477.2
QD7A18.0/B18.4	18.0	18.4	18.75	A3	5.50	0.25	1.31	3.63	1.63	F	4,000	461.6
QD7A19.6/B20.0	19.6	20.0	20.35	A3	5.50	0.25	1.31	3.63	1.63	F	4,000	458.5
QD7A24.6/B25.0	24.6	25.0	25.35	A3	5.50	0.25	1.31	3.63	1.63	F	4,000	459.3
QD7A29.6/B30.0	29.6	30.0	30.35	A3	5.50	0.25	1.31	3.63	1.63	F	4,000	460.1
QD7A37.6/B38.0	37.6	38.0	38.35	A3	5.50	0.25	1.31	3.63	1.63	F	4,000	460.8

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Design Type Suffix indicates rim construction:
 1 = Solid Style
 2 = Web Style
 3 = Arm Style

Table No. C2

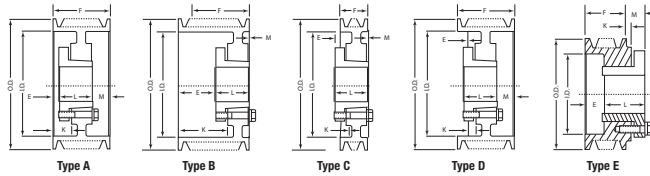
Hi-Power® II QD® Sheaves

Part Number	A Datum Dia. (in)	B Datum Dia. (in)	Outside Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
					F	E	K	L	M			
B - 8 Groove												
QD8B5.4	5.0	5.4	5.75	A1	6.25	1.09	1.81	1.88	3.28	SK	2.625	527.7
QD8B5.6	5.2	5.6	5.95	A1	6.25	1.09	1.81	1.88	3.28	SK	2.625	528.5
QD8B5.8	5.4	5.8	6.15	A1	6.25	1.09	1.81	1.88	3.28	SK	2.625	529.2
QD8B6.0	5.6	6.0	6.35	A1	6.25	1.13	1.81	2.00	3.13	SF	2.938	516.8
QD8B6.2	5.8	6.2	6.55	A1	6.25	1.13	1.81	2.00	3.13	SF	2.938	517.6
QD8B6.4	6.0	6.4	6.75	A1	6.25	1.13	1.81	2.00	3.13	SF	2.938	518.4
QD8B6.6	6.2	6.6	6.95	A1	6.25	1.13	1.81	2.00	3.13	SF	2.938	519.1
QD8B6.8	6.4	6.8	7.15	A1	6.25	1.13	1.81	2.00	3.13	SF	2.938	519.9
QD8B7.0	6.6	7.0	7.35	A1	6.25	1.13	1.81	2.00	3.13	SF	2.938	520.7
QD8B7.4	7.0	7.4	7.75	A1	6.25	1.13	1.81	2.00	3.13	SF	2.938	521.5
QD8B8.6	8.2	8.6	8.95	A1	6.25	1.47	2.38	2.63	2.16	E	3.500	483.4
QD8B9.4	9.0	9.4	9.75	A2	6.25	1.47	2.38	2.63	2.16	E	3.500	484.2
QD8B11.0	10.6	11.0	11.35	A2	6.25	1.47	2.38	2.63	2.16	E	3.500	479.5
QD8B12.4	12.0	12.4	12.75	A2	6.25	1.47	2.38	2.63	2.16	E	3.500	480.3
QD8B13.6	13.2	13.6	13.95	A3	6.25	1.47	2.38	2.63	2.16	E	3.500	481.1
QD8B15.4	15.0	15.4	15.75	A3	6.25	1.47	2.38	2.63	2.16	E	3.500	481.8
QD8B16.0	15.6	16.0	16.35	A3	6.25	1.47	2.38	2.63	2.16	E	3.500	482.6
QD8B18.4	18.0	18.4	18.75	A3	6.25	0.25	1.31	3.63	2.38	F	4.000	499.7
QD8B20.0	19.6	20.0	20.35	A3	6.25	0.25	1.31	3.63	2.38	F	4.000	500.5
QD8B25.0	24.6	25.0	25.35	A3	6.25	0.25	1.31	3.63	2.38	F	4.000	501.3
QD8B30.0	29.6	30.0	30.35	A3	6.25	0.25	1.31	3.63	2.38	F	4.000	502.0
QD8B38.0	37.6	38.0	38.35	A3	6.25	0.25	1.31	3.63	2.38	F	4.000	502.8
B - 10 Groove												
QD10B5.4	5.0	5.4	5.75	A1	7.75	1.84	2.56	1.88	4.03	SK	2.625	535.5
QD10B5.6	5.2	5.6	5.95	A1	7.75	1.84	2.56	1.88	4.03	SK	2.625	536.2
QD10B5.8	5.4	5.8	6.15	A1	7.75	1.84	2.56	1.88	4.03	SK	2.625	537.0
QD10B6.0	5.6	6.0	6.35	A1	7.75	1.88	2.56	2.00	3.88	SF	2.938	530.0
QD10B6.2	5.8	6.2	6.55	A1	7.75	1.88	2.56	2.00	3.88	SF	2.938	530.8
QD10B6.4	6.0	6.4	6.75	A1	7.75	1.88	2.56	2.00	3.88	SF	2.938	531.6
QD10B6.6	6.2	6.6	6.95	A1	7.75	1.88	2.56	2.00	3.88	SF	2.938	532.4
QD10B6.8	6.4	6.8	7.15	A1	7.75	1.88	2.56	2.00	3.88	SF	2.938	533.1
QD10B7.0	6.6	7.0	7.35	A1	7.75	1.88	2.56	2.00	3.88	SF	2.938	533.9
QD10B7.4	7.0	7.4	7.75	A1	7.75	1.88	2.56	2.00	3.88	SF	2.938	534.7
QD10B8.6	8.2	8.6	8.95	A1	7.75	2.22	3.13	2.63	2.91	E	3.500	511.4
QD10B9.4	9.0	9.4	9.75	A2	7.75	2.22	3.13	2.63	2.91	E	3.500	512.1
QD10B11.0	10.6	11.0	11.35	A2	7.75	2.22	3.13	2.63	2.91	E	3.500	509.8
QD10B12.4	12.0	12.4	12.75	A2	7.75	2.22	3.13	2.63	2.91	E	3.500	510.6
QD10B13.6	13.2	13.6	13.95	A3	7.75	2.06	2.06	3.63	3.13	F	4.000	522.2
QD10B15.4	15.0	15.4	15.75	A3	7.75	1.00	2.06	3.63	3.13	F	4.000	523.0
QD10B16.0	15.6	16.0	16.35	A3	7.75	1.00	2.06	3.63	3.13	F	4.000	523.8
QD10B18.4	18.0	18.4	18.75	A3	7.75	1.00	2.06	3.63	3.13	F	4.000	524.6
QD10B20.0	19.6	20.0	20.35	A3	7.75	1.00	2.06	3.63	3.13	F	4.000	525.4
QD10B25.0	24.6	25.0	25.35	A3	7.75	1.00	2.06	3.63	3.13	F	4.000	526.1
QD10B30.0	29.6	30.0	30.35	A3	7.75	1.00	2.06	3.63	3.13	F	4.000	526.9
QD10B38.0	37.6	38.0	38.35	A3	7.75	0.31	1.56	4.50	2.94	J	4.500	512.9

Hi-Power® II QD® Sheaves

Part Number	Datum Dia. (in)	Outside Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
C - 1 Groove											
QD1C7.0	7.0	7.4	C1	1.38	0.56	0.13	2.00	0.06	SF	2.938	558.8
QD1C7.5	7.5	7.9	C1	1.38	0.56	0.13	2.00	0.06	SF	2.938	559.6
QD1C8.0	8.0	8.4	C1	1.38	0.56	0.13	2.00	0.06	SF	2.938	560.3
QD1C8.5	8.5	8.9	C2	1.38	0.56	0.13	2.00	0.06	SF	2.938	561.1
QD1C9.0	9.0	9.4	C2	1.38	0.56	0.13	2.00	0.06	SF	2.938	561.9
QD1C9.5	9.5	9.9	C2	1.38	0.56	0.13	2.00	0.06	SF	2.938	562.7
QD1C10.0	10.0	10.4	C2	1.38	0.56	0.13	2.00	0.06	SF	2.938	551.0
QD1C10.5	10.5	10.9	C2	1.38	0.56	0.13	2.00	0.06	SF	2.938	551.8
QD1C11.0	11.0	11.4	C3	1.38	0.56	0.13	2.00	0.06	SF	2.938	552.6
QD1C12.0	12.0	12.4	C3	1.38	0.56	0.13	2.00	0.06	SF	2.938	553.3
QD1C13.0	13.0	13.4	C3	1.38	0.56	0.13	2.00	0.06	SF	2.938	554.1
QD1C14.0	14.0	14.4	C3	1.38	0.56	0.13	2.00	0.06	SF	2.938	554.9
QD1C16.0	16.0	16.4	C3	1.38	0.56	0.13	2.00	0.06	SF	2.938	555.7
QD1C18.0	18.0	18.4	C3	1.38	0.56	0.13	2.00	0.06	SF	2.938	556.4
QD1C20.0	20.0	20.4	C3	1.38	0.56	0.13	2.00	0.06	SF	2.938	557.2
QD1C24.0	24.0	24.4	C3	1.38	0.56	0.13	2.00	0.06	SF	2.938	558.0
C - 2 Groove											
QD2C5.6	5.6	6	A1	2.38	0.19	0.81	1.81	0.38	SD	2.000	575.9
QD2C7.0	7.0	7.4	A1	2.38	0.13	0.81	2.00	0.25	SF	2.938	571.2
QD2C7.5	7.5	7.9	A1	2.38	0.13	0.81	2.00	0.25	SF	2.938	572.0
QD2C8.0	8.0	8.4	C2	2.38	0.13	0.81	2.00	0.25	SF	2.938	572.8
QD2C8.5	8.5	8.9	A1	2.38	0.13	0.81	2.00	0.25	SF	2.938	573.5
QD2C9.0	9.0	9.4	A2	2.38	0.13	0.81	2.00	0.25	SF	2.938	574.3
QD2C9.5	9.5	9.9	A2	2.38	0.13	0.81	2.00	0.25	SF	2.938	575.1
QD2C10.0	10.0	10.4	A2	2.38	0.13	0.81	2.00	0.25	SF	2.938	568.9
QD2C10.5	10.5	10.9	A3	2.38	0.13	0.81	2.00	0.25	SF	2.938	569.7
QD2C11.0	11.0	11.4	A2	2.38	0.13	0.81	2.00	0.25	SF	2.938	570.4
QD2C12.0	12.0	12.4	D3	2.38	0.13	0.56	2.00	0.50	SF	2.938	577.4
QD2C13.0	13.0	13.4	D3	2.38	0.13	0.56	2.00	0.50	SF	2.938	578.2
QD2C14.0	14.0	14.4	D3	2.38	0.13	0.56	2.00	0.50	SF	2.938	579.0
QD2C16.0	16.0	16.4	D3	2.38	0.13	0.56	2.00	0.50	SF	2.938	579.8
QD2C18.0	18.0	18.4	D3	2.38	0.13	0.56	2.00	0.50	SF	2.938	580.5
QD2C20.0	20.0	20.4	D3	2.38	0.13	0.56	2.00	0.50	SF	2.938	581.3
QD2C24.0	24.0	24.4	D3	2.38	0.13	0.56	2.00	0.50	SF	2.938	582.1
QD2C27.0	27.0	27.4	C3	2.38	0.75	0.31	3.63	0.50	F	4.000	538.6
QD2C30.0	30.0	30.4	C3	2.38	0.75	0.31	3.63	0.50	F	4.000	539.3

Heavy Duty V-Belt Drive Design Manual



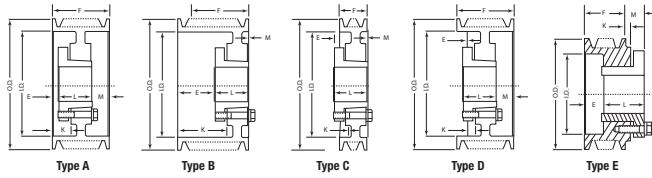
Design Type Suffix indicates rim construction:
 1 = Solid Style
 2 = Web Style
 3 = Arm Style

Table No. C2

Hi-Power® II QD® Sheaves

Part Number	Datum Dia. (in)	Outside Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
C - 3 Groove											
QD3C5.0	5.0	5.4	A1	3.38	0.44	1.06	1.81	1.13	SD	2.000	601.5
QD3C5.6	5.6	6	A1	3.38	0.69	1.31	1.81	0.88	SD	2.000	600.7
QD3C6.0	6.2	6.6	A1	3.38	0.63	1.31	2.00	0.75	SF	2.938	598.4
QD3C7.0	7.0	7.4	A1	3.38	0.63	1.31	2.00	0.75	SF	2.938	599.2
QD3C7.5	7.5	7.9	A1	3.38	0.63	1.31	2.00	0.75	SF	2.938	600.0
QD3C8.0	8.0	8.4	B1	3.38	0.84	1.75	2.63	0.09	E	3.500	547.9
QD3C8.5	8.5	8.9	B1	3.38	0.84	1.75	2.63	0.09	E	3.500	548.7
QD3C9.0	9.0	9.4	B1	3.38	0.84	1.75	2.63	0.09	E	3.500	549.4
QD3C9.5	9.5	9.9	B1	3.38	0.84	1.75	2.63	0.09	E	3.500	550.2
QD3C10.0	10.0	10.4	B1	3.38	0.84	1.75	2.63	0.09	E	3.500	541.7
QD3C10.5	10.5	10.9	B2	3.38	0.84	1.75	2.63	0.09	E	3.500	542.5
QD3C11.0	11.0	11.4	B2	3.38	0.84	1.75	2.63	0.09	E	3.500	543.2
QD3C12.0	12.0	12.4	B2	3.38	0.84	1.75	2.63	0.09	E	3.500	544.0
QD3C13.0	13.0	13.4	B2	3.38	0.84	1.75	2.63	0.09	E	3.500	544.8
QD3C14.0	14.0	14.4	B2	3.38	0.84	1.75	2.63	0.09	E	3.500	545.6
QD3C16.0	16.0	16.4	B3	3.38	0.84	1.75	2.63	0.09	E	3.500	546.3
QD3C18.0	18.0	18.4	B3	3.38	0.84	1.75	2.63	0.09	E	3.500	547.1
QD3C20.0	20.0	20.4	A3	3.38	0.09	1.00	2.63	0.66	E	3.500	587.5
QD3C24.0	24.0	24.4	A3	3.38	0.09	1.00	2.63	0.66	E	3.500	588.3
QD3C27.0	27.0	27.4	C3	3.38	0.25	0.81	3.63	0.00	F	4.000	563.4
QD3C30.0	30.0	30.4	C3	3.38	0.25	0.81	3.63	0.00	F	4.000	564.2
QD3C36.0	36.0	36.4	C3	3.38	0.25	0.81	3.63	0.00	F	4.000	565.0
QD3C44.0	44.0	44.4	C3	3.38	0.25	0.81	3.63	0.00	F	4.000	565.8
QD3C50.0	50.0	50.4	C3	3.38	0.25	0.81	3.63	0.00	F	4.000	566.5
C - 4 Groove											
QD4C5.0	5.0	5.4	A1	4.38	0.94	1.56	1.81	1.63	SD	2.000	638.8
QD4C5.6	5.6	6	A1	4.38	0.94	1.56	1.81	1.63	SD	2.000	639.6
QD4C6.0	6.2	6.6	A1	4.38	0.88	1.56	2.00	1.50	SF	2.938	622.5
QD4C7.0	7.0	7.4	A1	4.38	0.88	1.56	2.00	1.50	SF	2.938	623.3
QD4C7.5	7.5	7.9	A1	4.38	0.88	1.56	2.00	1.50	SF	2.938	624.1
QD4C8.0	8.0	8.4	A1	4.38	1.09	2.00	2.63	0.66	E	3.500	595.3
QD4C8.5	8.5	8.9	A1	4.38	1.09	2.00	2.63	0.66	E	3.500	596.1
QD4C9.0	9.0	9.4	A1	4.38	1.09	2.00	2.63	0.66	E	3.500	596.9
QD4C9.5	9.5	9.9	A2	4.38	1.09	2.00	2.63	0.66	E	3.500	597.6
QD4C10.0	10.0	10.4	A2	4.38	1.09	2.00	2.63	0.66	E	3.500	589.1
QD4C10.5	10.5	10.9	A2	4.38	1.09	2.00	2.63	0.66	E	3.500	589.9
QD4C11.0	11.0	11.4	A2	4.38	1.09	2.00	2.63	0.66	E	3.500	590.6
QD4C12.0	12.0	12.4	A2	4.38	1.09	2.00	2.63	0.66	E	3.500	591.4
QD4C13.0	13.0	13.4	A2	4.38	1.09	2.00	2.63	0.66	E	3.500	592.2
QD4C14.0	14.0	14.4	A3	4.38	1.09	2.00	2.63	0.66	E	3.500	593.0
QD4C16.0	16.0	16.4	A3	4.38	1.09	2.00	2.63	0.66	E	3.500	593.8
QD4C18.0	18.0	18.4	A3	4.38	1.09	2.00	2.63	0.66	E	3.500	594.5
QD4C20.0	20.0	20.4	A3	4.38	0.59	1.50	2.63	1.16	E	3.500	602.3
QD4C24.0	24.0	24.4	A3	4.38	0.26	1.32	3.63	0.49	F	4.000	576.7
QD4C27.0	27.0	27.4	A3	4.38	0.25	1.31	3.63	0.50	F	4.000	582.9
QD4C30.0	30.0	30.4	A3	4.38	0.25	1.31	3.63	0.50	F	4.000	583.6
QD4C36.0	36.0	36.4	A3	4.38	0.25	1.31	3.63	0.50	F	4.000	584.4
QD4C44.0	44.0	44.4	B3	4.38	0.31	1.56	4.50	0.44	J	4.500	540.1
QD4C50.0	50.0	50.4	B3	4.38	0.31	1.56	4.50	0.44	J	4.500	540.9
C - 5 Groove											
QD5C6.0	6.2	6.6	A1	5.38	1.25	1.94	2.00	2.13	SF	2.938	641.9
QD5C7.0	7.0	7.4	A1	5.38	1.25	1.94	2.00	2.13	SF	2.938	642.7
QD5C7.5	7.5	7.9	A1	5.38	1.25	1.94	2.00	2.13	SF	2.938	643.5
QD5C8.0	8.0	8.4	A1	5.38	1.47	2.38	2.63	1.28	E	3.500	611.6
QD5C8.5	8.5	8.9	A1	5.38	1.47	2.38	2.63	1.28	E	3.500	612.4
QD5C9.0	9.0	9.4	A1	5.38	1.47	2.38	2.63	1.28	E	3.500	613.2
QD5C9.5	9.5	9.9	A1	5.38	1.47	2.38	2.63	1.28	E	3.500	614.0
QD5C10.0	10.0	10.4	A1	5.38	1.47	2.38	2.63	1.28	E	3.500	605.4
QD5C10.5	10.5	10.9	A2	5.38	1.47	2.38	2.63	1.28	E	3.500	606.2
QD5C11.0	11.0	11.4	A2	5.38	1.47	2.38	2.63	1.28	E	3.500	607.0
QD5C12.0	12.0	12.4	A2	5.38	1.47	2.38	2.63	1.28	E	3.500	607.7
QD5C13.0	13.0	13.4	A2	5.38	1.47	2.38	2.63	1.28	E	3.500	608.5
QD5C14.0	14.0	14.4	A3	5.38	1.47	2.38	2.63	1.28	E	3.500	609.3
QD5C16.0	16.0	16.4	A3	5.38	1.47	2.38	2.63	1.28	E	3.500	610.1
QD5C18.0	18.0	18.4	A3	5.38	1.47	2.38	2.63	1.28	E	3.500	610.9
QD5C20.0	20.0	20.4	A3	5.38	0.25	1.31	3.63	1.50	F	4.000	624.8
QD5C24.0	24.0	24.4	A3	5.38	0.25	1.31	3.63	1.50	F	4.000	625.6
QD5C27.0	27.0	27.4	A3	5.38	0.25	1.31	3.63	1.50	F	4.000	626.4
QD5C30.0	30.0	30.4	A3	5.38	0.25	1.31	3.63	1.50	F	4.000	627.2
QD5C36.0	36.0	36.4	A3	5.38	0.31	1.56	4.50	0.56	J	4.500	585.2
QD5C44.0	44.0	44.4	A3	5.38	0.31	1.56	4.50	0.56	J	4.500	586.0
QD5C50.0	50.0	50.4	A3	5.38	0.31	1.56	4.50	0.56	J	4.500	586.8

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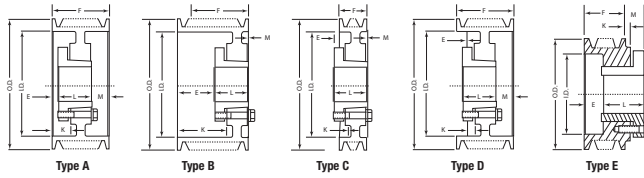
Design Type Suffix indicates rim construction:
 1 = Solid Style
 2 = Web Style
 3 = Arm Style

Table No. C2

Hi-Power® II QD® Sheaves

Part Number	Datum Dia. (in)	Outside Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
C - 6 Groove											
QD6C6.0	6.2	6.6	A1	6.38	1.25	1.94	2.00	3.13	SF	2.938	672.3
QD6C7.0	7.0	7.4	A1	6.38	1.25	1.94	2.00	3.13	SF	2.938	673.0
QD6C7.5	7.5	7.9	A1	6.38	1.25	1.94	2.00	3.13	SF	2.938	673.8
QD6C8.0	8.0	8.4	A1	6.38	1.47	2.38	2.63	2.28	E	3.500	647.4
QD6C8.5	8.5	8.9	A1	6.38	1.47	2.38	2.63	2.28	E	3.500	648.2
QD6C9.0	9.0	9.4	A1	6.38	1.38	2.44	3.63	1.38	F	4.000	621.0
QD6C9.5	9.5	9.9	A1	6.38	1.38	2.44	3.63	1.38	F	4.000	621.7
QD6C10.0	10.0	10.4	A1	6.38	1.38	2.44	3.63	1.38	F	4.000	614.7
QD6C10.5	10.5	10.9	A1	6.38	1.38	2.44	3.63	1.38	F	4.000	615.5
QD6C11.0	11.0	11.4	A1	6.38	1.38	2.44	3.63	1.38	F	4.000	616.3
QD6C12.0	12.0	12.4	A2	6.38	1.38	2.44	3.63	1.38	F	4.000	617.1
QD6C13.0	13.0	13.4	A2	6.38	1.38	2.44	3.63	1.38	F	4.000	617.8
QD6C14.0	14.0	14.4	A3	6.38	1.38	2.44	3.63	1.38	F	4.000	618.6
QD6C16.0	16.0	16.4	A3	6.38	1.38	2.44	3.63	1.38	F	4.000	619.4
QD6C18.0	18.0	18.4	A3	6.38	1.38	2.44	3.63	1.38	F	4.000	620.2
QD6C20.0	20.0	20.4	A3	6.38	0.88	1.94	3.63	1.88	F	4.000	640.4
QD6C24.0	24.0	24.4	A3	6.38	0.88	1.94	3.63	1.88	F	4.000	641.2
QD6C27.0	27.0	27.4	A3	6.38	0.31	1.56	4.50	1.56	J	4.500	635.7
QD6C30.0	30.0	30.4	A3	6.38	0.31	1.56	4.50	1.56	J	4.500	636.5
QD6C36.0	36.0	36.4	A3	6.38	0.31	1.56	4.50	1.56	J	4.500	637.3
QD6C44.0	44.0	44.4	A3	6.38	0.31	1.56	4.50	1.56	J	4.500	638.1
QD6C50.0	50.0	50.4	B3	6.38	0.47	1.94	6.75	0.84	M	5.500	537.8
C - 7 Groove											
QD7C7.0	7.0	7.4	A1	7.38	2.25	2.94	2.00	3.13	SF	2.938	674.6
QD7C8.0	8.0	8.4	A1	7.38	2.34	3.25	2.63	2.41	E	3.500	648.9
QD7C8.5	8.5	8.9	A1	7.38	2.34	3.25	2.63	2.41	E	3.500	649.7
QD7C9.0	9.0	9.4	A1	7.38	2.25	3.31	3.63	1.50	F	4.000	634.2
QD7C9.5	9.5	9.9	A1	7.38	2.25	3.31	3.63	1.50	F	4.000	634.9
QD7C10.0	10.0	10.4	A1	7.38	2.25	3.31	3.63	1.50	F	4.000	628.0
QD7C10.5	10.5	10.9	A1	7.38	2.25	3.31	3.63	1.50	F	4.000	628.7
QD7C11.0	11.0	11.4	A1	7.38	2.25	3.31	3.63	1.50	F	4.000	629.5
QD7C12.0	12.0	12.4	A2	7.38	2.25	3.31	3.63	1.50	F	4.000	630.3
QD7C13.0	13.0	13.4	A2	7.38	2.25	3.31	3.63	1.50	F	4.000	631.1
QD7C14.0	14.0	14.4	A2	7.38	2.25	3.31	3.63	1.50	F	4.000	631.8
QD7C16.0	16.0	16.4	A2	7.38	2.25	3.31	3.63	1.50	F	4.000	632.6
QD7C18.0	18.0	18.4	A3	7.38	2.25	3.31	3.63	1.50	F	4.000	633.4
QD7C20.0	20.0	20.4	A3	7.38	0.31	1.56	4.50	2.56	J	4.500	658.3
QD7C24.0	24.0	24.4	A3	7.38	0.31	1.56	4.50	2.56	J	4.500	659.0
QD7C27.0	27.0	27.4	A3	7.38	0.31	1.56	4.50	2.56	J	4.500	659.8
QD7C30.0	30.0	30.4	A3	7.38	0.31	1.56	4.50	2.56	J	4.500	660.6
QD7C36.0	36.0	36.4	A3	7.38	0.31	1.56	4.50	2.56	J	4.500	661.4
QD7C44.0	44.0	44.4	A3	7.38	0.47	1.94	6.75	0.16	M	5.500	567.3
QD7C50.0	50.0	50.4	A3	7.38	0.47	1.94	6.75	0.16	M	5.500	568.1
C - 8 Groove											
QD8C7.0	7.0	7.4	A1	8.38	2.44	3.13	2.00	3.94	SF	2.938	692.5
QD8C8.0	8.0	8.4	A1	8.38	2.34	3.25	2.63	3.41	E	3.500	679.3
QD8C8.5	8.5	8.9	A1	8.38	2.34	3.25	2.63	3.41	E	3.500	680.0
QD8C9.0	9.0	9.4	A1	8.38	2.25	3.31	3.63	2.50	F	4.000	655.9
QD8C9.5	9.5	9.9	A1	8.38	2.25	3.31	3.63	2.50	F	4.000	656.7
QD8C10.0	10.0	10.4	A1	8.38	2.25	3.31	3.63	2.50	F	4.000	650.5
QD8C10.5	10.5	10.9	A1	8.38	2.25	3.31	3.63	2.50	F	4.000	651.3
QD8C11.0	11.0	11.4	A1	8.38	2.25	3.31	3.63	2.50	F	4.000	652.0
QD8C12.0	12.0	12.4	A2	8.38	2.25	3.31	3.63	2.50	F	4.000	652.8
QD8C13.0	13.0	13.4	A2	8.38	2.25	3.31	3.63	2.50	F	4.000	653.6
QD8C14.0	14.0	14.4	A2	8.38	2.25	3.31	3.63	2.51	F	4.000	657.5
QD8C16.0	16.0	16.4	A2	8.38	2.25	3.31	3.63	2.50	F	4.000	654.4
QD8C18.0	18.0	18.4	A3	8.38	2.25	3.31	3.63	2.50	F	4.000	655.2
QD8C20.0	20.0	20.4	A3	8.38	0.31	1.56	4.50	3.56	J	4.500	680.8
QD8C24.0	24.0	24.4	A3	8.38	0.31	1.56	4.50	3.56	J	4.500	681.6
QD8C27.0	27.0	27.4	A3	8.38	0.31	1.56	4.50	3.56	J	4.500	682.4
QD8C30.0	30.0	30.4	A3	8.38	0.31	1.56	4.50	3.56	J	4.500	683.1
QD8C36.0	36.0	36.4	A3	8.38	0.47	1.94	6.75	1.16	M	5.500	603.1
QD8C44.0	44.0	44.4	A3	8.38	0.47	1.94	6.75	1.16	M	5.500	603.9
QD8C50.0	50.0	50.4	A3	8.38	0.47	1.94	6.75	1.16	M	5.500	604.6
C - 9 Groove											
QD9C8.0	8.0	8.4	A1	9.38	2.34	3.25	2.63	4.41	E	3.500	693.2
QD9C8.5	8.5	8.9	A1	9.38	2.34	3.25	2.63	4.41	E	3.500	694.0
QD9C9.0	9.0	9.4	A1	9.38	2.31	3.56	4.50	2.56	J	4.500	668.4
QD9C9.5	9.5	9.9	A1	9.38	2.31	3.56	4.50	2.56	J	4.500	669.1
QD9C10.0	10.0	10.4	A1	9.38	2.31	3.56	4.50	2.56	J	4.500	662.2
QD9C10.5	10.5	10.9	A1	9.38	2.31	3.56	4.50	2.56	J	4.500	662.9
QD9C11.0	11.0	11.4	A1	9.38	2.31	3.56	4.50	2.56	J	4.500	663.7
QD9C12.0	12.0	12.4	A1	9.38	2.31	3.56	4.50	2.56	J	4.500	664.5
QD9C13.0	13.0	13.4	A2	9.38	2.31	3.56	4.50	2.56	J	4.500	665.3
QD9C14.0	14.0	14.4	A2	9.38	2.31	3.56	4.50	2.56	J	4.500	666.0
QD9C16.0	16.0	16.4	A2	9.38	2.31	3.56	4.50	2.56	J	4.500	666.8
QD9C18.0	18.0	18.4	A3	9.38	2.31	3.56	4.50	2.56	J	4.500	667.6
QD9C20.0	20.0	20.4	A3	9.38	1.81	3.06	4.50	3.06	J	4.500	669.9
QD9C24.0	24.0	24.4	A3	9.38	1.81	3.06	4.50	3.06	J	4.500	670.7
QD9C27.0	27.0	27.4	A3	9.38	1.81	3.06	4.50	3.06	J	4.500	671.5
QD9C30.0	30.0	30.4	A3	9.38	0.47	1.94	6.75	2.16	M	5.500	644.3
QD9C36.0	36.0	36.4	A3	9.38	0.47	1.94	6.75	2.16	M	5.500	645.1
QD9C44.0	44.0	44.4	A3	9.38	0.47	1.94	6.75	2.16	M	5.500	645.8
QD9C50.0	50.0	50.4	A3	9.38	0.47	1.94	6.75	2.16	M	5.500	646.6

Heavy Duty V-Belt Drive Design Manual



Design Type Suffix indicates rim construction:
 1 = Solid Style
 2 = Web Style
 3 = Arm Style

Table No. C2

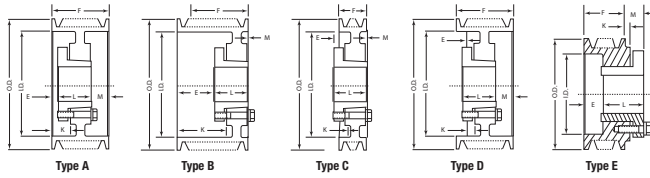
Hi-Power® II QD® Sheaves

Part Number	Datum Dia. (in)	Outside Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
C - 10 Groove											
QD10C8.0	8.0	8.4	A1	10.38	2.34	3.25	2.63	5.41	E	3.500	707.2
QD10C8.5	8.5	8.9	A1	10.38	2.34	3.25	2.63	5.41	E	3.500	708.0
QD10C9.0	9.0	9.4	A1	10.38	2.31	3.56	4.50	3.56	J	4.500	690.9
QD10C9.5	9.5	9.9	A1	10.38	2.31	3.56	4.50	3.56	J	4.500	691.7
QD10C10.0	10.0	10.4	A1	10.38	2.31	3.56	4.50	3.56	J	4.500	683.9
QD10C10.5	10.5	10.9	A1	10.38	2.31	3.56	4.50	3.56	J	4.500	684.7
QD10C11.0	11.0	11.4	A1	10.38	2.31	3.56	4.50	3.56	J	4.500	685.5
QD10C12.0	12.0	12.4	A1	10.38	2.31	3.56	4.50	3.56	J	4.500	686.2
QD10C13.0	13.0	13.4	A2	10.38	2.31	3.56	4.50	3.56	J	4.500	687.0
QD10C14.0	14.0	14.4	A2	10.38	2.31	3.56	4.50	3.56	J	4.500	687.8
QD10C16.0	16.0	16.4	A2	10.38	2.31	3.56	4.50	3.56	J	4.500	688.6
QD10C18.0	18.0	18.4	A3	10.38	2.31	3.56	4.50	3.56	J	4.500	689.4
QD10C20.0	20.0	20.4	A3	10.38	2.31	3.56	4.50	3.56	J	4.500	690.1
QD10C24.0	24.0	24.4	A3	10.38	0.47	1.94	6.75	3.16	M	5.500	675.4
QD10C30.0	30.0	30.4	A3	10.38	0.47	1.94	6.75	3.16	M	5.500	676.1
QD10C36.0	36.0	36.4	A3	10.38	0.47	1.94	6.75	3.16	M	5.500	676.9
QD10C44.0	44.0	44.4	A3	10.38	0.47	1.94	6.75	3.16	M	5.500	677.7
QD10C50.0	50.0	50.4	A3	10.38	0.47	1.94	6.75	3.16	M	5.500	678.5
C - 12 Groove											
QD1QD2C9.0	9.0	9.4	A1	12.38	2.81	4.06	4.50	5.06	J	4.500	701.0
QD1QD2C9.5	9.5	9.9	A1	12.38	2.81	4.06	4.50	5.06	J	4.500	701.8
QD1QD2C10.0	10.0	10.4	A1	12.38	2.81	4.06	4.50	5.06	J	4.500	694.8
QD1QD2C10.5	10.5	10.9	A1	12.38	2.81	4.06	4.50	5.06	J	4.500	695.6
QD1QD2C11.0	11.0	11.4	A1	12.38	2.81	4.06	4.50	5.06	J	4.500	696.4
QD1QD2C12.0	12.0	12.4	A1	12.38	2.81	4.06	4.50	5.06	J	4.500	697.1
QD1QD2C13.0	13.0	13.4	A1	12.38	2.81	4.06	4.50	5.06	J	4.500	697.9
QD1QD2C14.0	14.0	14.4	A1	12.38	2.81	4.06	4.50	5.06	J	4.500	698.7
QD1QD2C16.0	16.0	16.4	A2	12.38	2.81	4.06	4.50	5.06	J	4.500	699.5
QD1QD2C18.0	18.0	18.4	A3	12.38	2.81	4.06	4.50	5.06	J	4.500	700.2
QD1QD2C20.0	20.0	20.4	A3	12.38	0.47	1.94	6.75	5.16	M	5.500	702.6
QD1QD2C24.0	24.0	24.4	A3	12.38	0.47	1.94	6.75	5.16	M	5.500	703.3
QD1QD2C30.0	30.0	30.4	A3	12.38	0.47	1.94	6.75	5.16	M	5.500	704.1
QD1QD2C36.0	36.0	36.4	A3	12.38	0.47	1.94	6.75	5.16	M	5.500	704.9
QD1QD2C44.0	44.0	44.4	A3	12.38	0.47	1.94	6.75	5.16	M	5.500	705.7
QD1QD2C50.0	50.0	50.4	A3	12.38	0.47	1.94	6.75	5.16	M	5.500	706.5

Hi-Power® II QD® Sheaves

Part Number	Datum Dia. (in)	Outside Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
D - 3 Groove											
QDQD3D12.0	12.0	12.6	A2	4.63	0.44	1.50	3.63	0.56	F	4.000	721.2
QDQD3D13.0	13.0	13.6	A2	4.63	0.44	1.50	3.63	0.56	F	4.000	722.0
QDQD3D13.5	13.5	14.1	A2	4.63	0.44	1.50	3.63	0.56	F	4.000	722.8
QDQD3D14.0	14.0	14.6	A2	4.63	0.44	1.50	3.63	0.56	F	4.000	723.6
QDQD3D14.5	14.5	15.1	A2	4.63	0.44	1.50	3.63	0.56	F	4.000	724.3
QDQD3D15.0	15.0	15.6	A2	4.63	0.44	1.50	3.63	0.56	F	4.000	725.1
QDQD3D15.5	15.5	16.1	A2	4.63	0.44	1.50	3.63	0.56	F	4.000	725.9
QDQD3D16.0	16.0	16.6	A2	4.63	0.44	1.50	3.63	0.56	F	4.000	726.7
QDQD3D18.0	18.0	18.6	D3	4.63	0.06	1.19	4.50	0.19	J	4.500	710.3
QDQD3D22.0	22.0	22.6	D3	4.63	0.06	1.19	4.50	0.19	J	4.500	711.1
QDQD3D24.0	24.0	24.6	D3	4.63	0.06	1.19	4.50	0.19	J	4.500	711.9
QDQD3D27.0	27.0	27.6	D3	4.63	0.06	1.19	4.50	0.19	J	4.500	712.7
QDQD3D33.0	33.0	33.6	D3	4.63	0.06	1.19	4.50	0.19	J	4.500	713.4
QDQD3D40.0	40.0	40.6	D3	4.63	0.06	1.19	4.50	0.19	J	4.500	714.2
D - 4 Groove											
QD4D12.0	12.0	12.6	A2	6.06	1.25	2.31	3.63	1.19	F	4.000	729.0
QD4D13.0	13.0	13.6	A2	6.06	1.25	2.31	3.63	1.19	F	4.000	729.8
QD4D13.5	13.5	14.1	A2	6.06	1.25	2.31	3.63	1.19	F	4.000	730.5
QD4D14.0	14.0	14.6	A2	6.06	1.25	2.31	3.63	1.19	F	4.000	731.3
QD4D14.5	14.5	15.1	A2	6.06	1.25	2.31	3.63	1.19	F	4.000	732.1
QD4D15.0	15.0	15.6	A2	6.06	1.25	2.31	3.63	1.19	F	4.000	732.9
QD4D15.5	15.5	16.1	A2	6.06	1.25	2.31	3.63	1.19	F	4.000	733.7
QD4D16.0	16.0	16.6	A2	6.06	1.25	2.31	3.63	1.19	F	4.000	734.4
QD4D17.0	17.0	17.6	A2	6.06	1.31	2.56	4.50	0.25	J	4.500	715.0
QD4D18.0	18.0	18.6	A2	6.06	1.31	2.56	4.50	0.25	J	4.500	715.8
QD4D20.0	20.0	20.6	A3	6.06	0.31	1.56	4.50	1.25	J	4.500	735.2
QD4D22.0	22.0	22.6	A3	6.06	0.31	1.56	4.50	1.25	J	4.500	736.0
QD4D24.0	24.0	24.6	A3	6.06	0.31	1.56	4.50	1.25	J	4.500	736.8
QD4D27.0	27.0	27.6	A3	6.06	0.31	1.56	4.50	1.25	J	4.500	737.5
QD4D33.0	33.0	33.6	B3	6.06	0.47	1.94	6.75	1.16	M	5.500	708.8
QD4D40.0	40.0	40.6	B3	6.06	0.47	1.94	6.75	1.16	M	5.500	709.6

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Design Type Suffix indicates rim construction:
 1 = Solid Style
 2 = Web Style
 3 = Arm Style

Table No. C2

Hi-Power® II QD® Sheaves

Part Number	Datum Dia. (in)	Outside Dia. (in)	Design Type	Dimensions (in)					Bushing Size	Max. Bushing Bore (in)	Approx. Weight (lb)
				F	E	K	L	M			
D - 5 Groove											
QD5D12.0	12.0	12.6	A1	7.50	2.00	3.06	3.63	1.88	F	4.000	743.0
QD5D13.0	13.0	13.6	A2	7.50	2.00	3.06	3.63	1.88	F	4.000	743.8
QD5D13.5	13.5	14.1	A2	7.50	2.00	3.06	3.63	1.88	F	4.000	744.5
QD5D14.0	14.0	14.6	A2	7.50	2.00	3.06	3.63	1.88	F	4.000	745.3
QD5D14.5	14.5	15.1	A2	7.50	2.00	3.06	3.63	1.88	F	4.000	746.1
QD5D15.0	15.0	15.6	A2	7.50	2.00	3.06	3.63	1.88	F	4.000	746.9
QD5D15.5	15.5	16.1	A2	7.50	2.00	3.06	3.63	1.88	F	4.000	747.6
QD5D16.0	16.0	16.6	A2	7.50	2.00	3.06	3.63	1.88	F	4.000	748.4
QD5D17.0	17.0	17.6	A2	7.50	2.06	3.31	4.50	0.94	J	4.500	727.4
QD5D18.0	18.0	18.6	A2	7.50	2.06	3.31	4.50	0.94	J	4.500	728.2
QD5D20.0	20.0	20.6	A3	7.50	0.31	1.56	4.50	2.69	J	4.500	759.3
QD5D22.0	22.0	22.6	A3	7.50	0.31	1.56	4.50	2.69	J	4.500	760.1
QD5D24.0	24.0	24.6	A3	7.50	0.31	1.56	4.50	2.69	J	4.500	760.9
QD5D27.0	27.0	27.6	A3	7.50	0.47	1.94	6.75	0.28	M	5.500	717.3
QD5D33.0	33.0	33.6	A3	7.50	0.47	1.94	6.75	0.28	M	5.500	718.1
QD5D40.0	40.0	40.6	A3	7.50	0.47	1.94	6.75	0.28	M	5.500	718.9
QD5D48.0	48.0	48.6	A3	7.50	0.47	1.94	6.75	0.28	M	5.500	719.7
QD5D58.0	58.0	58.6	A3	7.50	0.47	1.94	6.75	0.28	M	5.500	720.4
D - 6 Groove											
QD6D12.0	12.0	12.6	A1	8.94	2.06	3.31	4.50	2.38	J	4.500	749.2
QD6D13.0	13.0	13.6	A2	8.94	2.06	3.31	4.50	2.38	J	4.500	750.0
QD6D13.5	13.5	14.1	A2	8.94	2.06	3.31	4.50	2.38	J	4.500	750.8
QD6D14.0	14.0	14.6	A2	8.94	2.06	3.31	4.50	2.38	J	4.500	751.5
QD6D14.5	14.5	15.1	A2	8.94	2.06	3.31	4.50	2.38	J	4.500	752.3
QD6D15.0	15.0	15.6	A2	8.94	2.06	3.31	4.50	2.38	J	4.500	753.1
QD6D15.5	15.5	16.1	A2	8.94	2.06	3.31	4.50	2.38	J	4.500	753.9
QD6D16.0	16.0	16.6	A2	8.94	2.06	3.31	4.50	2.38	J	4.500	754.6
QD6D17.0	17.0	17.6	A2	8.94	2.06	3.31	4.50	2.38	J	4.500	755.4
QD6D18.0	18.0	18.6	A2	8.94	2.06	3.31	4.50	2.38	J	4.500	756.2
QD6D20.0	20.0	20.6	A3	8.94	2.06	3.31	4.50	2.38	J	4.500	757.0
QD6D22.0	22.0	22.6	A3	8.94	0.47	1.94	6.75	1.72	M	5.500	738.3
QD6D24.0	24.0	24.6	A3	8.94	0.47	1.94	6.75	1.72	M	5.500	739.1
QD6D27.0	27.0	27.6	A3	8.94	0.47	1.94	6.75	1.72	M	5.500	739.9
QD6D33.0	33.0	33.6	A3	8.94	0.47	1.94	6.75	1.72	M	5.500	740.7
QD6D40.0	40.0	40.6	A3	8.94	0.47	1.94	6.75	1.72	M	5.500	741.4
QD6D48.0	48.0	48.6	A3	8.94	0.47	1.94	6.75	1.72	M	5.500	742.2
QD6D58.0	58.0	58.6	A3	8.94	0.56	2.25	8.13	0.25	N	5.938	716.6
D - 8 Groove											
QD8D12.0	12.0	12.6	A1	11.81	2.31	3.56	4.50	5.00	J	4.500	767.9
QD8D13.0	13.0	13.6	A1	11.81	2.31	3.56	4.50	5.00	J	4.500	768.6
QD8D13.5	13.5	14.1	A1	11.81	2.31	3.56	4.50	5.00	J	4.500	769.4
QD8D14.0	14.0	14.6	A2	11.81	2.31	3.56	4.50	5.00	J	4.500	770.2
QD8D14.5	14.5	15.1	A2	11.81	2.31	3.56	4.50	5.00	J	4.500	771.0
QD8D15.0	15.0	15.6	A2	11.81	2.31	3.56	4.50	5.00	J	4.500	771.7
QD8D15.5	15.5	16.1	A2	11.81	2.31	3.56	4.50	5.00	J	4.500	772.5
QD8D16.0	16.0	16.6	A2	11.81	2.31	3.56	4.50	5.00	J	4.500	773.3
QD8D17.0	17.0	17.6	A2	11.81	2.31	3.56	4.50	5.00	J	4.500	774.1
QD8D18.0	18.0	18.6	A2	11.81	2.47	3.94	6.75	2.59	M	5.500	757.8
QD8D20.0	20.0	20.6	A2	11.81	2.47	3.94	6.75	2.59	M	5.500	758.5
QD8D22.0	22.0	22.6	A3	11.81	0.47	1.94	6.75	4.59	M	5.500	765.5
QD8D27.0	27.0	27.6	A3	11.81	0.47	1.94	6.75	4.59	M	5.500	766.3
QD8D33.0	33.0	33.6	A3	11.81	0.47	1.94	6.75	4.59	M	5.500	767.1
QD8D40.0	40.0	40.6	A3	11.81	0.56	2.25	8.13	3.13	N	5.938	761.6
QD8D48.0	48.0	48.6	A3	11.81	0.56	2.25	8.13	3.13	N	5.938	762.4
QD8D58.0	58.0	58.6	A3	11.81	0.56	2.25	8.13	3.13	N	5.938	763.2
D - 10 Groove											
QD10D12.0	12.0	12.6	A1	14.69	2.47	3.94	6.75	5.47	M	5.500	776.4
QD10D13.0	13.0	13.6	A1	14.69	2.47	3.94	6.75	5.47	M	5.500	777.2
QD10D13.5	13.5	14.1	A1	14.69	2.47	3.94	6.75	5.47	M	5.500	778.0
QD10D14.0	14.0	14.6	A1	14.69	2.47	3.94	6.75	5.47	M	5.500	778.7
QD10D14.5	14.5	15.1	A1	14.69	2.47	3.94	6.75	5.47	M	5.500	779.5
QD10D15.0	15.0	15.6	A1	14.69	2.47	3.94	6.75	5.47	M	5.500	780.3
QD10D15.5	15.5	16.1	A1	14.69	2.47	3.94	6.75	5.47	M	5.500	781.1
QD10D16.0	16.0	16.6	A2	14.69	2.47	3.94	6.75	5.47	M	5.500	781.8
QD10D17.0	17.0	17.6	A2	14.69	2.47	3.94	6.75	5.47	M	5.500	782.6
QD10D18.0	18.0	18.6	A2	14.81	2.47	3.94	6.75	5.59	M	5.500	784.2
QD10D20.0	20.0	20.6	A2	14.69	2.47	3.94	6.75	5.47	M	5.500	783.4
QD10D22.0	22.0	22.6	A3	14.69	1.47	2.94	6.75	6.47	M	5.500	785.0
QD10D27.0	27.0	27.6	A3	14.69	1.47	2.94	6.75	6.47	M	5.500	785.7
QD10D33.0	33.0	33.6	A3	14.69	1.56	3.25	8.13	5.00	N	5.938	774.9
QD10D40.0	40.0	40.6	A3	14.69	1.56	3.25	8.13	5.00	N	5.938	775.6
QD10D48.0	48.0	48.6	A3	14.69	0.75	2.63	9.38	4.56	P	7.000	764.0
QD10D58.0	58.0	58.6	A3	14.69	0.75	2.63	9.38	4.56	P	7.000	764.7
D - 12 Groove											
QD12D12.0	12.0	12.6	A1	17.56	3.47	4.94	6.75	7.34	M	5.500	788.1
QD12D13.0	13.0	13.6	A1	17.56	3.47	4.94	6.75	7.34	M	5.500	788.8
QD12D13.5	13.5	14.1	A1	17.56	3.47	4.94	6.75	7.34	M	5.500	789.6
QD12D14.0	14.0	14.6	A1	17.56	3.47	4.94	6.75	7.34	M	5.500	790.4
QD12D14.5	14.5	15.1	A1	17.56	3.47	4.94	6.75	7.34	M	5.500	791.2
QD12D15.0	15.0	15.6	A1	17.56	3.47	4.94	6.75	7.34	M	5.500	792.0
QD12D15.5	15.5	16.1	A1	17.56	3.47	4.94	6.75	7.34	M	5.500	792.7
QD12D16.0	16.0	16.6	A2	17.56	3.47	4.94	6.75	7.34	M	5.500	793.5
QD12D17.0	17.0	17.6	A2	17.56	3.47	4.94	6.75	7.34	M	5.500	794.3
QD12D18.0	18.0	18.6	A2	17.56	3.47	4.94	6.75	7.34	M	5.500	795.1
QD12D20.0	20.0	20.6	A2	17.56	3.47	4.94	6.75	7.34	M	5.500	795.8
QD12D22.0	22.0	22.6	A3	17.56	2.47	3.94	6.75	8.34	M	5.500	798.9
QD12D27.0	27.0	27.6	A3	17.56	2.56	4.25	8.13	6.88	N	5.938	786.5
QD12D33.0	33.0	33.6	A3	17.56	2.56	4.25	8.13	6.88	N	5.938	787.3
QD12D40.0	40.0	40.6	A3	17.56	0.75	2.63	9.38	7.44	P	7.000	796.6
QD12D48.0	48.0	48.6	A3	17.56	0.75	2.63	9.38	7.44	P	7.000	797.4
QD12D58.0	58.0	58.6	A3	17.56	0.75	2.63	9.38	7.44	P	7.000	798.2

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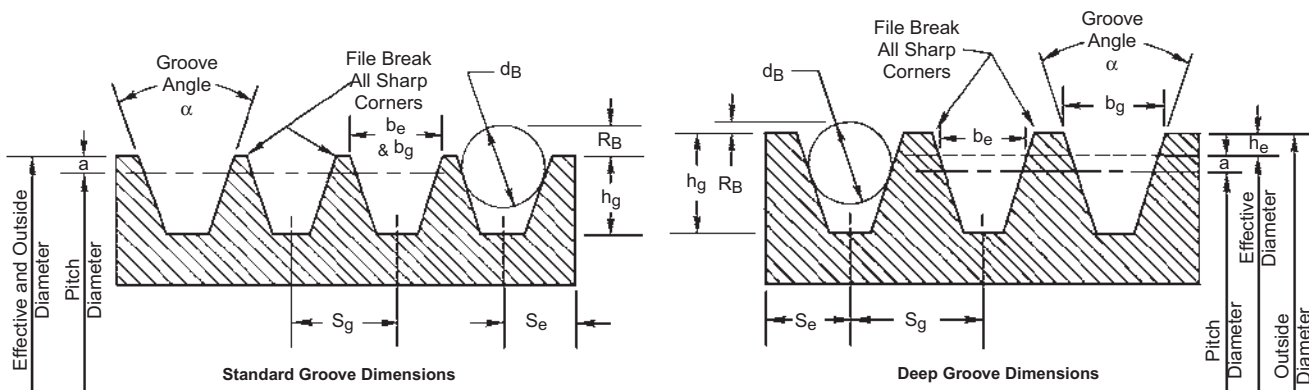


Table No. C3

Gates Super HC™ Sheave Groove Dimensions

Cross Section	Outside Diameter (in)	Groove Angle $\pm 0.25^\circ$	Standard Groove Dimensions (in)							Design Factors		Machined Surface Area	Maximum Surface Roughness Height, R_a (Arithmetic Avg.) (Microin.)	
			b_g ± 0.005	b_e Ref	h_g Min.	R_B Min.	d_B ± 0.0005	S_g ± 0.015	S_e	Minimum Recommended Outside Diameter	2a			
3V, 3VX	Up through 3.49	36				0.181							V-Pulley Groove Sidewalls	125
	Over 3.49 to and including 6.00	38				0.183							Rim Edges, Rim I.D.'s Hub Ends, Hub O.D.'s	250
	Over 6.00 to and including 12.00	40	0.350	0.350	0.340	0.186	0.3438	0.406	0.344 +0.094 -0.031	3V 2.65 3VX 2.20	0.050		Straight Bores	125
	Over 12.00	42				0.188							Taper Bores	175
5V, 5VX	Up through 9.99	38				0.329								
	Over 9.99 to and including 16.00	40	0.600	0.600	0.590	0.332	0.5938	0.688	0.500 +0.125 -0.047	5V 7.10 5VX 4.40	0.100			
	Over 16.00	42				0.336								
8V	Up through 15.99	38				0.575								
	Over 15.99 to and including 22.40	40	1.000	1.000	0.990	0.580	1.0000	1.125	0.750 +0.250 -0.062	12.50	0.200			
	Over 22.40	42				0.585								

Cross Section	Outside Diameter (in)	Groove Angle $\pm 0.25^\circ$	Deep Groove Dimensions (in)							Design Factors			Face Width of Standard and Deep Groove Sheaves	Face Width = $S_g(Ng - 1) + 2S_e$ Where: Ng = Number of Grooves
			b_g ± 0.005	b_e Ref	h_g Min.	R_B Min.	d_B ± 0.0005	S_g ± 0.015	S_e	Minimum Recommended Outside Diameter	2a	2he		
3V, 3VX	Up through 3.71	36	0.421			0.070								
	Over 3.71 to and including 6.22	38	0.425			0.073								
	Over 6.22 to and including 12.22	40	0.429	0.350	0.449	0.076	0.3438	0.500	0.375 +0.094 -0.031	3V 2.87 3VX 2.42	0.050	0.218		
	Over 12.22	42	0.434			0.078								
5V, 5VX	Up through 10.31	38	0.710			0.168								
	Over 10.31 to and including 16.32	40	0.716	0.600	0.750	0.172	0.5938	0.812	0.562 +0.125 -0.047	5V 7.42 5VX 4.72	0.100	0.320		
	Over 16.32	42	0.723			0.175								
8V	Up through 16.51	38	1.180			0.312								
	Over 16.51 to and including 22.92	40	1.191	1.000	1.252	0.316	1.0000	1.312	0.844 +0.250 -0.062	13.02	0.200	0.524		
	Over 22.92	42	1.201			0.321								

Summation of the deviations from "Sg" for all grooves in any one sheave shall not exceed ± 0.031 ". The variation in pitch diameter between the grooves in any one sheave must be within the following limits:

Up through 19.9" outside diameter and up through 6 grooves: -0.010" (Add 0.0005" for each additional groove).

20.0" and over on outside diameter and up through 10 grooves: -0.015" (Add 0.0005" for each additional groove).

This variation can easily be obtained by measuring the distance across two measuring balls or rods placed in the grooves diametrically opposite each other. Comparing this "diameter over balls or rods" measurement between grooves will give the variation in pitch diameter.

Deep groove sheaves are intended for drives with belt offset such as quarter-turn or vertical shaft drives. (See RMA Power Transmission Belt Technical Information Bulletin IP-3-10, V-Belts Drives with a twist.) They may also be necessary where oscillations in the center distance may occur. **Joined belts will not operate in deep groove sheaves.**

OTHER SHEAVE TOLERANCES

OUTSIDE DIAMETER

Up through 8.0"
Outside Diameter ± 0.020 "
For each additional inch of
Outside Diameter add ± 0.0025 "

RADIAL RUNOUT (Total Indicator Reading)

Up through 10.0"
Outside Diameter 0.010"
For each additional inch of
Outside Diameter add 0.0005"

AXIAL RUNOUT (Total Indicator Reading)

Up through 5.0"
Outside Diameter 0.005"
For each additional inch of
Outside Diameter add 0.001"

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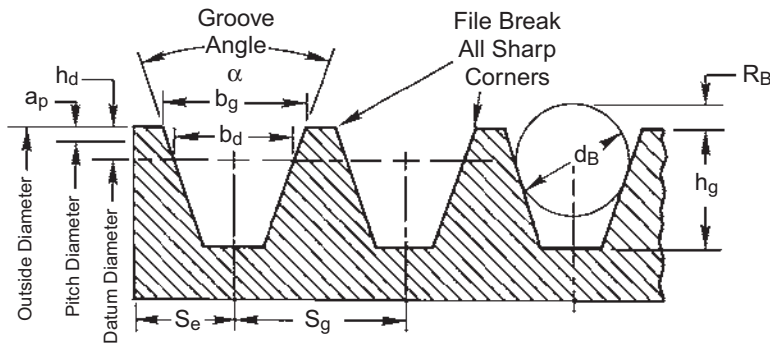


Table No. C4

Gates Hi-Power™ II Sheave Groove Dimensions

Standard Groove Dimensions (in)												Design Factors	
Cross Section	Datum Diameter Range	α Groove Angle $\pm 0.33^\circ$	b_d Ref.	b_g	h_g Min.	$2h_d$ Ref.	R_B Min.	d_B ± 0.0005	S_g ± 0.025	S_e		Minimum Recommended Datum Diameter	$2a_p$
A, AX	Up through 5.4 Over 5.4	34 38	0.418	0.494 0.504 ± 0.005	0.460	0.250	0.148 0.149	0.4375 (7/16)	0.625	0.375	+0.090 -0.062	A 3.0 AX 2.2	0
B, BX	Up through 7.0 Over 7.0	34 38	0.530	0.637 0.650 ± 0.006	0.550	0.350	0.189 0.190	0.5625 (9/16)	0.750	0.500	+0.120 -0.065	B 5.4 BX 4.0	0
A-B Combination	A, AX Belt	Up through 7.4 (1) Over 7.4	34 38	0.612 0.625 ± 0.006	0.612	0.634 (3) 0.602	0.230	0.5625 (9/16)	0.750	0.500	+0.120	A 3.6(1)	0.39
	B, BX Belt	Up through 7.4 (1) Over 7.4	34 38	0.612 0.625 ± 0.006		0.268 (3) 0.276	0.230				-0.065	B 5.7(1)	-0.08
C, CX	Up through 7.99 Over 7.99 to and including 12.0 Over 12.0	34 36 38	0.757	0.879 0.887 ± 0.007 0.895	0.750	0.400	0.274 0.276 0.277	0.7812 (25/32)	1.000	0.688	+0.160 -0.070	C 9.0 CX 6.8	0
D	Up through 12.99 Over 12.99 to and including 17.0 Over 17.0	34 36 38	1.076	1.259 1.271 ± 0.008 1.283	1.020	0.600	0.410 0.410 0.411	1.1250 (1 1/8)	1.438	0.875	+0.220 -0.080	13.0	0

Machined Surface Area	Maximum Surface Roughness Height, R_a (Arithmetic Avg.) (Micron.)
Sheave Groove Sidewalls	125
Sheave O.D.'s and Rim Edges	250
Rim I.D.'s Hub Ends, Hub O.D.'s	250
Straight Bores	125
Taper Bores	175
Cast Surface Area	As Cast

Face Width of Standard and Deep Groove Sheaves
 Face Width = $S_g (N_g - 1) + 2S_e$
 Where: N_g = Number of Grooves

1) Diameters shown for combination grooves are outside diameters. A specific datum diameter does not exist for either A or B belts in combination grooves.
 2) The b_d value shown for combination grooves is the "constant width" point but does not represent a datum width for either A or B belts ($2h_d = 0.340$ reference).
 3) $2h_d$ values for combination groove are calculated based on b_d for A and B grooves.

Deep Groove Dimensions (in)												Design Factors	
Cross Section	Datum ⁽⁴⁾ Diameter Range	α Groove Angle $\pm 0.33^\circ$	b_d Ref.	b_g	h_g Min.	$2h_d$ Ref.	R_B Min.	d_B ± 0.0005	S_g ± 0.025	S_e		Minimum Recommended Datum Diameter	$2a_p$
B, BX	Up through 7.0 Over 7.0	34 38	0.530	0.747 0.774 ± 0.006	0.730	0.710	0.007 0.008	0.5625 (9/16)	0.875	0.562	+0.120 -0.065	B 5.4 BX 4.0	0.36
C, CX	Up through 7.99 Over 7.99 to and including 12.0 Over 12.0	34	0.757	1.066	1.055	1.010	-0.035	0.7812 (25/32)	1.250	0.812	+0.160	C 9.0	0.61
		36		1.085 ± 0.007			-0.032						
D	Up through 12.99 Over 12.99 to and including 17.0 Over 17.0	34	0.076	1.513	1.435	1.430	-0.010	1.1250 (1 1/8)	1.750	1.062	+0.220	13.0	0.83
		36		1.541 ± 0.008			-0.009						
		38		1.569			0.008				-0.080		

4) The A/AX, B/BX combination groove should be used when deep grooves are required for A or AX belts.

Summation of the deviations from "Sg" for all grooves in any one sheave shall not exceed ± 0.050 ".

The variation in datum diameter between the grooves in any one sheave must be within the following limits:

Up through 19.9" outside diameter and up through 6 grooves: 0.010" (add 0.0005" for each additional groove).

20.0" and over on outside diameter and up through 10 grooves: 0.015" (add 0.0005" for each additional groove).

OTHER SHEAVE TOLERANCES

OUTSIDE DIAMETER

Up through 8.0"
 Outside Diameter ± 0.020 "
 For each additional inch of
 Outside Diameter add ± 0.005 "

RADIAL RUNOUT (Total indicator Reading)

Up through 10.0"
 Outside Diameter 0.010"
 For each additional inch of
 Outside Diameter add 0.0005"

AXIAL RUNOUT (Total indicator Reading)

Up through 5.0"
 Outside Diameter 0.005"
 For each additional inch of
 Outside Diameter add 0.001"

This variation can be obtained easily by measuring the distance across two measuring balls or rods placed diametrically opposite each other in a groove. Comparing this "diameter over balls or rods" measurement between grooves will give the variation in datum diameter.

Deep groove sheaves are intended for drives with belt offset such as quarter-turn or vertical shaft drives. (See RMA Power Transmission Belt Technical Information Bulletin IP-3-10, V-Belts Drives with Twist.)

Joined belts will not operate in deep groove sheaves. Also, A and AX joined belts will not operate in A/AX and B/BX combination grooves.

Heavy Duty V-Belt Drive Design Manual

Shaft and Hub Keyway and Key Sizes

Keys connecting shafts to sheave hubs are commonly used to achieve reliable no-slip power transmission in belt drive systems.

Key, Keyseat and Keyway Definitions

Key: A demountable machinery part, which when assembled into keyseats, provides a positive means for transmitting torque between a shaft and a hub or bushing.

Keyseat: An axially located rectangular groove in a shaft, hub, or bushing. This may also be referred to as a shaft keyseat or hub keyseat or bushing keyseat when describing an exact application. The hub or bushing keyseat can be referred to as a keyway.

Keyway: The hub or bushing keyseat.

Keys and Keyways: The Basics

In order to lock a hub or bushing and shaft together, and prevent the shaft from rotating in the bore, a key is commonly inserted into a keyway that is machined in both the bore and shaft. The key is responsible for preventing rotation between the shaft and the bore, and carries a portion of the torque load. Improperly fitted keys and keyways (either too tight or too loose) can result in mechanical failures. Therefore, to ensure appropriate fit, the width and height dimensions of standard key and keyways must be held to recommended tolerances. Industry standards for key sizes in various bores exist for both English and Metric systems. A common standard available from the Mechanical Power Transmission Association is MPTA-B1-2003. Another useful industry standard is ANSI Standard B17.1 for Keys and Keyseats.

Shallow Keys

Shallow keys are sometimes used when the shaft diameter approaches the maximum bushing or hub bore range. In order to accommodate the large shaft, the bore keyway depth is reduced. The power transmission capability of this arrangement is not reduced, but may not be as robust as a standard key and keyseat. Dimensional standards for "shallow key" sizes do not exist, so manufacturers generally furnish these special keys with their pulley or bushings.

Sheaves With Bushings

In order to achieve better concentricity as well as versatility in fitting numerous standard shaft sizes, tapered bushings are commonly used in sheaves. The most common bushing types used in industrial power transmission applications are QD® (Quick Disconnect – flanged type) and TL (Taper-Lock® – flangeless type). Each system has its own merits and benefits.

In most QD type bushings, a setscrew in the flange tightens against the key to prevent key loss in applications subject to vibrating or pulsating loads, and in vertical shaft applications. Some bushing types are manufactured with an integral key that is formed as part of the bore. This also prevents potential key loss. Both types of bushing are popular in vertical shaft installations. Gates standard V-belt sheaves are used with QD bushings.

Keyless Bushings

Besides keyed bushings, several types of keyless locking devices using a tapered wedge principle are available. These keyless bushings convert clamping action between inner and outer tapered rings into radial pressure that locks the device to the shaft and pulley. Keyless bushings exert significantly greater radial hub loads compared to conventional tapered and keyed bushings. This requires that hubs be sufficiently sized to handle the increased hoop stress loads. Keyless bushings transmit high torque loads while maintaining excellent concentricity (minimal radial run out and belt tension excursion). However, they are available in a limited number of bore sizes and tend to cost more than conventional tapered and keyed bushings.

Standard Key and Keyway Sizing

Figure C1 describes the dimensions used when specifying English or Metric keys and keyways.

English Dimensions:	Metric Dimensions:
Keyway: $W \times T_1$	Keyway: $W \times h$
Key: $W \times T$	Key: $W \times T$

QD® is a trademark of Emerson Electric.

Taper-Lock® is a trademark of Reliance Electric.

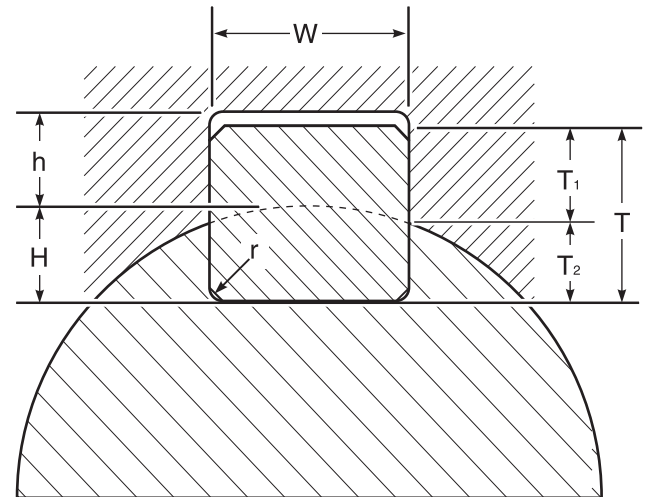


Figure No. C1 - Keyway and Key Size Dimension Reference

Specifying English Keyways

In the English system, it is standard practice to dimension keyways. The hub keyway is dimensioned by its width and depth on the shaft – keyway sides. Referencing Figure C1, the keyway dimension is $W \times T_1$.

Unless otherwise specified, the shaft keyway is assumed to be standard. A list of standard keyway and corresponding key sizes for English shafts are listed below in Table C5. The common specification dimension, Keyway Size, is highlighted.

Table No. C5

English Standard Keyway and Key Sizes					
Shaft Diameter (in)		Keyway (in)*		Key (in)	
From	To	Width (W)	Depth (T ₁)	Width (W)	Depth (T)
5/16	7/16	3/32	3/64	3/32	3/32
1/2	9/16	1/8	1/16	1/8	1/8
5/8	7/8	3/16	3/32	3/16	3/16
15/16	1 1/4	1/4	1/8	1/4	1/4
1 5/16	1 3/8	5/16	5/32	5/16	5/16
1 7/16	1 3/4	3/8	3/16	3/8	3/8
1 13/16	2 1/4	1/2	1/4	1/2	1/2
2 5/16	2 3/4	5/8	5/16	5/8	5/8
2 13/16	3 1/4	3/4	3/8	3/4	3/4
3 5/16	3 3/4	7/8	7/16	7/8	7/8
3 13/16	4 1/2	1	1/2	1	1
4 9/16	5 1/2	1 1/4	5/8	1 1/4	1 1/4
5 9/16	6 1/2	1 1/2	3/4	1 1/2	1 1/2
6 9/16	7 1/2	1 3/4	3/4	1 3/4	1 1/2
7 9/16	9	2	3/4	2	1 1/2

* Common dimension specification

Specifying Metric Keyways

Heavy Duty V-Belt Drive Design Manual

Shaft and Hub Keyway and Key Sizes

Dimensioning and specifying Metric keys and keyways varies significantly from the English system. In the Metric system it is common practice to specify the key size. Referencing Figure C1, the Metric key size is W x T. The keyway dimensions are also different from the English system. Metric Keyways are dimensioned by width and depth as measured from the radius of the shaft to the center of the keyway. See dimensions W and h in Figure C1.

Unless otherwise specified, the shaft keyway is assumed to be standard. Also, T₁ and T₂ are not necessarily equal. The Metric system does not refer to keyseat or keyway dimensions as does the English system. Instead, key dimensions are specified. Note that metric keys are rectangular in shape, and not square as in the English system. A list of the standard key sizes and corresponding keyways for Metric shafts are listed below in Table C6. The common specification dimension, Key Size, is highlighted.

Table No. C6

Metric Standard Parallel Keyway and Key Sizes					
Shaft Diameter (in)		Keyway (in)*		Key (in)	
From	To	Width (W)	Depth (T ₁)	Width (W)	Depth (T)
6	8	2	1.0	2	2
9	10	3	1.4	3	3
11	12	4	1.8	4	4
13	17	5	2.3	5	5
18	22	6	2.8	6	6
23	30	8	3.3	8	7
31	38	10	3.3	10	8
39	44	12	3.3	12	8
45	50	14	3.8	14	9
51	58	16	4.3	16	10
59	65	18	4.4	18	11
66	75	20	4.9	20	12
76	86	22	5.4	22	14
86	96	25	5.4	25	14
96	110	28	6.4	28	16
111	130	32	7.4	32	18
131	150	36	8.4	36	20
151	170	40	9.4	40	22
171	200	45	10.4	45	25
201	230	50	11.4	50	28
231	260	56	12.4	56	32
261	290	63	12.4	63	32
291	330	70	14.4	70	36
331	380	80	15.4	80	40
381	440	90	17.4	90	45
441	500	100	19.5	100	50

* Common dimension specification

Table No. C7

QD® English Bushing Keyseat Dimensions		
Bushing	Bores	Keyseat
JA	1/2 - 1 1 1/16 - 1 3/16	Standard 1/4 x 1/16
SH	1/2 - 1 3/8 1 7/16 - 1 5/8	Standard 3/8 x 1/16
SDS	1/2 - 1 5/8 1 11/16 - 1 3/4 1 13/16 - 1 15/16	Standard 3/8 x 1/8 1/2 x 1/16
SD	1/2 - 1 11/16 1 3/4 1 13/16 - 1 15/16	Standard 3/8 x 1/8 1/2 x 1/16
SK	1/2 - 2 1/8 2 3/16 - 2 1/4 2 5/8 2 15/16 - 2 1/2	Standard 1/2 x 3/16 None 5/8 x 1/16
SF	1/2 - 2 5/16 2 3/8 - 2 1/2 2 5/8 - 2 3/4 2 13/16 2 7/8 - 2 15/16	Standard 5/8 x 3/16 5/8 x 1/16 3/4 x 1/8 3/4 - 1/32
E	7/8 - 2 7/8 2 15/16 - 3 1/4 3 5/16 3 3/8 - 3 1/2	Standard 3/4 x 1/8 7/8 x 1/8 7/8 x 1/16
F	1 - 3 1/4 3 3/8 - 3 3/4 3 7/8 - 3 15/16 4	Standard 7/8 x 3/16 1 1/8 None
J	1 1/2 - 3 3/4 3 7/8 - 4 1/2	Standard 1 x 1/8
M	2 - 4 3/4 4 7/8 - 5 1/2	Standard 1 1/4 x 1/4
N	2 7/16 - 5 5 1/8 - 5 1/2 5 3/4 - 6	Standard 1 1/4 x 1/4 1 1/2 x 1/8
P	3 7/16 - 5 15/16 6 - 6 1/2 7	Standard 1 1/2 x 1/4 1 3/4 x 1/8
W	4 - 8 1/2	Made to Order
S	5 1/2 - 10	Made to Order

All dimensions are given in inches.

All QD Metric bushings have standard keyways.

Heavy Duty V-Belt Drive Design Manual

Stock Bushings for Sheaves

QD Bushings - Dimensions

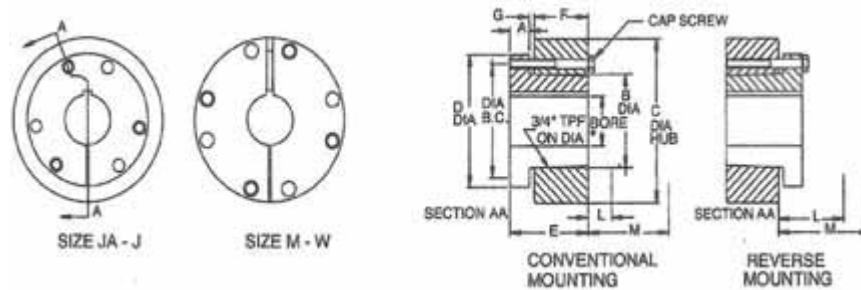
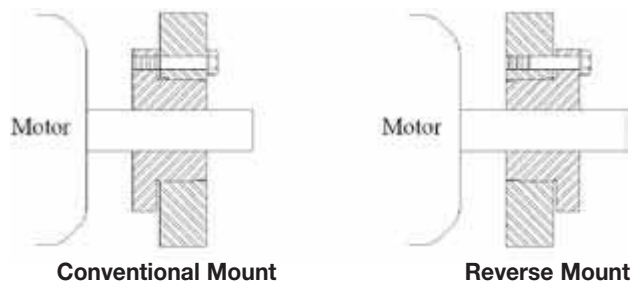


Table No. C8

QD Bushing Ratings and Dimensions													
Bush. Symb.	Ratings (Lb-in)	Bore Range (in)				Dimensions (in)							
	Bush. Torque Cap.*	Min.	Max. Bore for:			A	B Dia.	C Hub Dia.		D Dia.	E	F	G
			Full KW	Shallow KW	No KW			Cl 30 Iron	Steel				
QT	1000	3/8	1-1/4	1-1/2	1-9/16	0.25	1.625	3.00	2.375	2.50	1.25	0.94	0.12
JA	1000	1/2	1	1-3/16	1-1/4	0.31	1.38	3.93	2.25	2.00	1.00	0.56	0.12
SH	3500	1/2	1-3/8	1-5/8	1-11/16	0.43	1.88	4.75	3.00	2.63	1.31	0.81	0.12
SDS	5000	1/2	1-5/8	1-15/16	2	0.43	2.18	4.75	3.50	3.18	1.31	0.75	0.12
SD	5000	1/2	1-5/8	1-15/16	2	0.43	2.18	3.81	3.50	3.18	1.81	1.25	0.12
SK	7000	1/2	2-1/8	2-1/2	2-5/8	0.56	2.81	4.75	4.50	3.88	1.93	1.25	0.22
SF	11000	1/2	2-5/16	2-15/16	—	0.63	3.13	6.38	5.50	4.63	2.06	1.25	0.22
E	20000	7/8	2-7/8	3-1/2	—	0.88	3.83	7.50	6.50	6.00	2.75	1.63	0.25
F	30000	1	3-1/4	3-15/16	—	1.00	4.43	7.75	7.25	6.63	3.75	2.50	0.34
J	45000	1-1/2	3-3/4	4-1/2	—	1.13	5.14	9.00	8.00	7.25	4.63	3.18	0.38
M	85000	2	4-3/4	5-1/2	—	1.25	6.50	11.38	10.00	9.00	6.75	5.18	0.41
N	150000	2-7/16	5	6	—	1.50	7.00	12.00	—	10.00	8.12	6.25	0.56
P	250000	2-15/16	5-15/16	7	—	1.75	8.25	14.00	—	11.75	9.38	7.25	0.63
W	375000	4	7-1/2	8-1/2	—	2.00	10.42	17.00	—	15.00	11.38	9.00	0.50
S	625000	5-1/2	9	10	—	2.75	12.13	19.00	—	17.75	15.25	12.00	0.75

* Torque ratings apply when bushing installation screws are tightened to listed torque. Important: Do not over-torque screws. This can lead to hub damage.

QD®* Type Sheave Installation and Removal



To Install QD Type Bushings

1. Clean the shaft, bushing bore, outside of bushing and the sprocket bore of all oil, paint and dirt. File away any burrs.
Note: Do not lubricate the bushing taper, hub taper, bushing bore or the shaft. The use of lubricants can cause sprocket breakage.

DO NOT USE ANY LUBRICANTS IN INSTALLATION.

2. For a *conventional mount*, assemble the sprocket-bushing combination by sliding the sprocket taper bore into position over the mating tapered bushing surface. Align the unthreaded holes in the sprocket hub with the threaded holes in the flange of the bushing. Hand-tighten the cap screws with lock washers installed. The sprocket-bushing assembly will mount onto the shaft, with the bushing flange facing inward.

Due to sprocket design or clearance on a particular drive, some sprocket assemblies will allow a reverse mount procedure by reversing the entire sprocket-bushing combination. This results in the bushing flange facing outward, but still allows the cap screw installation from the outside of the assembly. The cap screws fit through the unthreaded holes of the bushing flange and into the threaded holes of the sprocket hub.

When mounting sprockets on M through W bushing sizes, position the threaded jackscrew hole as far from the bushing saw slot as possible to reduce the possibility of bush-

ing breakage during disassembly.

3. With the key in the shaft keyway, position the assembly onto the shaft allowing for small axial movement of the sprocket, which will occur during the tightening process. When installing large or heavy parts in conventional mount, it may be easier to mount the key and bushing onto the shaft first then place the sprocket on the bushing and align the holes.

Note: When mounting sprockets on a vertical shaft, precautions must be taken to prevent the sprocket and/or bushing from falling during installation.

4. Alternately tighten the cap screws until the sprocket and bushing tapers are completely seated together (at approximately half the recommended torque).
5. Check the alignment and sprocket run out (wobble), and correct as necessary.
6. Continue alternate tightening of the cap screws to the recommended torque values specified in the table below. Do not tighten cap screws further once the recommended torque value is reached.

Note: Excessive cap screw torque can cause sprocket and/or bushing breakage. When properly mounted, there must be a gap between bushing flange and sprocket after the screws are tightened.

7. Tighten the set screw, when available, to hold the key.

To Remove

1. Loosen and remove all mounting screws.
2. Insert cap screws into all threaded jack screw holes.
3. Loosen the bushing by first tightening the screw furthest from the bushing saw slot, then, alternately tighten remaining screws. Keep tightening the screws in small but equal

increments until the tapered sprocket and bushing disengage.

Note: Excessive or unequal pressure on the cap can break the bushing flange, making removal impossible without destroying the sprocket.

Table No. C9

English Bushing Installation

Bushing Style	Bolts		Torque Wrench	
	Qty.	Size	lb-ft	lb-in
H	2	1/4 x 3/4	7.9	95
JA	3	10-24 x 1	4.5	54
SH & SDS	3	1/4-20 x 1 3/8	9.0	108
SD	3	1/4-20 x 1 7/8	9.0	108
SK	3	5/16-18 x 2	15.0	180
SF	3	3/8-16 x 2	30.0	360
E	3	1/2-13 x 2 3/4	60.0	720
F	3	9/16-12 x 3 5/8	75.0	900
J	3	5/8-11 x 4 1/2	135.0	1620
M	4	3/4-10 x 6 3/4	225.0	2700
N	4	7/8-9 x 8	300.0	3600
P	4	1-8 x 9 1/2	450.0	5400
W	4	1 1/8-7 x 11 1/2	600.0	7200
S	5	1 1/4-7 x 15 1/2	750.0	9000

CAUTION: Excessive bolt torque can cause sprocket and/or bushing breakage.

NOTE: To insure proper bushing/sprocket performance, full bushing contact on the shaft is recommended.

Table No. C10

Metric Bushing Installation

Bushing Style	Bolts			Torque Wrench	
	Qty.	Size	Length (mm)	lb-ft	lb-in
QT	2	M6 x 1	22	7.1	85
JA	3	M5 x 0.8	25	4.1	50
SH	3	M6 x 1	35	8.5	102
SDS	3	M6 x 1	35	8.5	102
SD	3	M6 x 1	35	8.5	102
SK	3	M8 x 1.25	50	15.0	180
SF	3	M10 x 1.5	50	25.0	300
E	3	M12 x 1.75	70	55.0	680
F	3	M14 x 2	100	70.0	880
J	3	M16 x 2	120	140.0	1720
M	4	M20 x 2.5	180	185.0	2260

* QD® is a trademark of Emerson Electric

SECTION D

Engineering Data

Sub- Section 1- Application Design Considerations

1. Gear Motors / Speed Reducer Drives
2. Electric Motor Dimensions
3. Minimum Recommended Sheave Diameters for Electric Motors
4. Flywheel Effect
5. Belt Drive Noise
6. Fixed (Non-Adjustable) Center Distance
7. Use of Idlers
8. Specifying Shaft Locations in Multipoint Drive Layouts
9. Adverse Operating Environments
10. V- Flat Drives
11. Quarter-Turn Drives
12. Stationary Control Variable Pitch Sheave Drives

Sub- Section 2- Engineering Design Considerations

1. Efficiency
2. Sheave Diameter- Speed
3. Static Conductivity
4. Datum System
5. Center Distance and Belt Length Estimation
6. Belt Length Tolerances
7. Belt Installation Tension
8. Center Distance Allowances for Installation and Tensioning
9. Drive Alignment
10. Belt Pull Calculations
11. Shaft/ Bearing Load Calculations
12. Belt Storage and Handling

Sub Section 3 -Technical Data

1. Made-to-Order (MTO) Metals and Belts
 2. Trouble Shooting
 3. Standard Calculations
 4. Useful Formulas and Calculations
- Industrial V-Belt Standards

NOTE: This engineering section provides general engineering information for V-belts and sheaves which are useful in general drive design work. If you need additional information, contact Gates Power Transmission Product Application.

Sub Section I Application Design Considerations

When designing V-belt drives, there are several special circumstances that may require additional consideration:

1. Gear Motors/Speed Reducer Drives
2. Electric Motor Frame Dimensions
3. Minimum Recommendations Sheave Diameters for Electric Motors
4. Flywheel Effect
5. Belt Drive Noise
6. Fixed (Nonadjustable) Center Distance
7. Use of Idlers
8. Specifying Shaft Locations in Multipoint Drive Layouts
9. Adverse Operating Environments
10. V-Flat Drives
11. Quarter-Turn Drives
12. Stationary Control Variable Pitch Sheave Drives

Each of these circumstances and special considerations are reviewed below.

1. Gear Motors/Speed Reducer Drives

When designing a belt drive system to transfer power from the output shaft of a speed reducer to the final driven shaft, the designer must make certain that the belt drive does not exert shaft loads greater than the speed reducing device is rated to carry. Failure to do so can result in premature shaft/bearing failures whether the belt drive has been designed with the appropriate power capacity or not.

This concept is similar to the National Electric Motor Association (NEMA) establishing minimum acceptable sheave diameters for each of their standardized motor frames. Abiding by these minimum recommended diameters, when designing a belt drive system, prevents the motor bearings from failing prematurely due to excessive shaft loads exerted by the belt drive.

Overhung load is generally defined as a force exerted by a belt or chain drive, that is perpendicular to a speed reducer shaft, and applied beyond its outermost bearing. Calculated overhung load values are intended to serve as an indication of how heavily loaded the shaft and outermost bearing of a speed reducer actually is.

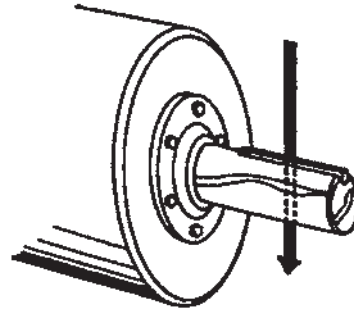


Figure No. D1 -Overhung Load

Overhung load calculations are generally assumed to apply to the slower output shaft of a speed reducer. It is important to note that these calculations apply to higher speed input shafts as well. Most speed reducer manufacturers publish allowable overhung load values for every model in their product line. This value represents the maximum load that the shaft and bearings can support without negatively impacting the durability of the speed reducer. When the actual overhung load exceeds the published allowable value, premature shaft or bearing failure may occur. In extreme cases, catastrophic failures can occur.

A general formula used to calculate overhung load (OHL) is as follows:

Formula No. D1

$$\text{OHL} = \frac{126,000 \times \text{HP} \times \text{kLCF} \times \text{KSF} \times \text{KLLF}}{\text{PD} \times \text{RPM}}$$

Where:

- HP = Actual horsepower being transmitted at the gear motor/reducer output shaft with no service factor applied
- kLCF = Overhung load connection factor (1.5 for all V-belt drives)
- KSF = Service factor for the speed reducer (available from the manufacturer)
- KLLF = Load location factor for the speed reducer (available from the manufacturer)
- PD = Pitch diameter of the speed reducer output shaft sheave
- RPM = RPM of the speed reducer output shaft

Speed reducer manufacturers each publish their own specific formula and constants to calculate overhung load. They also publish specific overhung load ratings for each speed reducer product that they produce. It is very important to use the correct overhung load calculation procedure in conjunction with the manufacturer's accompanying overhung load rating.

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If the calculated overhung load for a particular belt drive system does exceed the speed reducer manufacturer's maximum recommended value, consider altering the belt drive design. In order to reduce the calculated overhung load, consider:

- Increasing sheave diameters
- Reducing number of belts used
- Mounting the sheave closer to the speed reducer outboard bearing

Increasing the sheave diameter not only reduces calculated overhung load, it also potentially reduces the required number of belts. Reducing the number of belts and mounting the sheave as close as possible to the outermost bearing of the speed reducer both move the center of the belt load closer to the speed reducer. This also reduces the calculated overhung load. Alterations to the belt drive design should be made until the calculated overhung load is within the speed reducer manufacturer's recommendations.

2. Electric Motor Frame Dimensions

Motor dimensions can be important considerations depending on the application and its requirements. If motor shaft length, motor shaft diameter, or clearance issues are a concern, refer to the motor dimension table on this page. The table lists common general purpose electric motors by frame size.

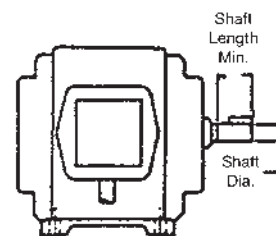


Table No. D1
Motor Frame Dimensions

Frame Size	Shaft Dia. (in)	Shaft Length Min. (in)	Key (in)
48	1/2	—	3/64 Flat
56	5/8	—	3/16 x 3/16 x 1-3/8
143T	7/8	2	3/16 x 3/16 x 1-3/8
145T	7/8	2	3/16 x 3/16 x 1-3/8
182	7/8	2	3/16 x 3/16 x 1-3/8
182T	1-1/8	2-1/2	1/4 x 1/4 x 1-3/4
182	7/8	2	3/16 x 3/16 x 1-3/8
182T	1-1/8	2-1/2	1/4 x 1/4 x 1-3/4
213	1-1/8	2-3/4	1/4 x 1/4 x 2
213T	1-3/8	3-1/8	5/16 x 5/16 x 2-3/8
215	1-1/8	2-3/4	1/4 x 1/4 x 2
215T	1-3/8	3-1/8	5/16 x 5/16 x 2-3/8
254U	1-3/8	3-1/2	5/16 x 5/16 x 2-3/4
254T	1-5/8	3-3/4	3/8 x 3/8 x 2-7/8
256U	1-3/8	3-1/2	5/16 x 5/16 x 3-3/4
256T	1-5/8	3-3/4	3/8 x 3/8 x 2-7/8
284U	1-5/8	4-5/8	3/8 x 3/8 x 3-3/4
284T	1-7/8	4-3/8	1/2 x 1/2 x 3-1/4
284TS	1-5/8	3	3/8 x 3/8 x 1-7/8
286U	1-5/8	4-5/8	3/8 x 3/8 x 3-3/4
286T	1-7/8	4-3/8	1/2 x 1/2 x 3-1/4
286TS	1-5/8	3	3/8 x 3/8 x 1-7/8
324U	1-7/8	5-3/8	1/2 x 1/2 x 4-1/4
324T	2-1/8	5	1/2 x 1/2 x 3-7/8
324TS	1-7/8	3-1/2	1/2 x 1/2 x 2
326U	1-7/8	5-3/8	1/2 x 1/2 x 4-1/4
326T	2-1/8	5	1/2 x 1/2 x 3-7/8
326TS	1-7/8	3-1/2	1/2 x 1/2 x 2
364U	2-1/8	6-1/8	1/2 x 1/2 x 5
364US	1-7/8	3-1/2	1/2 x 1/2 x 2
364T	2-3/8	5-5/8	5/8 x 5/8 x 4-1/4
364TS	1-7/8	3-1/2	1/2 x 1/2 x 2
365U	2-1/8	6-1/8	1/2 x 1/2 x 5
365US	1-7/8	3-1/2	1/2 x 1/2 x 2
365T	2-3/8	5-5/8	5/8 x 5/8 x 4-1/4
365TS	1-7/8	3-1/2	1/2 x 1/2 x 2
404U	2-3/8	6-7/8	5/8 x 5/8 x 5-1/2
404US	2-1/8	4	1/2 x 4 x 2-3/4
404T	2-7/8	7	3/4 x 3/4 x 5-5/8
404TS	2-1/8	4	1/2 x 1/2 x 2-3/4
405U	2-3/8	6-7/8	5/8 x 5/8 x 5-1/2
405US	2-1/8	4	1/2 x 1/2 x 2-3/4
405T	2-7/8	7	3/4 x 3/4 x 5-5/8
405TS	2-1/8	4	1/2 x 1/2 x 2-3/4
444U	2-7/8	8-3/8	3/4 x 3/4 x 7
444US	2-1/8	4	1/2 x 1/2 x 2-3/4
444T	3-3/8	8-1/4	7/8 x 7/8 x 6-7/8
444TS	2-3/8	4-1/2	5/8 x 5/8 x 3
445U	2-7/8	8-3/8	3/4 x 3/4 x 7
445US	2-1/8	4	1/2 x 1/2 x 2-3/4
445T	3-3/8	8-1/4	7/8 x 7/8 x 6-7/8
445TS	2-3/8	4-1/2	5/8 x 5/8 x 3
447T	3-3/8	8-1/4	7/8 x 7/8 x 6-7/8
447TS	2-3/8	4-1/2	5/8 x 5/8 x 3
449T	3-3/8	8-1/4	7/8 x 7/8 x 6-7/8
449TS	2-3/8	4-1/2	5/8 x 5/8 x 3

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3. Minimum Sheave Diameter

Recommendations for Electric Motors

Minimum Recommended Sprocket /Sheave Diameters

NEMA (The National Electric Manufacturers Association) publishes recommendations for the minimum diameter of sprockets and sheaves to be used on General Purpose Electric Motors. The purpose of these recommendations is to prevent the use of excessively small sprockets or sheaves. This can result in motor shaft or bearing damage since belt pull increases as the diameter is reduced.

Table data has been compiled from NEMA Standard MG-1-14-42; 11/78, MG-1-14-43; 1/68, and a composite of electric motor manufacturers data. Values are generally conservative, and specific motors may permit the use of a smaller sprocket or sheave. Consult the motor manufacturer.

Table No. D2

Electric Motor Frames and Minimum Diameters

Frame No.	Shaft Diameter (in)	Super HC [®] V-Belts & PowerBand [®] Belts	Hi-Power [®] II V-Belts & PowerBand Belts & Tri-Power [®] Molded Notch V-Belts	Horsepower at Synchronous Speed (rpm)			
		Minimum Outside Diameter (in)	Minimum Datum Diameter (in)	3600 (3450)	1800 (1750)	1200 (1160)	900 (870)
143T	0.875	2.2	2.2	1-1/2	1	3/4	1/2
145T	0.875	2.2	2.4	2 – 3	1-1/2 – 2	1	3/4
182T	1.125	2.4	2.4	3	3	1-1/2	1
182T		2.4	2.6	5	—	—	—
184T	1.125	2.4	2.4	—	—	2	1-1/2
184T		2.4	2.6	5	—	—	—
184T		3.0	3.0	7-1/2	5	—	—
213T	1.375	3.0	3.0	7-1/2 – 10	7-1/2	3	2
215T	1.375	3.0	3.0	10	—	5	3
215T		3.8	3.8	15	10	—	—
254T	1.625	3.8	3.8	15	—	7-1/2	5
254T		4.4	4.4	20	15	—	—
256T		4.4	4.4	20 – 25	—	10	7-1/2
256T	1.625	4.4	4.6	—	20	—	—
284T	1.875	4.4	4.6	—	—	15	10
284T		4.4	5.0	—	25	—	—
286T		5.2	5.4	—	30	20	15
324T	2.125	6.0	6.0	—	40	25	20
236T	2.125	6.8	6.8	—	50	30	25
364T	2.375	6.8	6.8	—	—	40	30
364T		7.4	7.4	—	60	—	—
365T		8.2	8.2	—	—	50	40
365T	2.375	8.6	9.0	—	75	—	—
404T		8.0	9.0	—	—	60	—
404T	2.875	8.4	9.0	—	—	—	50
404T		8.6	10.0	—	100	—	—
405T		10.0	10.0	—	—	75	60
405T	2.875	8.6	10.0	—	100	—	—
405T		10.5	11.5	—	125	—	—
444T		10.0	11.0	—	—	100	—
444T	3.375	9.5	10.5	—	—	—	75
444T		9.5	11.0	—	125	—	—
444T		10.5	—	—	150	—	—
445T		12.0	12.5	—	—	125	—
445T	3.375	12.0	12.5	—	—	—	100
445T		10.5	—	—	150	—	—
445T		13.2	—	—	200	—	—

* Approximate Full Load Speed^S

For other than General Purpose AC motors (for example, DC motors, Definite Purpose motors, motors with special bearing or motors which are larger than those covered by the NEMA standard), consult the motor manufacturer for minimum sheave diameter recommendations. It is helpful to the manufacturer to include details of the application with your inquiry.

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4. Flywheel Effect, WR^2

Flywheels are used on some machines; for example, air compressors, to even out load pulsations. The V-belt sheave on the machine is often used to provide the necessary flywheel effect. This eliminates the need for a separate flywheel in the system.

The manufacturer of the machine specifies the minimum flywheel effect required in cases where it is important. The amount of flywheel effect is specified in terms of WR^2 (or sometimes Wk^2 , which is the same). The units of WR^2 are pound-feet². It is simply an indication of the weight of a wheel and the distance from the shaft centerline to the **effective** center of the weight. The heavier the wheel, the greater the flywheel effect; and the larger the wheel diameter, the greater the flywheel effect. Increased flywheel diameter contributes much more to flywheel effect than does increased weight, so where extra flywheel effect is needed it is best to use sheaves as large as space and belt speed limits permit. If more weight is needed for flywheel effect, special sheaves are available on order, priced on request. The desired amount of WR^2 should be specified.

Flywheel effect is sometimes given in units of pound-inches². Divide by 144 to obtain pound-feet².

Flywheel effect can be calculated from Formula D2:

Formula No. D2

$$WR^2 = \frac{0.1773 F (D_o^4 - D_i^4)}{1000} - \frac{NY (D_o - Z)^3}{1000} \text{ lb-ft}^2$$

where: D_o = outside diameter of rim, inches
 D_i = inside diameter of rim, inches
 (Table No. D3 gives the conversion from sheave outside diameter to inside diameter of the rim for standard sheaves.)
 F = face width of rim, inches
 (See Pages C4 through C19 for standard sheaves)
 N = number of grooves
 Y = groove constant from Table No. D3
 Z = groove constant from Table No. D3

The formula is correct to use for flat pulleys or flywheels as well as grooved sheaves. For flat wheels, the righthand term equals zero ($N = 0$).

Table No. D3

Sheave Data For WR^2 Calculations

Groove	Datum Diameter (in)	Add To D.D. To Find D_o	Outside Diameter (in)	Outside Diameter (D_o) Minus Inside Diameter (D_i) For Standard Sheaves*	Y	Z
3VX & 3V	—	—	up to 10.6	1.2	.113	.30
			10.7 to 25.0	1.3		
			25.1 to 35.5	1.5		
5VX & 5V	—	—	up to 16.0	1.9	.320	.50
			16.1 to 28.0	2.0		
			28.1 to 50.0	2.2		
			50.1 to 75.0	2.4		
8VX & 8V	—	—	up to 22.4	2.9	.885	.80
			22.5 to 40.0	3.1		
			40.1 to 53.0	3.3		
			53.1 to 85.0	3.4		
A Multi-duty	All	.75	—	1.8	.377	.50
B Multi-duty	All	.35	—	1.8	.377	.50
A	All	.25	—	1.5	.238	.40
B	Up to 20.0 20.1 to 38.0	.35	—	1.7	.384	.50
				1.9		
C	Up to 20.0 20.1 to 36.0 36.1 to 64.0	.40	—	2.2	.696	.68
				2.4		
				2.6		
D	Up to 18.0 18.1 to 40.0 40.1 to 58.0 58.1 to 85.0	.60	—	2.8	1.280	.90
				3.0		
				3.2		
				3.4		

*Approximate — Do not use for construction.

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5. Noise

V-belt, synchronous belt, roller chain, and gear drives will all generate noise while transmitting power. Each type of system has its own characteristic sound. V-belt drives tend to be the quietest belt drives, and synchronous belt drives are much quieter than roller chain drives. When noise is an issue, there are several design and maintenance tips that should be followed to achieve the quietest possible belt drive.

Noise: Decibel and Frequency

Noise is an unwanted or unpleasant sound that can be described with two criteria – frequency and decibel (dBA) levels. Frequency is measured in Hertz. The human ear is capable of distinguishing frequencies typically from 20 to 20,000 Hertz. The human ear generally does not perceive frequencies higher than 20,000 Hertz.

The noise level or intensity of noise is measured in terms of decibels (dBA). The decibel has become the basic unit of measure since it is an objective measurement that approximately corresponds to the subjective measurement made by the human ear. Since sound is composed of several distinct and measurable parts and the human ear doesn't differentiate between these parts, measuring scales that approximate the human ear's reaction have been adopted. Three scales – A, B, and C are used to duplicate the ear's response over the scale's ranges. The A scale is most commonly used in industry because of its adoption as the standard in OSHA regulations.

Noise described in decibels (dBA) is generally perceived as the loudness or intensity of the noise.

While the human ear can distinguish frequencies from 20 to 20,000 Hertz, the ear is most sensitive in the range of normal speech – 500 to 2000 Hertz. As a consequence, this range is the most common concern for noise control. Frequency is most closely related to what the ear hears as pitch. High frequency sounds are perceived as whining or piercing, while low frequency sounds are perceived as rumbling.

The combination of decibel and frequency describes the overall level of loudness to the human ear. One without the other does not adequately describe the loudness potential of the noise. For example, an 85 dBA noise at 3000 Hertz is going to be perceived as much louder than an 85 dBA noise at 500 Hertz.

For comparison, some typical noise levels and their sources are listed below.

Normal Speech	60 dBA
Busy Office	80 dBA
Textile Weaving Plant	90 dBA
Canning Plant	100 dBA
Heavy City Traffic	100 dBA
Punch Press	110 dBA
Air Raid Siren	130 dBA
Jet Engine	160 dBA

Reducing Noise

Following proper installation and maintenance procedures, as well as some simple design alternatives can reduce belt drive noise.

Belt Drive Tension and Alignment

Properly tensioning and aligning a belt drive will allow the belt drive to perform at its quietest level.

Improperly tensioned V-belt drives can slip and squeal. Check to make sure that the drive is properly tensioned by using Gates tension measurement gauges.

Misaligned V-belt drives will be noisier than properly aligned drives since interference is created at the belt's entry point into the sheave. Follow the guidelines discussed in the installation section of this manual for checking and correcting alignment.

6. Fixed (Non-Adjustable) Center Distance

Designers generally consider using fixed center drives for production or assembly applications. Their primary attributes include simplicity and reduced hardware expense with fewer component requirements. In manufacturing environments, assembly operator adjustments to belt tension can also be minimized.

Belt drive systems based on fixed center designs primarily utilize synchronous drive systems because of their positive tooth engagement characteristic. V-type belts rely on friction and proper tension for power transmission, which is very critical and difficult to control. Length manufacturing tolerances for V-type belts are considerably greater than for synchronous belts making belt tension control even more difficult. Though there has been some success with fixed center Poly V-Ribbed belt designs utilizing "stretch fit" belt technology, manufacturing requirements are complex and belt tension levels are difficult to maintain and control.

7. Use of Idlers

Idlers are either grooved sheaves or flat pulleys which do not transmit power. They are used in V-belt drives to:

- Provide takeup for fixed center drives
- Clear obstructions
- Turn corners (as in mule pulley drives)
- Break up long spans where belt whip may be a problem
- Maintain tension, as when the idler is spring-loaded or weighted
- Increase arc of contact on critically-loaded sheaves
- Clutch certain types of drives

An idler always imposes additional bending stresses on the belts, so if the above drive needs can be accomplished by other means, it is usually best to do so. For example, it is almost always more economical in the long run to provide takeup by movement of either the driveR or driveN shaft than by inserting an idler. If idlers must be used, there are certain principles you should follow to obtain the best possible drive. The important design considerations are:

- Placement In Drive
- Center Distance, Belt Length, Installation and Takeup
- Flat or Grooved
- Corrections for Horsepower Rating
- Diameter

Placement of Idlers in the Drive

Inside or Outside. Idlers may be placed either inside or outside the drive, as shown in Figure Nos. D2 and D3.

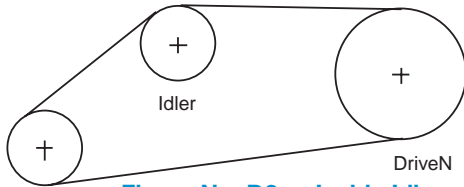


Figure No. D2 — Inside Idler

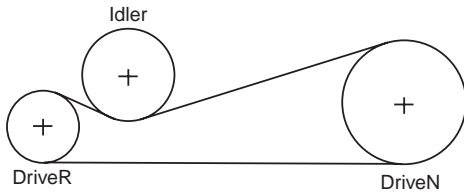


Figure No. D3 — Outside Idler

An inside idler decreases the arc of contact on the adjacent sheaves. An outside idler increases the arc of contact on these sheaves. Either may be used, but an outside idler must be larger, as discussed below. If you are using the idler for takeup purposes, you should remember that the amount of takeup obtained by an outside idler is limited by the belt span on the opposite side of the drive.

Outside idlers are always flat pulleys, since they contact the top of the V-belts. Inside idlers can be either grooved or flat for Hi-Power® II V-belts but are always grooved for the proper V-belt section when using Super HC® or Tri-Power® Molded Notch V-belts. Inside flat idlers can be used for drives using PowerBand® Belts.

Tight or Slack Spans. Figure Nos. D4 and D5 show an idler placed on the tightside and slackside of a drive.

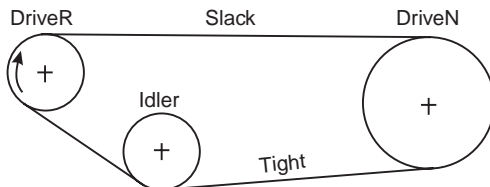


Figure No. D4 — Tightside Idler

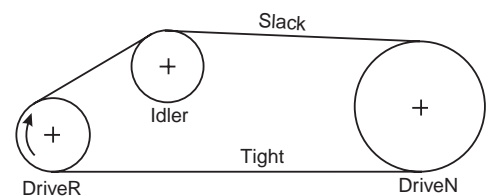


Figure No. D5 — Slackside Idler

Idlers should be placed, if at all possible, on the slackside of a drive, rather than on the tightside.

Spring-loaded, or weighted idlers should always be located on the slackside because the spring force, or weight, can be much less in this position. Also, spring-loaded or weighted idlers should not be used on a drive where the load can be reversed (i.e., where the slackside can become the tightside). You should contact your local Gates representative for help in determining the force which a spring-loaded or weighted idler must impose on the belts. The idler force must be such that resultant belt tension in the span over the idler is equal to the span operating tension calculated from the bearing load section of this manual. A vector analysis is used to correct idler force.

In the Span. A grooved inside idler may be located at any point in the span, but preferably so that it results in nearly equal arcs of contact on the two adjacent sheaves. See Figure No. D6. (If the drive is a V-flat drive, the grooved inside idler should preferably be located so that it results in nearly equal Factor $K\phi$'s on the two adjacent sheaves, regardless of arc of contact. See the V-Flat Section on Page D11.)

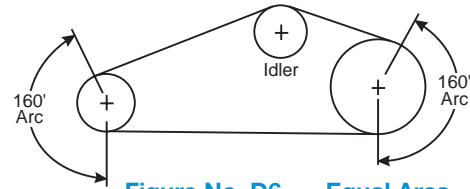


Figure No. D6 — Equal Arcs

A flat idler pulley, whether it is inside Hi-Power II V-Belts or PowerBand Belts only) or outside, should be located as far away as is practical from the next sheave the belts are entering (in the direction the belt is traveling). This is because V-belts move back and forth slightly on a flat pulley, and locating it away from the next sheave minimizes the possibility of the belts entering that sheave in a misaligned condition. See Figure No. D7.

In certain applications that have long belt spans and moderate shock loading, belt whip may occur. If this happens, belt whip can be minimized by breaking up the long belt spans with contact idlers.

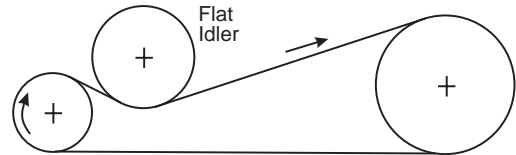


Figure No. D7 — Locating Flat Idler

Table No. D4

V-Belt Sheave and Idler Diameter Recommendations

Belt Cross Section	Minimum Recommended Diameters		
	Inside (in)	Flat Backside O.D. (in)	Flat Inside O.D. (in)
Classical			
A	3.00	4.25	2.25
B	5.40	6.00	3.75
C	9.00	8.50	5.75
D	13.00	13.50	7.50
E	21.00	27.30	19.00
AX	2.20	4.25	---
BX	4.00	6.00	---
CX	7.00	8.50	---
AA	3.00	---	2.25
BB	5.40	---	3.75
CC	9.00	---	5.75
Super HC			
3V	2.65	4.25	---
5V	7.10	10.00	---
8V	12.50	17.50	---
3VX	2.20	4.25	---
5VX	4.40	10.00	---
8VX			
Predator			
CP	9.00	8.50	5.75
3VP	2.65	4.25	---
5VP	7.10	8.50	---
8VP	12.50	17.50	---

Use Datum diameters for Classical belt sections and outside diameters for Super HC belt sections.

7. Use of Idlers — continued

Design of Idler Drives

The following procedure is used in the design of drives with idlers:

Step 1 Find the service factor and design horsepower, and select the V-belt cross section and driveR-driveN sheaves to be used for your drive in the regular manner as shown on Page B2. You will ordinarily know the required center distance between driveR and driveN shafts.

Step 2 Using the above idler rules, select the diameter and placement of the idler(s) you will use in the drive. See Table D4.

Step 3 Find a first-trial belt length by using the center distance and diameters of the driveR and driveN sheaves by the procedure given on Page B2.

Formula No. D3

$$\text{Belt Length} = 2C + 1.57(D + d) + \frac{(D-d)^2}{4C}$$

Step 4 Find the appropriate installation allowance for this first-trial belt length, from Table Nos. D33 - D36 on Pages D29 and D30.

Multiply this value by 2, since table values are on a center distance basis. Add this to the trial length. This usually results in a nonstandard belt length, so select the next larger **standard belt length** as the length for the drive.

Step 5 Subtract twice the installation allowance from the standard length to get the **minimum length**.

Step 6 Add twice the takeup allowance (also from Table Nos. D33 - D36 on Pages D29 and D30) the selected standard length to find the **maximum length** for takeup.

You now have three lengths — the selected **standard length**, the **minimum length** (for installation) and the **maximum length** (for takeup).

Step 7 Lay out the drive to scale using the selected diameters and centers. Use the idler position that will give the selected standard length. This requires some trial and error, placing the idler in various positions to see if the correct length is obtained.

Belt length on a layout can be determined by two methods. Using a map measure is one. Simply run the map measure around the line indicating the belt length. The other is to measure all the **span lengths** and add them to the **arc lengths** (the length of belt on the sheaves). Measure each arc of contact (wrap) with a protractor and calculate each arc length by:

Formula No. D4

$$\text{Arc Length} = \frac{\pi}{360} \times \text{Arc of Contact} \times \text{Diameter of Sheave}$$

Note: $\pi = 3.14$

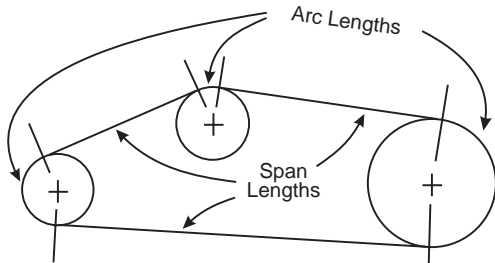


Figure No. D8 — Span and Arc

Step 8 Then place the idler in the positions required to get the minimum and maximum lengths, again by the trial and error layout method. This step insures that you can actually get the idler movement necessary for installation and takeup. Be sure to provide the idler movement indicated when the bracketry is designed. Measure each arc of contact.

Step 9 Using the smallest arc of contact measured in Steps 7 and 8, find the appropriate Factor K_ϕ for each loaded sheave or pulley, using Table No. D5 below.

*Table No. D5

Factor K_ϕ

Arc of Contact	Factor K_ϕ		Arc of Contact	Factor K_ϕ	
	V Sheave	Flat Pulley		V Sheave	Flat Pulley
320	1.18	1.00	160	0.95	0.69
300	1.16	0.98	140	0.89	0.64
280	1.15	0.95	120	0.82	0.57
260	1.13	0.92	100	0.74	0.50
240	1.10	0.88	80	0.64	0.42
220	1.08	0.84	60	0.52	0.33
200	1.04	0.80	40	0.38	0.23
180	1.00	0.75	20	0.20	0.12

*Use this table only for drives with idlers. For drives without idlers, refer to Table No. D26 on Page D24 for V-V drives; and to Table No. D11 on Page D12 for V-Flat drives.

Step 10 Find the rated horsepower per belt, using the smallest diameter loaded sheave in the drive, from Table Nos. B9 through B16 on Pages B56 through B63, or Table Nos. B25 through B34 on Pages B222 through B231. Contact Gates Application Engineering for specific belt length correction factors. Multiply the rated horsepower by the belt length correction factor and Factor K_ϕ .

Then apply the following idler correction factor in Table No. D6 below to the corrected horsepower to account for the additional bending stresses imposed on the belts by the idler(s). **NOTE:** Static tension can be calculated by using the procedure on Page D24

Table No. D6

Idler Correction Factor

No. of Idlers In Drive	Idler Correction Factor	No. of Idlers In Drive	Idler Correction Factor
0	1.00	2	0.86
1	0.91	3	0.81

The result is the horsepower per belt. Divide this figure into the design horsepower to obtain the number of belts required. The answer will usually contain a fraction. Use the next larger whole number of belts.

Smaller than recommended idler diameters are the most frequent cause of problems with idler drives. If you do not use diameters as large as recommended in Table D4, your drive will experience **short belt life**, when you use the number of belts determined in the above procedure. In this case, you should obtain a fatigue analysis and recommendations from your local Gates representative.

Drives having unusually large driveR and driveN sheaves do not always require idlers as large as recommended under Idler Diameters. In this case, obtain a fatigue analysis and recommendations from your local Gates representative.

Idler Details

Flat idlers for V-belt drives should not be crowned. Flanging of idlers, however, is good practice. If flanging is used, the inside bottom corners should not be rounded — this may cause the belts to climb off the pulley.

If your idler is to be a flat, uncrowned pulley, find the minimum **face width** required (between flanges, if flanged) by adding the face width of a grooved sheave (for the appropriate number of belts), in inches, to the amount given in Table No. D7.

Sheave face width is given in the sheave specification tables, Pages C20 through C21.

Table No. D7

Additional Width for Flat Idlers

Belt Cross Section	Amount to Add to Face Width of Grooved Sheave to Find Minimum Uncrowned Flat Pulley Face Width (in)	Belt Cross Section	Amount to Add to Face Width of Grooved Sheave to Find Minimum Uncrowned Flat Pulley Face Width (in)
3V	0.6	A	0.8
5V	1.0	B	1.0
8V	1.3	C	1.2
		D	1.5

Brackets for idlers should be sturdily constructed. Drive problems described as "belt stretch," "belt instability," "short belt life," "belt vibration" and others, are frequently traced to flimsy idler bracketry. Such components of the drive must be designed to withstand the forces imposed by the operating belt tensions.

8. Specifying Shaft Locations in Multipoint Drive Layouts

When collecting geometrical layout data for multiple sprocket drive layouts, it is important to use a standard approach that is readily understood and usable for drive design calculations. This is of particular importance when the data will be provided to Gates Power Transmission Product Application for analysis. Drive design software that allows designers to design multipoint drives can also be downloaded at www.gates.com/drivedesign.

Multipoint Drive

When working with a drive system having more than three shafts, the geometrical layout data must be collected in terms of X-Y coordinates for analysis. For those unfamiliar with X-Y coordinates, the X-Y cartesian coordinate system is commonly used in mathematical and engineering calculations and utilizes a horizontal and vertical axis as illustrated in Fig. D9.

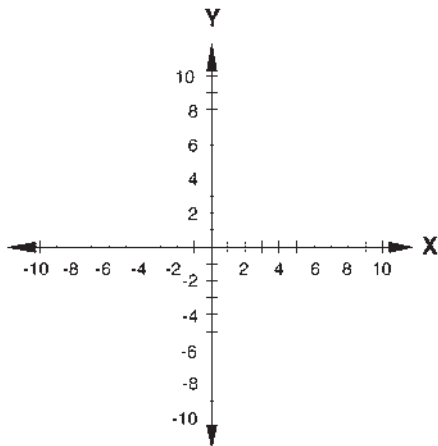


Figure No. D9

The axes cross at the zero point, or origin. Along the horizontal, or “X” axis, all values to the right of the zero point are positive, and all values to the left of the zero point are negative. Along the vertical, or “Y” axis, all values above the zero point are positive, and all values below the zero point are negative. This is also illustrated in Figure D9. When identifying a shaft center location, each X-Y coordinate is specified with a measurement in the “X” as well as the “Y” direction. This requires a horizontal and vertical measurement for each shaft center in order to establish a complete coordinate. Either English or Metric units of measurement may be used.

A complete coordinate is specified as follows:

(X,Y) where X = measurement along X-axis (horizontal)
Y = measurement along Y-axis (vertical)

In specifying X-Y coordinates for each shaft center, the origin (zero point) must first be chosen as a reference. The driveR shaft most often serves this purpose, but any shaft center can be used. Measurements for all remaining shaft centers must be taken from this origin or reference point. The origin is specified as (0,0).

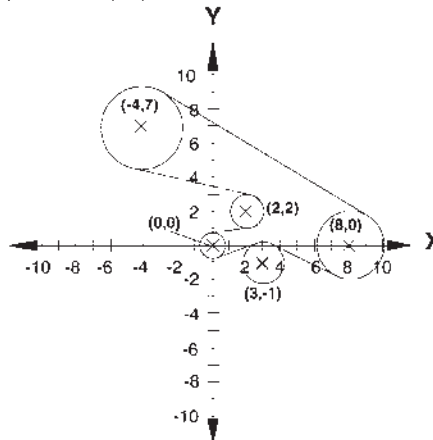


Figure No. D10

An example layout of a 5-point drive system is illustrated in Figure D10. Here each of the five shaft centers are located and identified on the X-Y coordinate grid. When specifying parameters for the moveable or adjustable shaft (for belt installation and tensioning), the following approaches are generally used:

Fixed Location: Specify the nominal shaft location coordinate with a movement direction.

Slotted Location: Specify a location coordinate for the beginning of the slot, and a location coordinate for the end of the slot along its path of linear movement.

Pivoted Location: Specify the initial shaft location coordinate along with a pivot point location coordinate and the pivot radius.

Performing belt length and idler movement/positioning calculations by hand can be quite difficult and time consuming. With a complete geometrical drive description, we can make the drive design and layout process quite simple for you. Contact Gates Power Transmission Product Application for computer-aided assistance.

9. Adverse Operating Environments

Debris

Be careful when using V-belt drives in high debris environments, even though a V-belt drive has a tendency to remove debris from the sheave grooves through drive operation. Care must be taken to provide adequate shielding to drives in environments where debris is likely. Completely enclosing a V-belt belt drive may be acceptable. Depending on the type and abrasive characteristics of the debris, excessive wear can be generated on both belt and sheaves.

Table No. D8

Temperature and Static Conductivity

Belt	Standard Cord	Temp Min (°F)	Temp Max (°F)	Pass RMA Static Conductive ?
Super HC	Polyester	-30	180	Yes
Super HC Molded Notch - Vextra	Polyester	-60	160	Yes
Super HC Molded Notch - EPDM	Polyester	-60	230	Yes
Predator	Aramid	-30	180	No
Hi-Power II	Polyester	-40	160	Yes
Tri-Power - Vextra	Polyester	-60	160	Yes
Tri-Power - EPDM	Polyester	-60	230	Yes
Metric Power Banded	Polyester	-40	160	Yes
Metric Power Notched - Vextra	Polyester	-60	160	Yes
Metric Power Notched - EPDM	Polyester	-60	230	Yes

High Humidity/Corrosive Environments

Many industrial applications face problems associated with rusting parts. Numerous applications in the food and beverage industry are located in areas that require periodic washdown. Unless a drive is completely shielded and protected from wash down, rust and corrosion will be rapidly apparent in these types of environments. This is equally true of sheaves when used in very wet or humid environments, such as seen with air moving drives on cooling towers or wood kilns. The constant effects of the wet air surrounding the belt drive can cause excessive rust, and allow the belts to slip.

Corrosion attacks sheave grooves, building up rust deposits. The corrosion will increase over time, building up in the sheave grooves and non-driving surfaces (bushing face). Sheaves with corrosion in the grooves can rapidly wear the belt and wear through the abrasion resistant tooth fabric, resulting in premature belt failure.

10. V-Flat Drives

Drives which use one grooved sheave and one flat pulley are called V-flat drives. Such drives are often used in converting flat belt drives to V-belt drives. A considerable saving can often be made by using a flat pulley or flywheel already on hand as the large pulley.

Gates PowerBand® Belts are ideally suited for V-Flat drives.

It must be remembered that Super HC® Individual V-belts are not recommended for V-Flat drives. The relatively small "bottoms" of the individual 3V, 5V and 8V belts can cause turnover on the flat pulley of some drives.

When The Large Pulley Can Be Flat

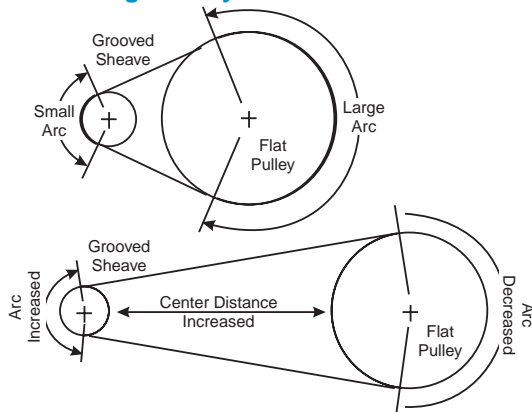


Figure No. D11 — V-Flat Drives

Figure No. D11 shows two drives, each using the same size grooved small sheave and large flat pulley. In the first drive, there is very little arc of contact (wrap) on the small sheave. Sheave grooves are required to give adequate power transmission capability without the need for extremely high tension to prevent slip. However, the arc of contact on the large pulley is ample. Therefore, the large pulley can have as much pulling ability as the small sheave, even though the pulley is not grooved. In the second drive, a longer PowerBand belt has been used, increasing the center distance. Note in Figure No. D11 that this decreases the arc of contact on the large pulley, thereby decreasing the ability of the flat pulley to transmit power without slipping. The second drive, therefore, requires more belt tension than the first drive to transmit the same load without the belt slipping.

The arc of contact on the flat pulley determines whether or not a V-flat drive is practical. Figure No. D11 shows that arc of contact of the belts on the sheave and pulley depends on the relative sheave and pulley diameters and the center distance. In fact, the arc of contact is proportional to the ratio:

Formula No. D5

$$\frac{D-d}{C}$$

Where: D = effective outside diameter of the large, flat pulley, inches
 d = outside diameter of the small sheave, inches
 C = center distance of drive, inches
 Effective outside diameter of the large, flat pulley is obtained by adding the appropriate value from Table No. D10.

Whenever the ratio $\frac{D-d}{C}$ is 0.5 or over, the large pulley or flywheel need not be grooved. The best results are obtained when this ratio is between 0.8 and 0.9. A V-Flat drive requires more tension than a V-V drive to keep it from slipping on the flat pulley if the ratio $\frac{D-d}{C}$ is less than 0.85, but tension is still less than for a flat belt drive.

Table No. D9

Amount to Add to the Outside Diameter of a Flat Pulley to Obtain the Effective Outside Diameter

PowerBand Cross Section Only (in)			
3V	5V	8V	
0.50	0.93	1.61	
V-Belt and PowerBand Cross Section (in)			
A	B	C	D
0.63	0.81	1.06	1.50

Flat Pulley Requirements

Width and Crown

In addition to the flat pulley diameter, you will need to know two other things about the pulley:

1. Face Width (width of the rim)
2. Crown

(Crown is defined as the difference between the diameter at the center and at the edge of a pulley. It is usually expressed as the crown per unit of face width.) If you do not know the face width of a pulley on hand, measure it with a rule or a tape measure and jot down the width.

Check the amount of crown on the pulley with a straightedge as shown in Figure No. D12. No crown is preferred, but some crown can be tolerated if it does not exceed $\frac{1}{8}$ " per foot of face width. To calculate the amount of crown per foot of face width, measure F and C (in inches) as shown in Formula No. D6.

Formula No. D6

$$\text{Inches of crown per foot of face width} = \frac{12 C}{F}$$

The pulley should not be used in a V-flat drive if this value exceeds $\frac{1}{8}$ ".

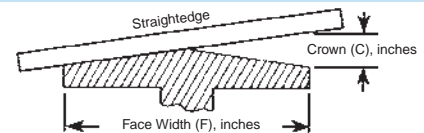


Figure No. D12 — Measuring Pulley Crown

Flat Pulley Construction

Since V-flat drives are usually capable of transmitting greater loads than the flat belt drives which they replace, some consideration must be given to the strength of the flat pulley. If you are replacing a flat belt drive and using the flat pulley which is already on the driveN machine you know that the pulley is strong enough to transmit the required load.

If you are using a flat pulley on a drive other than the one for which it was originally intended, check its construction for strength.

Design of V-Flat Drives

Besides the required data for a flat pulley on hand as discussed above, you need to know only four things before designing a V-Flat drive:

1. The type of application, machine, or work being done.
2. The horsepower rating and speed (RPM) of the driveR.
3. The speed (RPM) of the driveN machine or the required speed ratio.
4. The approximate center distance required.

Step 1

Find the Design Horsepower
See Step 1, Page B2.

Step 2

Select the Proper V-Belt Section
See Step 2, Page B3.

Step 3

Find the Desired Speed Ratio
See Step 3, Page B5

Step 4

Choose the Sheave Diameters

- A. Find the pitch diameter of the large flat pulley by adding the correct value from the Table No. D10 to the outside diameter of the pulley.

Table No. D10

Amount to Add to the Outside Diameter to Find the Pitch Diameter of a Flat Pulley

PowerBand Cross Section Only (in)			
3V	5V	8V	
0.45	0.83	1.41	
V-Belt and PowerBand Cross Section (in)			
A	B	C	D
0.63	0.81	1.06	1.50

10. V-Flat Drives — continued

Design of V-Flat Drives — continued

Step 4

- B. Divide the pitch diameter of the flat pulley by the desired speed ratio to get the required **small sheave pitch diameter**.
- C. Convert pitch diameter to datum or outside diameter using Table No. D17 on Page D18 then turn to Table No. D4 on Page D7, and see if the calculated small sheave diameter is as large or larger than the smallest outside diameter shown for your belt section. If so, proceed with the next step.
- If your calculated small sheave diameter is smaller than the minimum shown in Table No. D4 it is smaller than recommended for the belt section considered. Change to the **next smaller** belt section, and go back to Step 4, A.

NOTE: If your small sheave diameter is still smaller than listed for the next smaller cross section, see your local Gates representative.

- D. Select a stock diameter sheave from Table No. C1 and C2, nearest to your calculated diameter. Find the actual speed ratio by dividing the large pitch diameter. Calculate the driveN speed by dividing the driveR speed by the actual speed ratio (multiply if it is a speedup drive).

If the calculated driveN speed is near enough to the desired speed, use the stock small sheave diameter. Otherwise, you will have to order a nonstock diameter equal to the diameter you calculated in Step 4, B, above.

- E. Check rim speed (see Formula No. D11 on Page D15). If rim speed exceeds 6500 feet per minute, see your local Gates representative. Special sheaves and pulleys may be required.

Step 5 Select the Center Distance and V-Belt Number

You probably already know the desired center distance for your drive. However, remember that $\frac{D-d}{C}$ for a V-Flat drive should be at least 0.5, and ideally it should be 0.8 to 0.9. Since you already know D - d for your drive, you can calculate an ideal center distance as shown below and compare this with the desired center distance.

- A. Find the **ideal center distance**, C, by dividing the diameter difference (D - d) by 0.85.

Formula No. D7

$$\text{Ideal } C = \frac{D-d}{0.85}$$

If you desire more or less than the ideal center distance, adjust the center distance, accordingly. However, if $\frac{D-d}{C}$ must be less than 0.5, it is usually more economical to design a regular V-V drive.

NOTE: When the difference between the large and small diameters is not great, it may not be possible to achieve the ideal $\frac{D-d}{C}$ ratio, even if the shortest possible center is used.

Proceed with the design anyway, as long as $\frac{D-d}{C}$ is 0.5 or greater.

The shortest center distance possible is equal to $\frac{1}{2}$ (large pulley O.D. + small sheave O.D.) plus installation allowance. Installation allowances are given in Table Nos. D33 - D36 on Pages D29 and D30.

- B. Using the tentative center distance, calculate a tentative belt length, a **final belt length**, and a final **center distance** as in Step 3 on Page D8.

Step 6 Find the Recommended Installation and Takeup Requirements from Table Nos. D33 - D36 on Pages D29 and D30.

Follow the procedure in Step 9 on Page D8, but be sure to use arc correction Factor K_{ϕ} for V-flat drives from Table No. D11. If your drive is to use an idler, use Factor K_{ϕ} from Table No. D5 on Page D8.

*Table No. D11

Factor K_{ϕ} , V-Flat Drives

$\frac{D-d}{C}$	Arc of Contact on Small Sheave (°)	Factor K_{ϕ}
0.00	180	0.75
0.10	174	0.76
0.20	169	0.78
0.30	163	0.79
0.40	157	0.80
0.50	151	0.81
0.60	145	0.83
0.70	139	0.84
0.80	133	0.85
0.90	127	0.85
1.00	120	0.82
1.10	113	0.80
1.20	106	0.77
1.30	99	0.73
1.40	91	0.70
1.50	83	0.65

*Use this table for V-Flat drives **without** idlers. For drives with idlers, see Use of Idlers Section, starting on Page D7, and refer to Table No. D5 for the correct Factor K_{ϕ} .

Step 7 Check Pulley Crown

See flat pulley requirements at the beginning of this section.

Step 8 Width of Flat Pulley

The Minimum **face width** that the large pulley or flywheel should have is the sum of the approximate face width of the small grooved sheave, as shown in Table No. D12, and the amount listed in Table No. D13 according to the center distance of your drive. If the pulley is crowned, be sure to see the footnote immediately under Table No. D13.

Table No. D12

Approximate Face Widths of Sheaves with Standard Groove Spacing (in)

V-Belt Section	Number of Grooves										For Each Additional Groove, Add
	1	2	3	4	5	6	7	8	9	10	
3V	0.7	1.1	1.5	1.9	2.3	2.7	3.1	3.5	3.9	4.3	0.4
5V	1.0	1.7	2.4	3.1	3.7	4.4	5.1	5.8	6.5	7.2	0.7
8V	1.5	2.6	3.7	4.9	6.0	7.1	8.2	9.4	10.5	11.6	1.1
A*	0.8	1.4	2.0	2.6	3.2	3.9	4.5	5.1	5.8	6.4	0.6
B	1.0	1.8	2.5	3.2	4.0	4.8	5.5	6.2	7.0	7.8	0.8
C	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4	10.4	1.0
D	1.8	3.2	4.6	6.1	7.5	8.9	10.4	11.8	13.2	14.7	1.4

Face width of MultiDuty Sheaves is that given for B Section V-belts.

Table No. D13

Amount to be Added to Approximate Face Width of Grooved Sheave to Find the Face Width Required for the Flat Pulley*

Center Distance (in)	Amount To Add (in)
Less than 20	0.8
20 - 30	1.0
30 - 40	1.3
40 - 50	1.6
50 - 70	2.0
70 - 90	2.5
90 and Over	3.0

* If your V-flat drive uses a crowned pulley, multiply the amount in this table by the service factor for the drive.

Step 9 Find the Recommended Installation and Takeup Requirements from Table Nos. D33 - D36 on Pages D29 and D30.

11. Quarter-Turn Drives

Quarter-turn drives are drives in which the driveR and driveN shafts are at right angles to each other. Such drives are commonly used from engines to vertical turbine pumps and are found on many other applications.

Eighth-turn drives are also included in the design section below, although they are used less frequently than quarter-turn drives. An eighth-turn drive is a drive in which the driveR and driveN shafts are at 45° to each other.

Designing a Quarter-Turn Drive

For Speed Ratios up to 2.50

The simplest type of quarter-turn drive may be used with speed ratios from 1.00 up to about 2.50, where either the driveR or the driveN machine is moveable for belt installation and takeup.

To design a quarter-turn or eighth-turn drive, follow the steps given in the Drive Design Section for designing an ordinary drive, keeping in mind the following special points:

1. A standard V-belt length should be chosen which will give a **minimum center distance** of:

Formula No. D8

$$\text{Minimum } C = 5.5 (D + W)$$

Where: D = the outside diameter of the large sheave.

W = the width of the band of belts, from Table No. 90.

2. On eighth-turn drives, a standard V-belt length should be chosen which will give a **minimum center distance** of:

Formula No. D9

$$\text{Minimum } C = 4 (D + W)$$

3. Factor $K\phi$ may be taken as 1.00 on quarter-turn and eighth-turn drives.
4. Deep grooved sheaves should always be used on quarter-turn and eighth-turn drives using individual V-belts.
5. **Standard sheaves** should be used for all **PowerBand®** belt drives.

We recommend that you have any quarter-turn or eighth-turn drives you may design checked by a Gates representative.

Table No. D14

Width of Band of Belts on Deep Grooved and Standard Sheaves (in)

V-Belt Section	Groove Type	Number of Belts									
		1	2	3	4	5	6	7	8	9	10
3V/3VX	Deep Groove	.38	.88	1.38	1.88	2.38	2.88	3.38	3.88	4.38	4.88
	Std. Groove	.38	.79	1.19	1.60	2.00	2.41	2.82	3.22	3.63	4.03
5V/5VX	Deep Groove	.62	1.43	2.24	3.06	3.87	4.68	5.50	6.30	7.12	7.93
	Std. Groove	.62	1.31	2.00	2.68	3.37	4.06	4.75	5.44	6.12	6.81
8V/8VX	Deep Groove	1.00	2.31	3.62	4.94	6.25	7.56	8.87	10.18	11.50	12.81
	Std. Groove	1.00	2.13	3.25	4.38	5.50	6.63	7.75	8.88	10.00	11.13
A	Deep Groove	.50	1.25	2.00	2.75	3.50	4.25	5.00	5.75	6.50	7.25
	Std. Groove	.50	1.13	1.75	2.38	3.00	3.63	4.25	4.88	5.50	6.13
B	Deep Groove	.66	1.54	2.41	3.29	4.16	5.04	5.91	6.79	7.66	8.54
	Std. Groove	.66	1.41	2.16	2.91	3.66	4.41	5.16	5.91	6.66	7.41
C	Deep Groove	.88	2.13	3.38	4.63	5.88	7.13	8.38	9.63	10.88	12.13
	Std. Groove	.88	1.88	2.88	3.88	4.88	5.88	6.88	7.88	8.88	9.88
D	Deep Groove	1.25	3.00	4.75	6.50	8.25	10.00	11.75	13.50	15.25	17.00
	Std. Groove	1.25	2.69	4.13	5.56	7.00	8.44	9.88	11.32	12.75	14.19

Table No. D15

e Dimension (in)

Center Distance (in)	Super HC® Molded Notch	Super HC	Hi-Power® II & Tri-Power® Molded Notch
	60	0.1	0.1
80	0.2	0.3	0.4
100	0.3	0.4	0.6
120	0.4	0.6	0.9
140	0.6	0.8	1.2
160	0.7	1.0	1.5
180	0.9	1.3	1.9
220	1.4	2.0	2.9
240	1.6	2.3	3.5

Designing a Quarter-Turn Drive

For Speed Ratios Greater than 2.50

For speed ratios greater than 2.50, the shortest center distance allowable with a regular quarter-turn drive is too long and an arrangement similar to the type shown in Figure No. D13 should be used. This consists of a regular quarter-turn drive, with a speed ratio of 1.00 or more but not over 2.50, between the faster speed shaft and a jackshaft; and a straight V-V drive, or V-flat drive, between the jackshaft and the slow speed shaft.

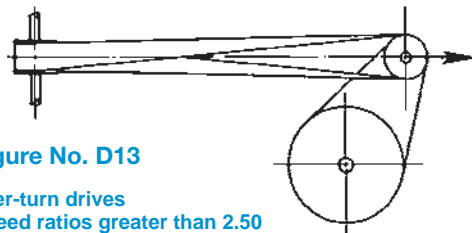


Figure No. D13

Quarter-turn drives for speed ratios greater than 2.50

Setting Up a Quarter-Turn Drive

Direction of rotation: The direction of rotation must be such that the **tightside** of the drive will be **on the bottom**.

Set a **horizontal driveR**—motor or engine—so that the bottom of the driveR sheave moves away from the driveN vertical shaft. Then place the belts on the vertical shaft to get the direction of rotation needed.

Set a **horizontal driveN** machine so that the bottom of the driveN sheave moves toward the vertical driveR shaft. Then place the belts on the vertical shaft to get the direction of rotation needed.

Aligning the Drive: Looking down on the drive, a line from the center of the vertical shaft should pass through the center of the face of the sheave on the horizontal shaft. The horizontal shaft should be at right angles to this line. See the top view in Figure No. D14.

Looking at the side of the drive, the center of the horizontal shaft should be raised a distance "e", from Table No. D15 above a level line through the center of the face of the sheave on the vertical shaft. See the side view in Figure No. D14.

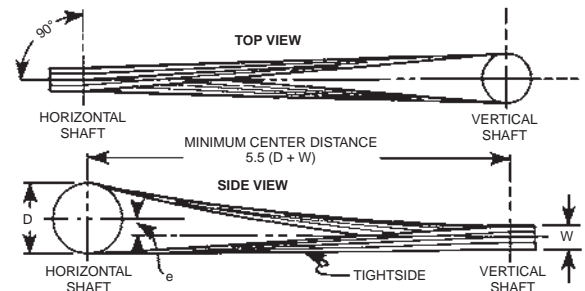


Figure No. D14

Quarter-Turn Drive Alignment

Adjusting the Tension: You can determine the proper tension for quarter-turn drives from the procedures on Pages D22 through D28. In addition, be sure that the belts are snug before you start the drive.

Adjust the tension so that, when the drive is running under load, the middle belt on the slackside of the drive will not fall below its groove in the sheave on the vertical shaft. Tighten the belts as needed after a few hours of run-in.

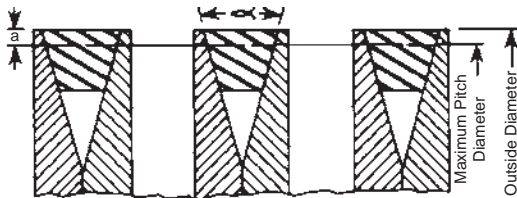
12. Stationary Control Variable Pitch Sheaves

The following procedure was adapted for Gates Power Transmission Products from RMA (Rubber Manufacturers Association) Bulletin Number IP-3-14, approved in 1987.

Operating Principles

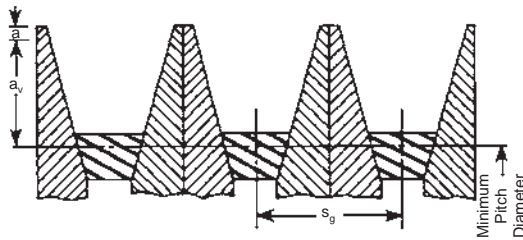
Variable pitch drives are used where the speed ratio must be changed or adjusted. A variable pitch drive normally uses one fixed pitch sheave in conjunction with a variable pitch sheave. The speed ratio capability may be doubled by using variable pitch sheaves on both the driveR and driveN shafts.

A variable pitch sheave has movable discs that allow the sheave grooves to open or close. By changing the groove width, the radial belt position is adjusted or changed causing a speed variation. Figure Nos. D15 and D16 illustrate this concept. The belt movement is indicated by the dimension a_v . Disc movement to make a complete pitch diameter change is normally indicated in terms of "range of pitch diameters."



Variable Pitch Sheave (Closed)

Figure No. D15



Variable Pitch Sheave (Open)

Figure No. D16

As the name implies, Stationary Control Variable Pitch Sheaves are not adjustable when running. The Stationary Control Model is designed for use where the machine can be shut down for speed changes. Tension on the belts must be removed, so the disc position may be adjusted for speed change. Where more frequent speed changes are required, or where changes must be made with the machine running, the Motion Control Model is available. The pitch diameter of the Motion Control sheave can be adjusted at any time, with the machine running.

Motion Control Variable Pitch Sheaves are available by special order. For further information on Motion Control Variable Pitch Sheaves, contact your local Gates representative.

Drive Design Procedure

Selection and drive design of Stationary Control Variable Pitch drives closely follows procedures used for conventional fixed ratio drives. For more detailed information on selecting Service Factor, proper V-Belt selection, and checking minimum recommended sheave diameters for electric motors, refer to Pages B2 through B5 of this manual.

Before selecting a drive, you need to know the following four things:

1. The type of application or machine.
2. The horsepower and speed (RPM) of the driveR.
3. The speed range (RPM) of the driveN machine or required speed ratio.
4. The approximate center distance required.

Step 1 Select the Design Horsepower

- A. Select the appropriate service factor from Table No. B1 on Page B2.
- B. Design Horsepower = (Service Factor) x (Horsepower Required)

Step 2 Select the Proper V-Belt Section

- A. Stationary Control Variable Pitch sheaves are available for use with A, B and C Section HiPower® II, and AX, BX and CX Tri-Power® Molded Notch V-belts. Only these section V-Belts should be used with Gates Stationary Control Variable Sheaves. PowerBand Belts should never be used with Variable Pitch Sheaves.
- B. Use Figure No. B2 on Page B3 to choose the cross section best suited for the application.
- C. The Tri-Power belts may be used to take advantage of the higher horsepower ratings. However, the more aggressive cut edge and molded notches could cause some belt instability or vibration unless particular attention is given to drive alignment. To minimize vibration problems with Tri-Power belts on Stationary Control Variable Pitch drives, standard stock Gates Companion Sheaves should always be used to help obtain the best possible drive alignment.

Step 3 Choose the Sheave Diameters

- A. After selecting either a large or small sheave diameter, determine the minimum acceptable pitch diameter for the belt cross section (Example: see Table No. D4 on Page D7). If the prime mover is an electric motor, also use the Tables on Page B4 to make sure the sheave selection is equal to or larger than NEMA recommendation. (Be sure to use the minimum pitch diameter for the Variable Pitch Sheave so that the sheave cannot be adjusted below NEMA the minimum recommended diameter when it's installed on the equipment.)
- B. The Variable Pitch Sheave can be on either the driveR or driveN shafts. However, the best practice is to install the Variable Pitch Sheave on the faster shaft, since this permits the widest speed range possible.
- C. Use the formulas listed in Table D16 on Page D15 to determine the other sheave diameter.
- D. Select the closest stock sheaves to meet the requirement determined above. Check the speed range, using pitch diameters.
- E. Companion sheaves are designed with special spacing between the grooves. The special spacing accommodates the Variable Pitch Sheave spacing so that belt misalignment is limited. Standard Gates HiPower® II Sheaves may also be used as a fixed pitch sheaves, if the offset, as shown in Figure No. D17 on Page D15 does not exceed two (2) degrees. The angle of offset (g) can be calculated using the following formula:

Formula No. D10

$$g = \tan^{-1} \left(\frac{F_a - F_t}{2t} \right)$$

where: F_a = adjustable sheave overall face width at minimum pitch diameter
 F_t = fixed sheave overall face width
 t = span length between sheaves

12. Stationary Control Variable Pitch Sheaves — continued

As shown in Figure Nos. D17 and D18 the formula is based on the center belt being aligned with the variable pitch sheave at its median pitch diameter. If an even number of belts is being used, it is based on the two center belts. To obtain maximum belt performance and service life, misalignment should not exceed $1/2^\circ$.

When using Gates Sheaves, every groove may be used as shown in Figure No. D17. Or, to reduce (g), as shown in Figure No. D18, every other sheave groove may be used.

A flat pulley (no-grooves) may also be used as a fixed pitch sheave. However, be sure the pulley is wide enough to allow for the total axial belt movement as speed is changed. Also, be sure to review the procedures for V-Flat Drives starting on Page D11.

Table No. D16

Given:	Fixed DriveR (D _F)	Variable DriveN (D _{VP ave})
Determine:		
Variable DriveN (D _{VP ave})	$= \frac{(D_F)(DR \text{ rpm})}{(DN \text{ rpm ave})}$	
Fixed DriveR (D _F)		$= \frac{(D_{VP \text{ ave}})(DN \text{ rpm ave})}{(DR \text{ rpm})}$
Given:	Fixed DriveN (D _F)	Variable DriveR (D _{VP ave})
Determine:		
Variable DriveR (D _{VP ave})	$= \frac{(D_F)(DN \text{ rpm ave})}{(DR \text{ rpm})}$	
Fixed DriveN (D _F)		$= \frac{(D_{VP \text{ ave}})(DR \text{ rpm})}{(DN \text{ rpm ave})}$
Where: D _F	= pitch diameter, fixed pitch sheave, inches or millimeters	
D _{VP ave}	= median pitch diameter, variable pitch sheave, inches or millimeters	
DN rpm ave	= median rpm for driveN sheave	

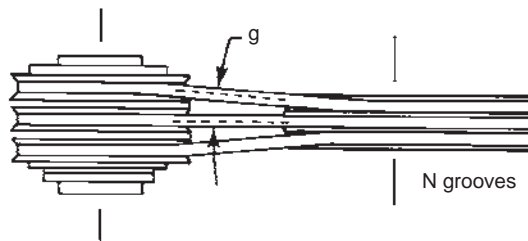


Figure No. D17

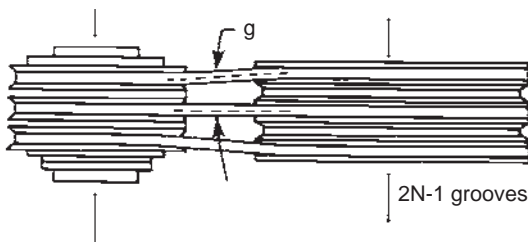


Figure No. D18

- F. Gates Sheaves are limited to 6,500 feet per minute rim speed. Rim speed may be calculated using the following formula:

Formula No. D11

$$\text{Rim Speed (FPM)} = \frac{(\text{Sheave Outside Dia., inches}) \times (\text{Max. RPM})}{3.82}$$

Step 4 Select the Center Distance and Belt Size

- A. The center distance should be selected to allow for the best possible belt alignment, as noted above. By using Formula Nos. D16 and D17 on Page D19, either center distance or belt length can be calculated. Standard belt pitch lengths should be selected from the Size Tables on Pages B68 through B215.

Step 5 Find the Number of Belts Required

- A. Find the basic horsepower rating for the small sheave and RPM of the faster shaft starting in Table No. B25 on Page B222 through Table No. B32 on Page B229. If the Variable Pitch Sheave is the small sheave, use its minimum diameter. Add the "Additional Horsepower for Speed Ratio" from the right side of the tables to the basic rating to get the rated horsepower per belt.
- B. Calculate (Dd)/C and find Factor K_φ in Table No. D26 on Page D24.
- C. Contact Gates Application Engineering for a belt length correction factor for the belt length chosen.
- D. Multiply the rated horsepower per belt by Factor K_φ and the length correction factor to obtain the horsepower per belt.
- E. Divide the design horsepower by the horsepower per belt to find the number of belts required. Always round fractions to the next larger whole number of belts.

Step 6 Installation and Takeup Allowances

- A. Calculate the center distance at the maximum diameter of the Variable Pitch Sheave to obtain the shortest possible center distance. Table No. D34 on Page D29, lists Minimum Center Distance Allowance for Installation. Provide enough center distance adjustment for the shortest center distance minus the installation allowance, so belts may be properly installed on the drive.
- B. Calculate the center distance at the minimum diameter of the Variable Pitch Sheave to obtain the longest possible center distance. Table No. D34 lists Minimum Center Distance Allowances for initial tensioning and subsequent takeup. Adjustment should be provided to allow movement to the maximum center distance plus the appropriate takeup listed in Table No. D34, so belt tension can be maintained throughout the life of the belt.

Sub Section II Engineering Design Considerations

All V-belt drives require proper installation procedures for optimum performance. In addition, topics such as the datum system, sheave rim speed limitations, efficiency, and tolerances are common to all Gates V-belt drives.

1. Efficiency
2. Sheave Diameter — Speed
3. Static conductivity
4. Datum System
5. Center Distance and Belt Length Estimation
6. Belt Length Tolerances
7. Belt Installation Tension
8. Center Distance Allowances for Installation and Tensioning
9. Drive Alignment
10. Belt Pull Calculations
11. Shaft/Bearing Load Calculations
12. Belt Storage and Handling

2. Sheave Diameter — Speed



Blanks in the lower right hand portions of the horsepower rating tables occur because sheave rim speed exceeds 6,500 feet per minute. Centrifugal forces developed beyond this speed may prohibit the use of stock gray cast iron sheaves. For rim speeds above 6,500 feet per minute, contact Gates Power Transmission Product Application for other alternatives.

1. Efficiency

Efficiency is defined (in terms of percent) using the following relationship:

Formula No. D12

$$1) \text{ Efficiency} = \frac{\text{HP Output}}{\text{HP Input}} \times 100$$

or

Formula No. D13

$$2) \text{ Efficiency} = \frac{\text{Torque Out} \times \text{RPM Out}}{\text{Torque In} \times \text{RPM In}} \times 100$$

The first form is the classical definition, the second form is more useful. When discussing the source of energy losses in a V-belt drive system, it is easier to relate those losses in terms of torque and speed (RPM). For V-belts, torque losses are due to hysteresis losses incurred from bending stresses imposed as the belt goes around the sheave. There are also frictional losses at the belt and sheave interface, and some windage losses as the belt moves through the air. Speed losses are the result of slip and belt creep. These combined energy losses affecting belt efficiency will be released in the form of heat the belt will run hotter on the drive. Gates recognizes that drive maintenance can, perhaps more than any other single source, affect belt efficiency, thus energy losses. Misalignment, worn sheave grooves and inadequate belt tension can account for a significant part of a V-belt drive system's inefficiency as much as 10% reduction in efficiency.

Before addressing the impact of some of the above discussed factors, remember that belt drives are a very efficient transmitter of power. A properly designed and maintained V-belt drive can yield efficiencies ranging from 95 to 98 percent. Considering some of the added benefits of V-belts (quiet, clean, versatile, inexpensive, non-lubricated, and low maintenance), they often surpass many other forms of power transmission (gears, chain).

3. Static Conductivity

Static discharge can pose a hazard on belt drives that operate in potentially explosive environments. Static discharge can also interfere with radios, electronic instruments, or controls used in a facility. While uncommon, static discharge can also cause bearing pitting if the discharge occurs through the bearing. Static conductivity is a required belt characteristic in these cases in order to prevent static discharge.

The **Rubber Manufacturer's Association (RMA)** has published **Bulletin IP 3-3** for static conductivity. Static conductivity testing involves using an ohmmeter to pass an electrical current with a nominal open circuit 500 volt potential through a belt. The test should be performed with the belt off of the belt drive. The belt's resistance is measured by placing electrodes 8.5 inches apart on the clean driving surface of the belt. A resistance reading of six (6) megohms or more constitutes a test failure. Belts that measure a resistance of 6 megohms or more are considered to be non-conductive. Belts that measure a resistance of less than 6 megohms are considered to be static conductive. A static conductive belt with a resistance of 6 megohms or less has sufficient conductivity to prevent measurable static voltage buildup, thus preventing a static discharge.

When a belt is used in a hazardous environment, additional protection must be employed to assure that there are no accidental static spark discharges. The portion of the belt that contacts the sprocket must be conductive to ensure that static charge is conducted into the drive hardware. V-belts must have a static conductive belt surface in contact with conductive sheave grooves. Unusual or excessive debris or contaminant on the belt contact surface or sheave grooves should be cleaned and removed.

Any belt drive system that operates in a potentially hazardous environment must be properly grounded. A continuous conductive path to ground is necessary to bleed off the static charge. This path includes a static conductive belt, a conductive sheave, a conductive bushing, a conductive shaft, conductive bearings, and the ground. As an additional measure of protection, a static-conductive brush or similar device should be employed to bleed off any residual static buildup that might remain around the belt. The user must ensure that belt drives operating in potentially hazardous or explosive environments are designed and installed in accordance with

existing building codes, OSHA requirements, and/or recognized safety-related organizations.

Please refer to Table D8 in the “Adverse Conditions” section for the static conductivity classification for Gates Heavy Duty V-Belts.

4. The “Datum” System

This manual reflects the industrial standard for classical V-belts (i.e., Hi-Power® II belts) and Hi-Power II (i.e., A, B, C, D cross-section) sheaves which include a change from the “Pitch” System to the recently adopted “Datum” System.

The term “Datum” was first adopted by the International Standards Organization (ISO 1081-1980) and recently by the Rubber Manufacturers’ Association Engineering Standard for Classical V-belt and Sheaves (IP-20-1988, Gates Form #14495-B). Classical sheaves were specified by pitch diameters until 1988, when the Datum System was adopted by the USA. This change was necessary because the nominal pitch diameter of a sheave no longer corresponded with the actual pitch line of the modern V-belt as it passes through the sheave groove.

Over several decades, construction improvements enhanced the performance of V-belts in many ways. New, advanced cord materials allowed the move from multiple unit tensile belts to high performance single unit tensile constructions which dramatically improved the horsepower capacity of V-belts. For example, a B-Section belt in 7.0 inch sheaves was rated at 4.2 HP (1750 RPM) by 1945 RMA standards. Today, a Gates Hi-Power II belt is rated at over 11 HP under the same conditions. This increased capacity is due in part to the move of the center of the tensile cord line to a location higher in the V-belt.

In general, the center of the tensile cord is associated with the pitch line. In the new higher position, the load carrying tensile has a greater torque carrying moment arm and more undercord support through which to transmit normal force to the sheave walls. In addition, manufacturers have determined that the optimum position for the tensile cord is very close to the outside diameter of a standard depth sheave. So the diameter through which the pitch line passes is nearly equal to the outside diameter for most belts.

By definition, the diameter through which the pitch line passes should be the pitch diameter. This is precisely what the Datum System accomplishes. Figure No. D19 illustrates the construction change and its effect on the location of the pitch line.

Originally, machining standards for classical sheaves were established with the pitch diameter as a basis. The system is built around the notion of constant “pitch width” as the basis for machining standards. The pitch width sheave specification is tabulated for each V-belt cross-section. Because V-belt cross-sections distort more as they bend around smaller sheaves, sheave groove angle is varied with sheave diameter.

In classical sheaves, the groove angle is pivoted about the old pitch width at the old pitch diameter. Figure D19 illustrates the old pitch system and the new Datum System as related to sheave angle. Note that Datum diameter/width directly replaces pitch diameter width as the “base” dimensions about which the machining dimensions are derived.

Because of the shortcomings of the old system, Datum diameters have been adopted by the industry as the means of designating sheave size. Datum diameters are now used to place an order for Classical sheaves. An old pitch diameter (PD) designated sheave is directly replaced by the new Datum diameter (DD) designation (i.e., old 8.0 inch Pitch Sheave = 8.0 inch Datum Sheave.)

Use of Datum versus pitch diameters is guided in manufacturers’ drive design manuals. Although all formulas remain the same, different values must be used for some calculations shown below.

To Calculate:	Previously Used:	Now Used:
Speed Ratio	Pitch Diameter	Pitch Diameter
Belt Speed	Pitch Diameter	Pitch Diameter
Horsepower	Pitch Diameter	Pitch Diameter
Rim Speed	Outside Diameter	Outside Diameter
Center Distance	Pitch Diameter and Pitch Length	Datum Diameter and Datum Length
Belt Length	Pitch Diameter	Datum Diameter
Center Distance Factor “h”	Pitch Diameter	Datum Diameter
Arc of Contact Corr Factor $K\phi$	Pitch or Outside Diameters	Datum, Pitch or Outside Diameters
Span Length	Pitch or Outside Diameters	Datum, Pitch or Outside Diameters

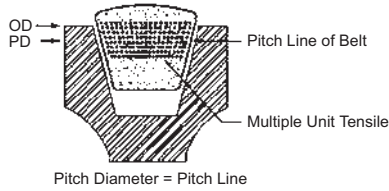
To simplify, modern pitch diameters are equivalent to outside diameters (OD) for standard depth sheaves for most belts. An exception is A-section belts or AX-section belts in A/B Combination Sheaves. Conversion values for PD to OD for these exceptions and DD to OD values are tabulated in manufacturers’ design manuals. The values for this relationship are found in Table No. D17 on Page D18.

Essentially, the Datum System removes complexity and inaccuracy from the V-belt drive design process. The challenge for power transmission professionals is using a new name for an old term.

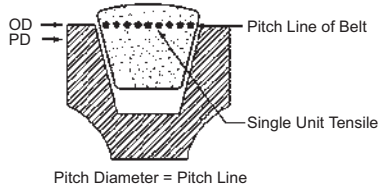
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4. The "Datum" System — continued

Approximate Neutral Axis of Multiple Unit (Layered) Cord Construction



Preferred Location of Belt Pitch Line (Tensile Location) With Newer Single Unit Cord



Datum Location of Current Belt Pitch Line For Datum System

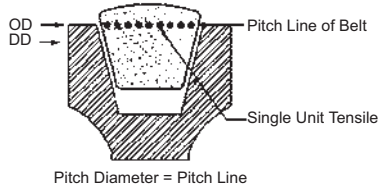


Figure No. D19

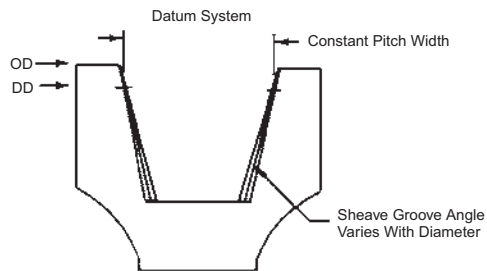
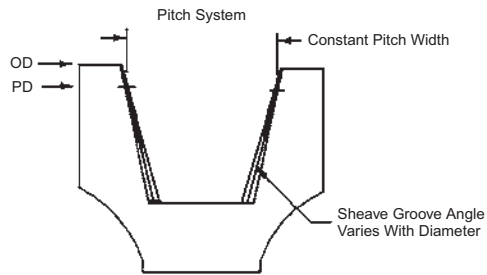


Figure No. D20

Table No. D17

Amount to Subtract from the Outside Diameter to Find Datum Diameter of a Grooved Sheave

V-Belt Cross Section		3V (in)	5V (in)	8V (in)	A* (in)	B* (in)	A (in)	B (in)	C (in)	D (in)
Standard Sheaves	Pitch	0.05	0.10	0.20	0.37	-0.08	0	0	0	0
	Datum	-	-	-	0.62	0.33	0.25	0.35	0.40	0.60
Deep Groove Sheaves	Pitch	0.268	0.420	0.724	-	-	-	0.36	0.61	0.83
	Datum	-	-	-	-	-	-	0.71	1.01	1.43

*Using a Multi-Duty® Sheave (Combination A and B).

Standard dimensions and variable definitions for sheave grooves can be found on pages C20 and C21.

Formula No. D14

Formulas: $O.D. = D.D. + 2h_d$
 $P.D. = D.D. + 2h_d - 2a_p$

Example: For an A Section belt in a Combination Sheave having a datum diameter of 10.6":
 Outside Diameter = 10.6" + 0.602 = 11.202"
 Pitch Diameter = 11.202" - 0.37" = 10.832"

NOTE: The datum system is used for classical V-belts (Eg. A, B, C, D) and Sheaves only.

5. Center Distance and Belt Length

Select the Center Distance and V-Belt Number

There are practically no center distance limits for Gates V-belt drives. They are especially well adapted for short center distances — which means more economical drives and more compact designs. But long center distances can be used just as well when required.

- A. If you do not already know a **tentative center distance**, a good estimate to use is equal to the large sheave diameter or $\frac{1}{2}(D + 3d)$, whichever is the larger. You can then find a tentative belt length by solving the following formula:

Formula No. D15

$$\text{Tentative Belt Length} = 1.57(D + d) + (\text{Tentative Center Distance} \times 2)$$

Where: **D** = diameter of large sheave
d = diameter of small sheave

NOTE: Belt length is Outside Circumference for all Super HC® belts, and Datum Length for HiPower® II or Tri-Power® Molded Notch belts.

D and d are Outside Diameters for Super HC, and Datum Diameters for Hi-Power II or Tri-Power Molded Notch.

- B. If your drive is to use an idler, see the Idler Section on Page D7 for the correct method of selecting a belt length and calculating center distance. If no idler used, go to the next step.
- C. Now select a **standard length V-belt** from tables on Pages B7, B8, B64 - B67, closest to the length obtained by solving the above formula. The actual center distance can then be calculated by a short, direct method, using the following formula:

Formula No. D16

$$\text{Actual Center Distance} = \frac{A - h(D - d)}{2}$$

Where: **A** = belt length - 1.57(D + d)
h = a center distance factor, depending on the value of $\frac{D-d}{A}$ from Table No. D18

NOTE: Belt length is Outside Circumference for all Super HC, and Datum Length for Hi-Power II or Tri-Power Molded Notch.
D and d are Outside Diameters for all Super HC, and Datum Diameters for Hi-Power II or Tri-Power Molded Notch.

C. (Alternate Method)

Many drive designers prefer to use a trial and error method rather than the above method. Usually the first or second trial at solving the following formula will yield an answer that is sufficiently close for all practical purposes:

Formula No. D17

$$\text{Belt Length} = 2C + 1.57(D + d) + \frac{(D - d)^2}{4C}$$

Where: **C** = Actual Center Distance

NOTE: Belt length is Outside Circumference for all Super HC, and Datum Length for Hi-Power II or Tri-Power Molded Notch.
D and d are Outside Diameters for all Super HC, and Datum Diameters for Hi-Power II or Tri-Power Molded Notch.

Table No. D18

Center Distance Factor "h"

$\frac{D-d}{A}$	Factor h	$\frac{D-d}{A}$	Factor h	$\frac{D-d}{A}$	Factor h	$\frac{D-d}{A}$	Factor h	$\frac{D-d}{A}$	Factor h	$\frac{D-d}{A}$	Factor h
0.00	0.00	0.12	0.06	0.23	0.12	0.34	0.18	0.43	0.24	0.51	0.30
0.02	0.01	0.14	0.07	0.25	0.13	0.35	0.19	0.44	0.25		
0.04	0.02	0.16	0.08	0.27	0.14	0.37	0.20	0.46	0.26		
0.06	0.03	0.18	0.09	0.29	0.15	0.39	0.21	0.47	0.27		
0.08	0.04	0.20	0.10	0.30	0.16	0.40	0.22	0.48	0.28		
0.10	0.05	0.21	0.11	0.32	0.17	0.41	0.23	0.50	0.29		

Heavy Duty V-Belt Drive Design Manual

V80® Belt Matching

Many V-belt drive applications use multiple belts where more than one belt is needed to transmit the required horsepower load.

The Rubber Manufacturers Association (RMA) Standards IP-20 and IP-22 specify permissible belt length variations within a set of classical or narrow industrial V-belts. For example, the manufactured lengths of industrial V-belts up to 63 inches must not vary by more than 0.15 inches within sets in order to share the load equally. If belt lengths vary more than this, the belts will not share the load evenly and belt performance will be negatively impacted.

The Gates V80 belt matching program yields classical and narrow V-belt products with tighter-than-RMA length tolerances. All belts included in this system are manufactured within the tolerance range recommended for matched V-belts, and are considered to be matched. Any V80 belt of a given length can run in a set with any other V80 belt of the same size and construction. Within Super HC®, Hi-Power II®, and Tri-Power® belts, the applicable V80 belts are:

V-belt drives should be installed with a normal “run-in” procedure. A “run-in” process consists of starting the drive, letting it run under full load, and then stopping, checking, and re-tensioning belts to recommended levels. Running belts under full load & re-tensioning them removes initial belt elongation and allows proper seating in sheave grooves. The recommended run-in time for most industrial belt drives is generally 24 to 48 hours. Belt “sag” will become less noticeable if not disappear after performing a proper run-in procedure.

Table No. D19

Molded Notch Construction	Banded Construction
Single V-Belts	Single V-Belts
3VX250-3VX1400	3V250-3V1400
5VX350-5VX2000	5V500-5V3550
8VX1000-8VX2000	8V1000-8V6000
AX21-AX173	A24-A200
BX24-BX300	B28-B472
CX51-CX360	C44-C450
XPZ604-XPZ3000	D98-D660
XPA630-3000	E144-E660
XPB1250-XPB3000	SPZ3150-SPZ3550
XPC1800-XPC3000	SPA3070-SPA4500
10X530LI-10X1750LI	SPB3150-SPB8000
13X715LI-13X4000LI	SPC3150-SPC10600
17X875LI-17X8636LI	
PowerBand® V-Belts	PowerBand V-Belts
3VX250-3VX1400	3V800-3V1400
5VX500-5VX2000	5V670-5V3550
	8V1000-8V6000
	A62-A180
	B62-B315
	C60-C420
	D144-D660

Industrial V-belts that are not manufactured within the V80 system are still grouped by the ‘old’ match number system which involves numbers printed on individual belts; each number representing a measured belt length range. These numbers are grouped in sequential order for matching according to length. The longer the belt length, the larger the sequential number range.

Long V80 belts within belt sets sometimes appear to hang unevenly when installed side by side on the same sheaves. It is very normal for belts to “sag” at different levels, even if manufactured within close matching tolerances. Extensive field tests prove that this “sag” has virtually no effect on either drive performance or the belts’ ability to share the load equally. All

6. Belt Length Tolerances

Table No. D20

Stock Belt Center Distance Tolerances		
Super HC Belts Belt Length Designation		Center Distance Tolerances (in)
Over 250	To 500	+/- 0.15
Over 500	To 800	+/- 0.20
Over 800	To 1000	+/- 0.25
Over 1000	To 1400	+/- 0.30
Over 1400	To 3000	+/- 0.40
Over 3000	To 4000	+/- 0.50
Over 4000	To 5000	+/- 0.60

Table No. D21

Stock Belt Center Distance Tolerances		
Hi Power II Belts Belt Length Designation		Center Distance Tolerances (in)
Over 26	To 35	+/- 0.30
Over 35	To 85	+/- 0.35
Over 85	To 144	+/- 0.40
Over 144	To 180	+/- 0.50
Over 180	To 210	+/- 0.55
Over 210	To 240	+/- 0.65
Over 240	To 300	+/- 0.80
Over 300	To 390	+/- 1.00
Over 390	To 660	+/- 1.65

Table No. D22

Belt Length Matching Limits		
Super HC Belts Belt Length Designation		Matching Limits Per Set (in)
Over 250	To 630	0.15
Over 630	To 1500	0.30
Over 1500	To 2500	0.45
Over 2500	To 3750	0.60
Over 3750	To 5000	0.75

Table No. D23

Belt Length Matching Limits		
Hi Power II Belts Belt Length Designation		Matching Limits Per Set (in)
Over 26	To 60	0.15
Over 60	To 144	0.30
Over 144	To 240	0.45
Over 240	To 360	0.60
Over 360	To 480	0.75
Over 480	To 660	0.90

Table No. D24

Match Group by Belt Length	
Belt Length	Matching Limit
Up to 100"	One Group Number
100 to 200"	Two Group Numbers
200 to 300"	Three Group Numbers
300 to 400"	Four Group Numbers
400 to 500"	Five Group Numbers
Over 500"	Six Group Numbers

Heavy Duty V-Belt Drive Design Manual

7. V-Belt Installation Tension

Principles of Tension Ratio

In order for a belt drive to transmit power, there must be a differential between the tight and slack side span tensions thus resulting in a net effective pull. The ratio of tight side span tension to slack side span tension in a belt drive, while transmitting power, is known as **tension ratio**. This ratio is a function of drive torque loads, as well as the magnitude of belt pre-tensioning. Tension ratio is defined by Formula D18.

Formula No. D18

$$TR = T_T / T_S \quad \text{where} \quad \begin{array}{l} TR = \text{Tension Ratio} \\ T_T = \text{Tight Side Span Tension (lb)} \\ T_S = \text{Slack Side Span Tension (lb)} \end{array}$$

Torque loads and belt pre-tensioning both have a direct impact on the magnitude of tight side and slack side span tensioners, as well as on the **operating tension ratio**.

Drive System Comparison:

Different types of drive systems perform at various **tension ratios** based upon their operating characteristics as well as their design. Figure No. D21 provides a listing of the most common types of drive systems along with their **design tension ratio**, assuming a belt wrap angle, or arc of contact, of 180 degrees.

Flat Belt Drives:	2.5:1
Micro-V Belt Drives:	4:1
V-Belt Drives:	5:1
V-Belt-Spring Tensional Drives:	7:1

Figure No. D21

Design Tension Ratios (180° wrap)

belt tension decay, however, the **operating tension ratio** must remain low enough for the drive to continue to transmit power. If the **operating tension ratio** increases beyond reasonable limits, V-belts will begin slipping.

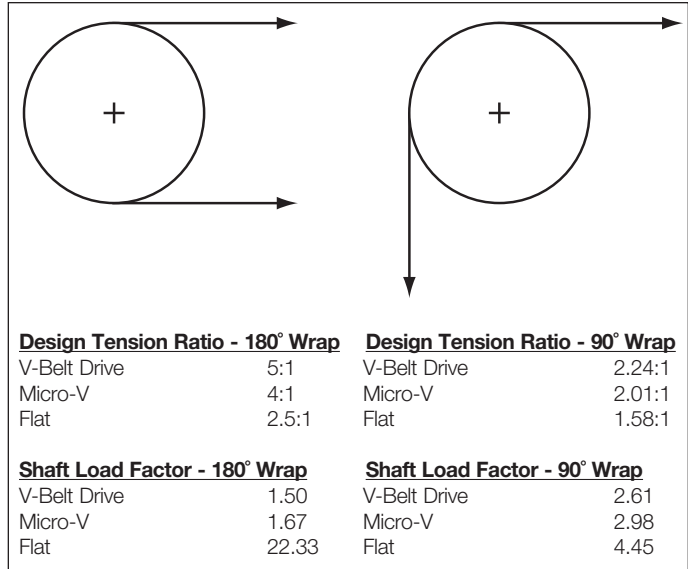


Figure No. D23

Effect of Wrap Angle On Design Tension Ratio

Effect On Belt Pull:

As the **tension ratio** decreases (towards 1:1), the slack side span tension increases, approaching the magnitude of the tight side span tension. For a belt drive under a given load, the **tension ratio** will decrease from its initial design value as the belt installation tension is increased. This results in increased belt pull.

As the **tension ratio** increases (toward infinity), the slack side span tension decreases, ultimately approaching zero. As slack side span tension is decreased, belt pull (shaft load) is also decreased. Figure No. D22 illustrates the effect that tension ratio has on shaft load.

Tension Ratio	Shaft Load Factor
7:1	1.33
5:1	1.50
4:1	1.67
2.5:1	2.33

Figure No. D22

Effect of Tension Ratio On Shaft Load

Effect On Belt Wrap Angle/Arc Of Contact:

The **design tension ratio** of "V" type drives must be decreased as the **belt wrap angle** or **arc of contact** on the critical sheave is reduced from 180 degrees in order to maintain adequate friction levels to transmit power. In other words, belt installation tension and belt pull increase as **belt wrap angle** is reduced due to speed ratio, drive geometry, etc.

Figure No. D23 compares the effects of wrap angle on **design tension ratio** in synchronous belt, and V-belt drives.

Tension Ratio — Effect Of Belt Tension Decay:

In practical terms, a belt operates at its **design tension ratio** only at the point of its initial installation. Belt tension decays rather rapidly at first, until it reaches a point of relative stability. At the point of relative stability, the **operating tension ratio** is higher than its **design tension ratio**. After

7. V-Belt Installation Tension – continued

General Guidelines

A few simple rules about tensioning will satisfy most of your requirements:

1. The best tension for a V-belt drive is the lowest tension at which the belts will not slip under the highest load condition.
2. Check the tension on a new drive frequently during the first day of operation.

3. Check the drive tension periodically, thereafter.

4. Too much tension shortens belt and bearing life.

5. Keep belts and sheaves free from any foreign material which may cause slip.

6. If a V-belt slips, **tighten it.**

NOTE: Do not use this section if your drive uses a spring-loaded idler or other means of automatic drive tensioning. See your local Gates representative.

Standard Belt Tensioning Procedure

When installing Gates V-belts:

A. Be sure they are tensioned adequately to prevent slippage under the most severe load conditions which the drive will encounter during operation.

B. Avoid extremely high tension which can reduce belt life and possibly damage bearings, shafts and other drive components.

The proper way to check belt tension is to use a tension tester. Gates has a variety of tension testers, ranging from the simple spring scale type tester to the sophisticated Sonic Tension Meter. The spring scale type tester is used by measuring how much force is required to deflect the belt at the center of its span by a specified distance (force deflection method), as shown in the sketch below.

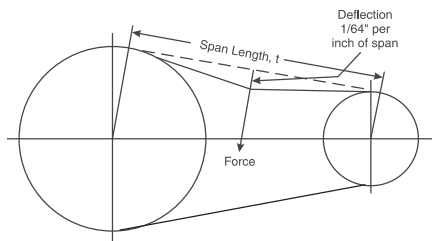


Figure No. D24

The Sonic Tension Meter measures the vibration of the belt span and instantly converts the vibration frequency into belt static-tension (span vibration method).

When you wish to use a numerical method for calculating recommended belt installation tension values, the following procedure may be used.

Table No. D25

Belt Unit Weight Values

For a single V-belt, enter 1 rib/strand. When measuring a PowerBand® (multiple) rib/strand belt, enter the number of ribs/strands per belt. Units are grams/meter per rib or strand.

Super HC®	
3V	72
5V	200
8V	510
3VX	61
5VX	158
Super HC® PowerBand®	
3V	96
5V	241
8V	579
3VX	70
5VX	185
Predator® Singles	
3V	96
5V	241
5VP	198
8VP	513
AP	114
BP	174
CP	324
SPBP	208
SPCP	377
Predator® PowerBand®	
3VP	89
5VP	217
8VP	528
BP	212
CP	332
Hi Power® II	
A	96
B	168
C	276
D	554
E	799
Hi Power® II PowerBand®	
A	151
B	200
C	342
D	663

Tri-Power®	
AX	85
BX	144
CX	232
Hi Power® II Dobl-V	
AA	125
BB	194
CC	354
DD	750
Metric Power™ Lengths ≤ 3000mm	
XPZ	51
XPA	87
XPB	156
XPC	249
10X	44
13X	86
17X	139
Metric Power™ Lengths > 3000mm	
SPZ	72
SPA	115
SPB	186
SPC	337
13X	100
17X	171
Truflex®	
2L	22
3L	44
4L	77
5L	125
PowerRated®	
67 (3L)	52
68 (4L)	83
69 (5L)	138

Heavy Duty V-Belt Drive Design Manual

7. V-Belt Installation Tension - continued

Regular V-Belt Tensioning Method

Step 1 Calculate the Required Base Static Installation Tension Per Strand of Belt (Static Tension)

A. The static tension per strand (T_{st}) is given by this formula:

Formula No. D19

$$T_{st} = 15 \left(\frac{2.5^\circ - K\phi}{K\phi} \right) \left(\frac{(\text{Motor HP}) (10^3)}{(N)(V)} \right) + \frac{MV^2}{10^6}$$

Where: $K\phi$ = arc correction factor from Table No. D26 or Table No. D11 on Page D12 for V-Flat drives.

N = Number of belts.
(This is the number of strands in the case of PowerBand® Belts.)

V = Belt speed, ft./min.

M = Constant from Table No. D27.

*2.67 for Micro-V® Belts.

Table No. D26

Arc of Contact Correction Factor $K\phi$ for V-V Drives

$\frac{D-d}{C}$	Arc of Contact on Small Sheave (°)	Factor $K\phi$	
		A, B, C, D 3V, 5V, 8V 5M, 7M, 11M	Micro-V J, L, M
0.00	180	1.00	1.00
0.10	174	0.99	0.98
0.20	169	0.97	0.97
0.30	163	0.96	0.95
0.40	157	0.94	0.94
0.50	151	0.93	0.92
0.60	145	0.91	0.90
0.70	139	0.89	0.88
0.80	133	0.87	0.85
0.90	127	0.85	0.83
1.00	120	0.82	0.80
1.10	113	0.80	0.77

Table No. D27

Factor M and Factor Y

Cross Section	M	Y
Super HC® Molded Notch 3VX	0.29	4
5VX	0.78	13
Super HC® Molded Notch PowerBand® 3VX	0.39	4
5VX	0.98	13
Super HC 5V	1.0	11
8V	2.6	22
Super HC PowerBand 3V	0.46	4
5V	1.2	11
5VP	1.2	39
8V	3.0	22
Hi-Power® II A	0.51	7
B	0.80	8
C	1.5	18
D	3.0	27
Hi-Power II PowerBand A	0.66	7
B	1.0	9
C	1.8	18
D	3.4	28
Tri-Power® Molded Notch AX	0.47	7
BX	0.76	8
CX	1.31	15
Micro-V® Belt J*	0.035	0.56
L	0.130	1.90
M	0.520	6.30
Polyflex® JB® 5M**	0.05	1.2
7M	0.14	4.6
11M	0.31	8.5
Predator Singles AP	0.56	21
BP	0.84	38
CP	1.6	87
3VP	NA	NA
5VP	0.96	42
8VP	2.5	105
Predator PowerBand AP	NA	NA
BP	1.0	40
CP	1.6	89
3VP	0.46	8.8
5VP	1.2	39
8VP	3.0	105

NOTE: When applying static belt tension values directly, multiply the required base static installation tension (T_{st}) calculated in Formula D19 by the following factors:

For New Belts:

Minimum Static Tension = 1.0 x T_{st}

Minimum Static Tension = 1.1 x T_{st}

For Used Belts:

Minimum Static Tension = 0.7 x T_{st}

Minimum Static Tension = 0.8 x T_{st}

Step 2 Calculate the Minimum and Maximum Recommended Forces to Deflect One Belt 1/64" Per Inch of Span Length

A. Measure the span length (t) of your drive (see sketch).

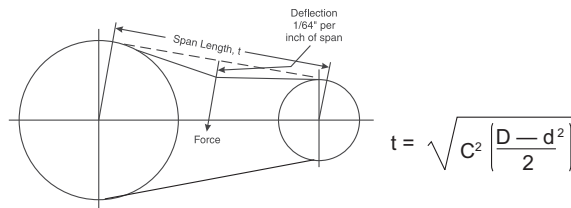


Figure No. D25

B. If your drive uses **two or more** PowerBand Belts or individual belts, calculate the lower and upper recommended deflection forces by these formulas:

Formula No. D20

$$\text{Minimum Recommended Force} = \frac{1.4 T_{st} + Y}{16}$$

Formula No. D21

$$\text{Maximum Recommended Force} = \frac{1.5 T_{st} + Y}{16}$$

Where: T_{st} = tension per strand from Step 1.

Y = constant from Table No. D27.

C. If your drive has only **one** PowerBand Belt (See Step D) or individual belt, calculate the lower and upper recommended deflection forces by these formulas:

Formula No. D22

$$\text{Minimum Recommended Force} = \frac{1.4 T_{st} + \left(\frac{t}{L}\right) Y}{16}$$

Formula No. D23

$$\text{Upper Recommended Force} = \frac{1.5 T_{st} + \left(\frac{t}{L}\right) Y}{16}$$

Where: T_{st} = tension per strand from Step 1.

Y = constant from Table No. D27.

t = span length (see Figure No. D25).

L = belt length

D. The deflection forces calculated in Step 2B or 2C are for an individual belt. Multiply these forces by the number of individual strands in a band to get the lower and upper recommended forces for a PowerBand Belt. (If your drive uses 2 or more PowerBand Belts, use the band with the fewest number of strands.)

7. V-Belt Installation Tension - continued

Regular V-Belt Tensioning Method

Step 3 Applying the Tension

Force Deflection Tension Method

- A. At the center of the span(t) measure the force required to deflect one belt on the drive $1/64$ " per inch of span length from its normal position. Be sure to apply the force perpendicular to the belt. See Figure No. D27 on Page D28. If your drive is a single belt drive or uses only one PowerBand Belt, be sure that at least one sheave is free to rotate.
- B. If the measured force is less than the minimum recommended force, the belts should be tightened. If it is more than the maximum recommended force, the drive is tighter than it needs to be.

Span Vibration Tension Method

The Sonic Tension Meter detects the vibration frequency in the belt span, and converts that measurement into the actual static tension in the belt. To use the Sonic Tension Meter, begin by entering the belt unit weight, belt width, and the span length. To measure the span vibration, press the "Measure" button on the meter, tap the belt span, and hold the microphone approximately $1/4$ " away from the back of the belt. The Sonic Tension Meter will display the static tension, and can also display the span vibration frequency.

The belt unit weights for use with the Gates Sonic Tension Meter are shown in Table No D25.

Elongation Method for Tensioning PowerBand Belts

When the cross section and number of strands in a Gates PowerBand Belt become so large that the deflection force is greater than can reasonably be imposed on the belt, a method of measuring tension other than the deflection method may be used.

The alternate method of checking PowerBand Belt tension is the Elongation Method. The principle is simple. A known amount of tension elongates a belt a known amount. Therefore the elongation of a PowerBand Belt as it is installed on a drive and tensioned is a measure of the static tension in the belt.

Step 1 Find the Required Tension Per Strand of Belt (Static Tension)

- A. Find the **required static tension**, T_{st} , using Formula No. D19 in Step 1A of the Regular V-Belt Tensioning Method
- B. Find a range or recommended tensions.
Minimum Tension = $1.4 \times T_{st}$
Maximum Tension = $1.5 \times T_{st}$

Step 2 Find the Amount to Elongate the Belt (On the Drive) to Obtain the Above Tension

- A. Measure the **outside circumference** of the belt at no tension. This can be done with the belt either on or off the drive.

NOTE: If you are retensioning a used drive, slack off on the drive until there is no tension, then tape the outside circumference of the belt while it is still on the drive.

- B. Find the correct **belt length multiplier** from Table No. D28 on Page D26 for each of the static tensions you calculated above.
- C. Multiply the taped outside circumference of the PowerBand Belt of each of the belt length multipliers. This gives the **elongated outside circumference** of the PowerBand Belt corresponding to each of the calculated tensions.

Step 3 Tension the Drive

- A. With the PowerBand Belt installed on the drive, tighten it until the taped outside circumference falls between the elongated outside circumferences calculated above.

Heavy Duty V-Belt Drive Design Manual

7. V-Belt Installation Tension – continued

Table No. D28

Belt Length Multipliers for Tensioning PowerBand Belts

Tst Per Strand (lb)	Super HC Molded Notch PowerBand Belts, Super HC PowerBand Belts & Predator PowerBand Belts							Hi-Power II PowerBand Belts					
	Cross Section												
	3V	3VX	5V	5VX	5VP	8V	8VP	A Equal To or Less Than 210" Length	B Equal To or Less Than 210" Length Over 210" Length		C Equal To or Less Than 210" Length Over 210" Length		D
10	1.00122	1.00091	1.00053	1.00033	1.00014	1.00029	1.00006	1.00048	1.00042	1.00050	1.00025	1.00033	1.00017
12	1.00146	1.00109	1.00063	1.00040	1.00017	1.00034	1.00007	1.00057	1.00050	1.00060	1.00030	1.00040	1.00021
14	1.00171	1.00127	1.00074	1.00047	1.00020	1.00040	1.00008	1.00067	1.00058	1.00070	1.00035	1.00047	1.00024
16	1.00195	1.00145	1.00084	1.00053	1.00023	1.00046	1.00009	1.00076	1.00067	1.00080	1.00040	1.00053	1.00028
18	1.00220	1.00164	1.00095	1.00060	1.00026	1.00051	1.00011	1.00086	1.00075	1.00090	1.00045	1.00060	1.00031
20	1.00244	1.00182	1.00105	1.00067	1.00029	1.00057	1.00012	1.00095	1.00083	1.00100	1.00050	1.00067	1.00034
24	1.00293	1.00218	1.00126	1.00080	1.00034	1.00069	1.00014	1.00114	1.00100	1.00120	1.00060	1.00080	1.00041
28	1.00341	1.00255	1.00147	1.00093	1.00040	1.00080	1.00016	1.00133	1.00117	1.00140	1.00070	1.00093	1.00048
32	1.00390	1.00291	1.00168	1.00107	1.00046	1.00091	1.00019	1.00152	1.00133	1.00160	1.00080	1.00107	1.00055
36	1.00439	1.00327	1.00189	1.00120	1.00051	1.00103	1.00021	1.00171	1.00150	1.00180	1.00090	1.00120	1.00062
40	1.00488	1.00364	1.00211	1.00133	1.00057	1.00114	1.00024	1.00190	1.00167	1.00200	1.00100	1.00133	1.00069
45	1.00549	1.00409	1.00237	1.00150	1.00064	1.00129	1.00026	1.00214	1.00188	1.00225	1.00113	1.00150	1.00078
50	1.00610	1.00455	1.00263	1.00167	1.00071	1.00143	1.00029	1.00238	1.00208	1.00250	1.00125	1.00167	1.00086
55	1.00671	1.00500	1.00289	1.00183	1.00079	1.00157	1.00032	1.00262	1.00229	1.00275	1.00138	1.00183	1.00095
60	1.00732	1.00545	1.00316	1.00200	1.00086	1.00171	1.00035	1.00286	1.00250	1.00300	1.00150	1.00200	1.00103
65	1.00793	1.00591	1.00342	1.00217	1.00093	1.00186	1.00038	1.00310	1.00271	1.00325	1.00163	1.00217	1.00112
70	1.00854	1.00636	1.00368	1.00233	1.00100	1.00200	1.00041	1.00333	1.00292	1.00350	1.00175	1.00233	1.00121
75	1.00915	1.00682	1.00395	1.00250	1.00107	1.00214	1.00044	1.00357	1.00313	1.00375	1.00188	1.00250	1.00129
80	1.00976	1.00727	1.00421	1.00267	1.00114	1.00229	1.00047	1.00381	1.00333	1.00400	1.00200	1.00267	1.00138
85	1.01037	1.00773	1.00447	1.00283	1.00121	1.00243	1.00050	1.00405	1.00354	1.00425	1.00213	1.00283	1.00147
90	1.01098	1.00818	1.00474	1.00300	1.00129	1.00257	1.00053	1.00429	1.00375	1.00450	1.00225	1.00300	1.00155
95	1.01159	1.00864	1.00500	1.00317	1.00136	1.00271	1.00056	1.00452	1.00396	1.00475	1.00238	1.00317	1.00164
100	1.01220	1.00909	1.00526	1.00333	1.00143	1.00286	1.00059	1.00476	1.00417	1.00500	1.00250	1.00333	1.00172
120	1.01463	1.01091	1.00632	1.00400	1.00171	1.00343	1.00071	1.00571	1.00500	1.00600	1.00300	1.00400	1.00207
140	1.01707	1.01273	1.00737	1.00467	1.00200	1.00400	1.00082	1.00667	1.00583	1.00700	1.00350	1.00467	1.00241
160	1.01951	1.01455	1.00842	1.00533	1.00229	1.00457	1.00094	1.00762	1.00667	1.00800	1.00400	1.00533	1.00276
180	1.02195	1.01636	1.00947	1.00600	1.00257	1.00514	1.00106	1.00857	1.00750	1.00900	1.00450	1.00600	1.00310
200	1.02439	1.01818	1.01053	1.00667	1.00286	1.00571	1.00118	1.00952	1.00833	1.01000	1.00500	1.00667	1.00345
240	1.02927	1.02182	1.01263	1.00800	1.00343	1.00686	1.00141	1.01143	1.01000	1.01200	1.00600	1.00800	1.00414
280	1.03415	1.02545	1.01474	1.00933	1.00400	1.00800	1.00165	1.01333	1.01167	1.01400	1.00700	1.00933	1.00483
320	1.03902	1.02909	1.01684	1.01067	1.00457	1.00914	1.00188	1.01524	1.01333	1.01600	1.00800	1.01067	1.00552
360	1.04390	1.03273	1.01895	1.01200	1.00514	1.01029	1.00212	1.01714	1.01500	1.01800	1.00900	1.01200	1.00621
400	1.04878	1.03636	1.02105	1.01333	1.00571	1.01143	1.00235	1.01905	1.01667	1.02000	1.01000	1.01333	1.00690
450	1.05488	1.04091	1.02368	1.01500	1.00643	1.01286	1.00265	1.02143	1.01875	1.02250	1.01125	1.01500	1.00776
500	1.06098	1.04545	1.02632	1.01667	1.00714	1.01429	1.00294	1.02381	1.02083	1.02500	1.01250	1.01667	1.00862
550	1.06707	1.05000	1.02895	1.01833	1.00786	1.01571	1.00324	1.02619	1.02292	1.02750	1.01375	1.01833	1.00948
600	1.07317	1.05455	1.03158	1.02000	1.00857	1.01714	1.00353	1.02857	1.02500	1.03000	1.01500	1.02000	1.01034
650	1.07927	1.05909	1.03421	1.02167	1.00929	1.01857	1.00382	1.03095	1.02708	1.03250	1.01625	1.02167	1.01121
700	1.08537	1.06364	1.03684	1.02333	1.01000	1.02000	1.00412	1.03333	1.02917	1.03500	1.01750	1.02333	1.01207
750	1.09146	1.06818	1.03947	1.02500	1.01071	1.02143	1.00441	1.03571	1.03125	1.03750	1.01875	1.02500	1.01293
800	1.09756	1.07273	1.04211	1.02667	1.01143	1.02286	1.00471	1.03810	1.03333	1.04000	1.02000	1.02667	1.01379
850	1.10366	1.07727	1.04474	1.02833	1.01214	1.02429	1.00500	1.04048	1.03542	1.04250	1.02125	1.02833	1.01466
900	1.10976	1.08182	1.04737	1.03000	1.01286	1.02571	1.00529	1.04286	1.03750	1.04500	1.02250	1.03000	1.01552
950	1.11585	1.08636	1.05000	1.03167	1.01357	1.02714	1.00559	1.04524	1.03958	1.04750	1.02375	1.03167	1.01638
1000	1.12195	1.09091	1.05263	1.03333	1.01429	1.02857	1.00588	1.04762	1.04167	1.05000	1.02500	1.03333	1.01724

Given:

Existing Drive

Motor Horsepower = 90
 DriveR = 6 grooves 5V 11.8" O.D.
 DriveR RPM = 870
 DriveN = 6 grooves 5V 46.0" O.D.
 V-Belts = 5VX1800
 Center Distance = 41.0"
 Belt Speed = 2665 ft./min.
 Factor $K\phi = 0.86$

This drive meets all the requirements for the Simplified Tensioning Method except it uses one more belt than the number recommended, so simplified tensioning would put more tension in the drive than needed. Use the regular V-belt tensioning method shown below.

Step 1 Find the Required Tension Per Strand of Belt, Using Formula No. D19 on Page D24.

$$T_{st} = 15 \left(\frac{2.5 - 0.86}{0.86} \right) \left[\frac{(90)(1000)}{(6)(2665)} \right] + \frac{(0.78)(2665)^2}{10^6}$$

$$= (15)(1.91)(5.63) + 5.54$$

$$= 161.3 + 7.10 = 166.8 \text{ or } 167 \text{ lb}$$

Step 2 Lower and Upper Forces for Deflection of One Belt.

A. Span length can be calculated from Formula No. D35 of Page D45.

$$t = 41.0 [1 - 0.125 (0.83)^2]$$

$$= 41.0 (1 - 0.0861)$$

$$= 37.5"$$

The deflection should be $\frac{38}{64}"$ or $\frac{19}{32}"$

B. Minimum recommended force = $\frac{(167)(1.4) + 13}{16} = 15.4 \text{ lb}$

Maximum recommended force = $\frac{(167)(1.5) + 13}{16} = 15.8 \text{ lb}$

Approximate Force Deflection Method

Though recommended, numerical methods of calculating belt tension may not always be possible to apply. In such cases, an approximate method requires fewer application parameters and allows belt deflection forces to be selected from tables. While relatively quick and easy, it should be noted that belt tension levels may be higher than with numerical methods in order to maintain adequate tension levels over the broad table ranges. This can result in higher than necessary forces on the shaft & bearings.

Heavy Duty V-Belt Drive Design Manual

7. V-Belt Installation Tension – continued

Approximate Force Deflection Method

Table No. D29

Recommended Deflection Force Per Belt For Super HC V-Belts, Super HC PowerBand Belts, Super HC Molded Notch V-Belts, Super HC Molded Notch PowerBand Belts

V-Belt Cross Section	Small Sheave Diameter Range (inches)	Small Sheave RPM Range	Speed Ratio Range	Recommended Deflection Force (lb)	
				Minimum	Maximum
3V	2.65 - 2.80	1200 - 3600	2.00 to 4.00	3.0	4.3
	3.00 - 3.15	1200 - 3600		3.3	4.8
	3.35 - 3.65	1200 - 3600		3.7	5.4
	4.12 - 5.00	900 - 3600		4.4	6.4
	5.30 - 6.90	900 - 3600		4.8	7.1
3VX	2.20 - 2.35	1200 - 3600	2.00 to 4.00	2.8	4.1
	2.65 - 2.80	1200 - 3600		3.2	4.7
	3.00 - 3.15	1200 - 3600		3.5	5.1
	3.35 - 3.65	1200 - 3600		4.1	6.0
	4.12 - 5.00	900 - 3600		4.8	7.1
5V	7.10 - 8.00	600 - 1800	2.00 to 4.00	11.0	16.0
	8.50 - 10.90	600 - 1800		13.0	18.0
	11.80 - 16.00	400 - 1200		14.0	21.0
5VX	4.40 - 4.65	1200 - 3600	2.00 to 4.00	9.0	13.0
	4.90 - 5.50	1200 - 3600		10.0	15.0
	5.90 - 6.70	1200 - 3600		11.0	17.0
	7.10 - 8.00	600 - 1800		13.0	19.0
	8.50 - 10.90	600 - 1800		14.0	21.0
8V	11.80 - 16.00	400 - 1200	2.00 to 4.00	15.0	23.0
	12.50 - 17.00	600 - 1200		28.0	41.0
	18.00 - 22.40	400 - 900		32.0	48.0

Table No. D30

Recommended Deflection Force Per Belt For Predator V-Belts or Predator PowerBand Belts

V-Belt Cross Section	Small Sheave Diameter Range (inches)	Small Sheave RPM Range	Speed Ratio Range	Recommended Deflection Force (lb)	
				Minimum	Maximum
5VP	7.10 - 8.00	600 - 1800	2.00 to 4.00	19.0	28.0
	8.50 - 10.90	600 - 1800		24.0	36.0
	11.80 - 16.00	400 - 1200		30.0	45.0
	12.50 - 14.00	600 - 1200		40.0	59.0
	15.00 - 17.00	600 - 1200		52.0	77.0
8VP	18.00 - 22.40	400 - 900	4.00	66.0	98.0

Table No. D31

Recommended Deflection Force Per Belt For Hi-Power II V-Belts, Hi-Power II PowerBand Belts, Tri-Power Molded Notch V-Belts

V-Belt Cross Section	Small Sheave Diameter Range (inches)	Small Sheave RPM Range	Speed Ratio Range	Recommended Deflection Force (lb)			
				Hi-Power II		Tri-Power Molded Notch	
				Minimum	Maximum	Minimum	Maximum
A AX	3.0	1750 to 3600	2.00 to 4.00	2.7	3.8	3.8	5.4
	3.2			2.9	4.2	3.9	5.6
	3.4 - 3.6			3.3	4.8	4.1	5.9
	3.8 - 4.2			3.8	5.5	4.3	6.3
	4.6 - 7.0			4.9	7.1	4.9	7.1
B BX	4.6	1160 to 1800	2.00 to 4.00	5.1	7.4	7.1	10.0
	5.0 - 5.2			5.8	8.5	7.3	11.0
	5.4 - 5.6			6.2	9.1	7.4	11.0
	6.0 - 6.8			7.1	10.0	7.7	11.0
	7.4 - 9.4			8.1	12.0	7.9	12.0
C CX	7.0	870 to 1800	2.00 to 4.00	9.1	13.0	12.0	18.0
	7.5			9.7	14.0	12.0	18.0
	8.0 - 8.5			11.0	16.0	13.0	18.0
	9.0 - 10.5			12.0	18.0	13.0	19.0
	11.0 - 16.0			14.0	21.0	13.0	19.0
D	12.0 - 13.0	690 to 1200	2.00 to 4.00	19.0	27.0		
	13.5 - 15.5			21.0	30.0		
	16.0 - 22.0			24.0	36.0		

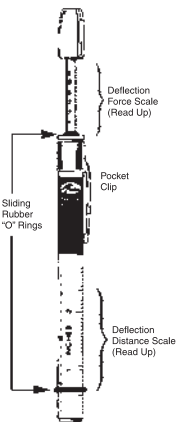
Table No. D32

Recommended Deflection Force Per Belt For Predator V-Belts

V-Belt Cross Section	Small Sheave Diameter Range (inches)	Small Sheave RPM Range	Speed Ratio Range	Force (lb)	
				Minimum	Maximum
AP	3.0 - 3.2	1750 to 3600	2.00 to 4.00	4.2	6.1
	3.4 - 3.6			5.0	7.4
	3.8 - 4.2			5.8	8.6
	4.6 - 5.0			6.9	10.1
	5.2 - 7.0			8.0	11.8
BP	4.6 - 5.0	1160 to 1800	2.00 to 4.00	10.0	15.0
	5.2 - 5.6			12.0	17.0
	6.0 - 6.8			14.0	20.0
	7.4 - 9.4			17.0	24.0
	7.0			17.0	25.0
CP	7.5	870 to 1800	2.00 to 4.00	19.0	27.0
	8.0 - 9.0			22.0	31.0
	9.5 - 11.0			26.0	37.0
	12.0 - 16.0			30.0	45.0

*Note: This information is for Horsepower Ratings which are mentioned in this manual only. Use with older drives could result in overtensioning.

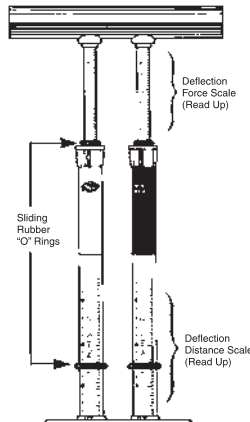
— up to 30 lb



Read the scales at the bottom edge of the "O" Ring. Leave the upper "O" Ring in maximum "down" position

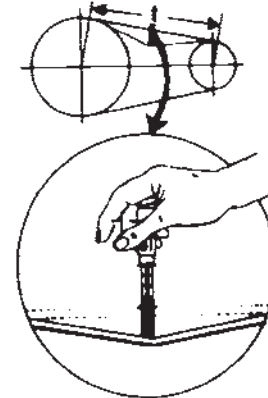
Figure No. D26

— up to 66 lb



Read the scales at the bottom edge of the "O" Ring. Leave the upper "O" Ring in maximum "down" position

Figure No. D27



Part No. Force Limitation

7401-0076 Up to 30 lb
7401-0075* Up to 66 lb

*Dual Tensioner

NOTE: Lay a steel bar or a narrow block of wood across the PowerBand® belt and apply the deflection force to the bar so that all of the individual strands in the band are deflected the same amount. If more than one PowerBand Belt is used on the drive, the neighboring band can be used as a reference for measuring the deflection, just as is done with individual V-belts. If only one band is used, lay a straightedge or stretch a string from sheave-to-sheave to use as a reference for measuring deflection. Lay the straightedge or string across the back of the PowerBand Belt on the sheaves.

In tensioning Gates PowerBand Belts, multiply the pounds of deflection forces by the number of belts in the band. The tension tester can be applied as indicated above to deflect the entire PowerBand Belt, providing a small board or metal plate is placed on top of the band so that all belts in the band are deflected a uniform amount. A straight-edge can be laid across the sheaves to use as a reference for measuring deflection.

Heavy Duty V-Belt Drive Design Manual

8. Center Distance Allowances for Installation and Tensioners

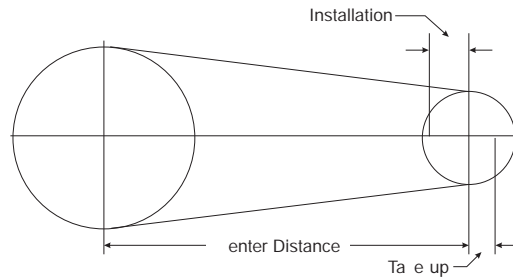


Figure No. D28

Table No. D33

Minimum Center Distance Allowances For Belt Installation and Takeup
Super HC Belts

V-Belt No.	Minimum Center Distance Allowance For Installation (in)						Minimum Center Distance Allowance For Initial Tensioning and Subsequent Takeup (in)	
	3V/3VX		5V/5VX		8V/8VX		All Cross Sections	
	Super HC V-Belt	Super HC PowerBand Belt	Super HC V-Belt	Super HC PowerBand Belt	Super HC V-Belt	Super HC PowerBand Belt	All Types	
0 through 475	0.5	1.2	1.0	2.1			1.0	
476 through 710	0.8	1.4	1.0	2.1			1.2	
711 through 1060	0.8	1.4	1.0	2.1	1.5	3.4	1.5	
1061 through 1250	0.8	1.4	1.0	2.1	1.5	3.4	1.8	
1251 through 1700	0.8	1.4	1.0	2.1	1.5	3.4	2.2	
1701 through 2000			1.0	2.1	1.8	3.6	2.5	
2001 through 2360			1.0	2.4	1.8	3.6	3.0	
2361 through 2650			1.2	2.4	1.8	3.6	3.2	
2651 through 3000			1.2	2.4	1.8	3.6	3.5	
3001 through 3550			1.2	2.4	2.0	4.0	4.0	
3551 through 3750					2.0	4.0	4.5	
3751 through 5000					2.0	4.0	5.5	
5001 through 6000					2.0	4.0	6.0	

Table No. D34

Minimum Center Distance Allowances For Belt Installation and Takeup
Hi-Power II and Tri-Power Belts

V-Belt No.	Minimum Center Distance Allowance For Installation (In)								Minimum Center Distance Allowance For Initial Tensioning and Subsequent Takeup (in)	
	A		B		C		D		All Cross Sections	
	Hi-Power II & Tri-Power Molded Notch V-Belts	Hi-Power II PowerBand Belt	Hi-Power II & Tri-Power Molded Notch V-Belts	Hi-Power II PowerBand Belt	Hi-Power II & Tri-Power Molded Notch V-Belts	Hi-Power II PowerBand Belt	Hi-Power II & Tri-Power Molded Notch V-Belts	Hi-Power II PowerBand Belt	All Types	
0 through 35	0.75	1.20	1.00	1.50					1.00	
36 through 55	0.75	1.20	1.00	1.50	1.50	2.00			1.50	
56 through 85	0.75	1.30	1.25	1.60	1.50	2.00			2.00	
86 through 112	1.00	1.30	1.25	1.60	1.50	2.00			2.50	
113 through 144	1.00	1.50	1.25	1.80	1.50	2.10	2.00	2.90	3.00	
145 through 180	1.10	1.70	1.25	1.80	2.00	2.20	2.00	3.00	3.50	
181 through 210	1.20	1.80	1.50	1.90	2.00	2.30	2.00	3.20	4.00	
211 through 240			1.50	2.00	2.00	2.50	2.50	3.20	4.50	
241 through 300			1.50	2.20	2.00	2.50	2.50	3.50	5.00	
301 through 390			1.80	2.40	2.00	2.70	2.60	3.60	6.00	
391 through 660					2.50	2.90	3.00	4.10	1.5% of belt length	

Heavy Duty V-Belt Drive Design Manual

8. Center Distance Allowances for Installation and Tensioners – continued

Table No. D35

Minimum Center Distance Allowances For Belt Installation and Takeup
Predator Belts

V-Belt No.	Minimum Center Distance Allowance For Installation (In)						Minimum Center Distance Allowance For Initial Tensioning and Subsequent Takeup (In)
	3VP		5VP		8VP		All Cross Sections
	Predator Single	Predator PowerBand	Predator Single	Predator PowerBand	Predator Single	Predator PowerBand	All Types
476 through 710			0.8	1.6			0.9
711 through 1060			0.8	1.6			1.1
1061 through 1250			0.8	1.6			1.4
1251 through 1700			0.8	1.6	1.1	2.6	1.7
1701 through 2000			0.8	1.6	1.4	2.7	1.9
2001 through 2360			0.8	1.8	1.4	2.7	2.3
2361 through 2650			0.9	1.8	1.4	2.7	2.4
2651 through 3000			0.9	1.8	1.4	2.7	2.6
3001 through 3550			0.9	1.8	1.5	3.0	3.0

Table No. D36

Minimum Center Distance Allowances For
Belt Installation and Takeup Predator Belts

V-Belt No.	Minimum Center Distance Allowance For Installation (In)			Minimum Center Distance Allowance For Initial Tensioning and Subsequent Takeup (In)
	AP	BP	CP	All Cross Sections
0 through 35	0.55			0.75
36 through 55	0.55	0.75		1.15
56 through 85	0.55	0.95	1.15	1.50
86 through 112		0.95	1.15	1.90
113 through 144		0.95	1.15	2.25
145 through 180		0.95	1.50	2.65
181 through 210		1.15	1.50	3.00

9. Drive Alignment

Amount of angular and parallel misalignment determines what action to take.

Misalignment is one of the most common causes of premature belt failure. The problem gradually reduces belt performance by increasing wear and fatigue. Depending on severity, misalignment can destroy a belt in a matter of hours or days.

While the basic forms of misalignment may be understood, accurate measurements and acceptable limits must be determined before corrective action is taken.

Types of Misalignment

Basically, any degree of misalignment, angular or parallel, decreases the normal service life of a belt drive. Angular misalignment (Figure No. D29) results in accelerated belt/sheave wear and potential stability problems with individual V-belts. A related problem, uneven belt and cord loading, results in unequal load sharing with multiple belt drives and leads to premature failure.

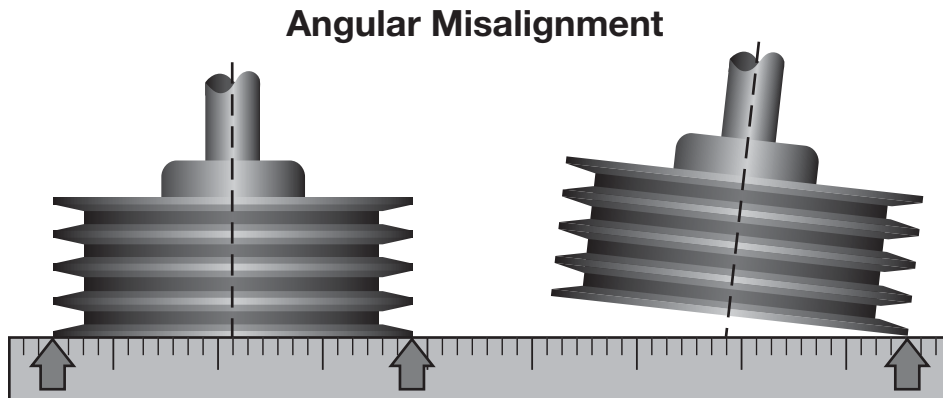


Figure No. D29

Angular misalignment causes excessive belt edge cord and sidewall wear and V-belt turnover in, or escape from, sheave grooves.

Parallel misalignment (Figure No. D30) also results in accelerated belt/sheave wear and potential stability problems with individual belts. Uneven belt and cord loading is not as significant a concern as with angular misalignment. However, parallel misalignment is typically more of a concern with V-belts than with synchronous belts. V-belts run in fixed grooves and cannot free float between flanges to a limited degree as synchronous belts can.

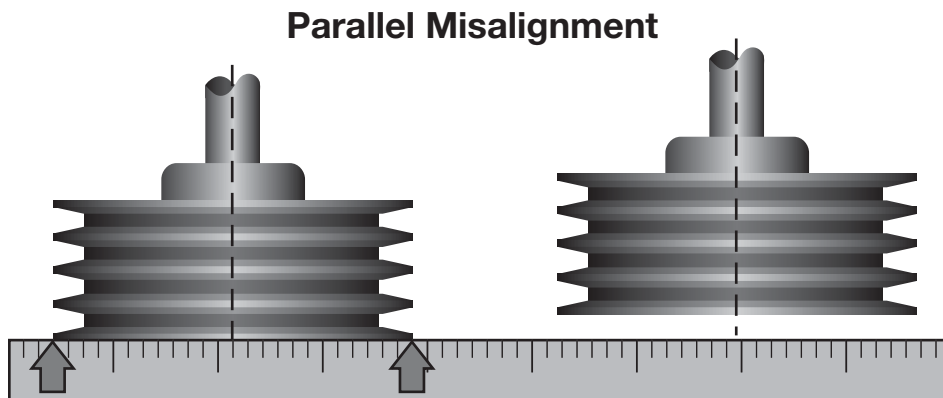


Figure No. D30

Parallel misalignment causes noise, tooth and sprocket wear, poor tracking, and excessive temperatures.

9. Drive Alignment - continued

Measuring Misalignment

The most common tools for measuring misalignment are a straightedge and string. The improper use of either tool, especially a string, can result in erroneous conclusions (Figure No. D31).

Use of a Straightedge and String

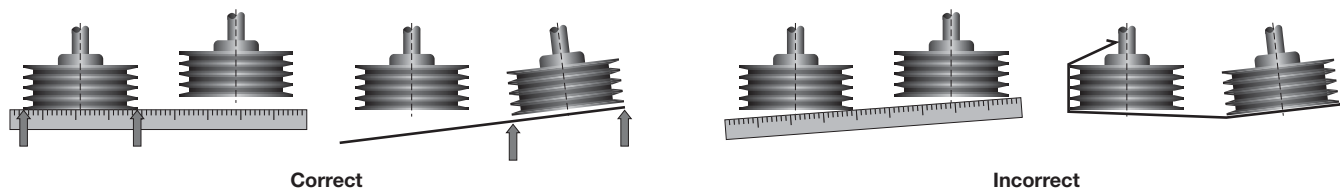


Figure No. D31

Correct and incorrect ways to use a straightedge and string to check for misalignment are shown.

A straightedge should be used to project the orientation of one sheave face with respect to the other. Orientation is also accomplished with a string, as long as it remains straight without any kinks or breaks.

When preparing to measure parallel misalignment, verify that edges of both sheaves are of equal thickness, or quantify the difference in thickness. Align sheave grooves faces directly with respect to one another, rather than the outside surfaces of the sheaves. It may be necessary to mount sheaves with the outside surfaces offset with respect to one another in order to properly align grooves on which belts operate.

Quantifying Misalignment

Misalignment is quantified mathematically or compared to some general rules of thumb for quick and easy results. Angular misalignment is quantified into a real value by taking measurements (Figure No. D32).

Measuring Angular Misalignment

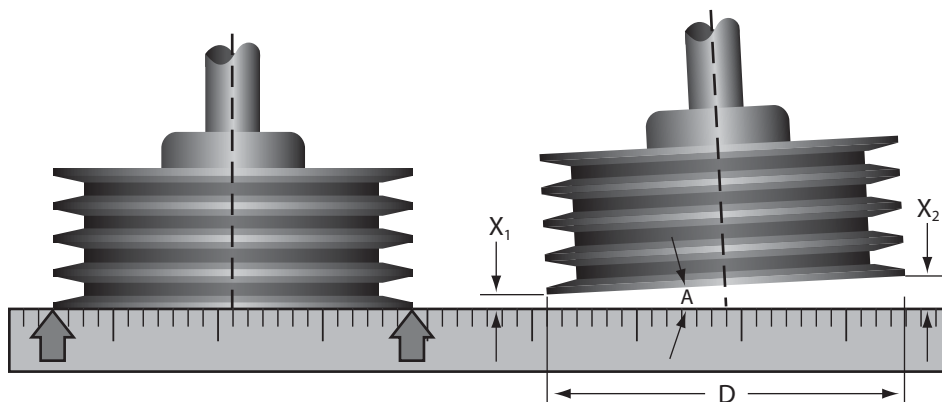


Figure No. D32

Angular misalignment is correct by moving one of the members in a drive train, usually the driver or motor.

The actual angle of misalignment is defined by the difference in clearance between the straightedge or string and the outside surface of the sheave across the diameter.

The mathematical relationship is:

Formula No. D24

$$A = \text{ArcTan} [(X2 - X1)/D]$$

where
 A = angular misalignment, deg.
 D = diameter of sheave, in.
 X = distance from straight edge to sheave flange, in.

9. Drive Alignment - continued

Measuring Parallel Misalignment

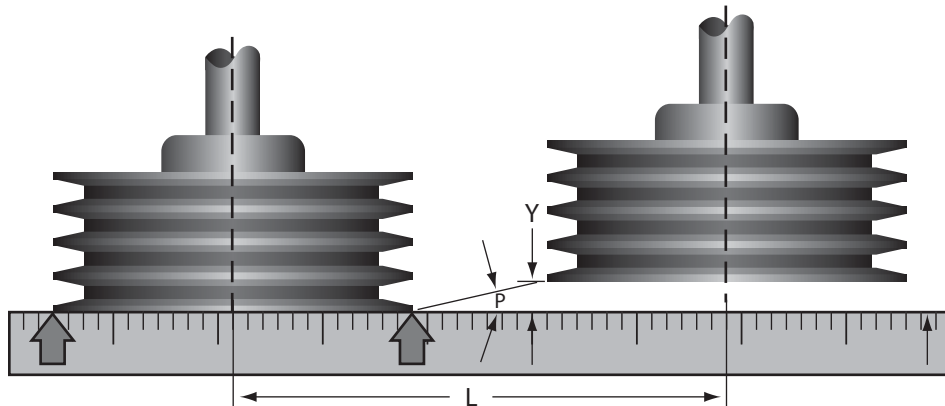


Figure No. D33

Parallel misalignment is corrected by adjusting sheaves on one or both shafts in a drive train.

The angle of parallel misalignment is defined by the difference in clearance between the straightedge or string, and the outer surfaces of the two sheaves across the span length of the belt (Figure No. D33).

The mathematical relationship is:

Formula No. D25

$$P = \text{ArcTan} (Y/L)$$

where
 P = parallel misalignment, deg.
 Y = distance from straightedge to sheaves, in.
 L = center distance between sheaves, in.

The total allowable misalignment recommended for V-belts is 1/2 deg. While individual V-belts are capable of handling misalignment up to 6 deg. before becoming unstable, maintaining the misalignment to within 1/2 deg. maximizes belt life. Joined V-belts tolerate misalignment up to 3 deg. before significant tieband damage occurs.

When determining if a V-type drive system is aligned within these recommendations, angular and parallel misalignment must be measured, quantified, and added together. The total sum of angular and parallel misalignment is compared to the belt manufacturer's recommendations for the particular type of drive.

Rules of Thumb

Maintenance technicians may not find it practical or possible to accurately calculate total misalignment in a system while determining if it is in acceptable alignment. It is also difficult to visualize small fractions of an angle such as 1/4 or 1/2 deg. These angles are illustrated with the following rules of thumb:

For V-belt drives: 1/2 deg. = approximately 1/10-in. offset per foot.

These rules are used to estimate the amount of angular and parallel misalignment visually rather than by calculating numerical values.

Tips for Aligning Drives

Dual plane drive alignment. The processes described above permit alignment checking in one plane only. Shafts may be misaligned in either of two different planes, or both. For example, a drive with horizontal shafts is aligned in one plane using the techniques described above, then lined up in the second plane using a bubble level. The bubble level is used to see that both shafts are parallel with respect to the ground. If a drive has vertical shafts, the bubble level is used to make certain both shafts are perpendicular to the ground.

Parallel alignment. Parallel misalignment is difficult to determine since an accurate common reference plane is not always available. If the shafts are horizontal, and one is located vertically above the other, a plumb bob or bubble level is used to determine if the sheaves are in line with each other. A single V-belt could also be hung in an outside sheave groove from the upper shaft to indicate the proper position of the lower sheave.

Related components, such as brackets and platforms, should also be checked for proper design and placement. These parts must be strong enough to withstand peak forces exerted by drives without bending or flexing.

10. Belt Pull

The V-belt drive designer is often asked to furnish data on bearing loads to the machine designer. The amount of bearing load in driveR or driveN machines caused by V-belt drives depends upon the side load (shaft load) imposed on the shaft and the bearing locations with respect to the side load. The side load is the combined load due to sheave weight and belt pull.

Sheave weight can be found from standard sheave specification tables or obtained from the sheave supplier. Belt pull can be calculated if you have the drive data. It is a function of the following variables:

- 1. Horsepower Transmitted** — for the same drive, more horsepower requires more belt pull.
- 2. Belt Speed** — for the same horsepower, higher belt speed (larger sheave diameters) means less belt pull.
- 3. Arc of Contact** — reduced arc of contact (wrap) requires more tension to prevent slip, resulting in increased belt pull for the same horsepower load.
- 4. Total Drive Installation Tension** — a V-belt drive can be either tight or loose, depending on how it is tensioned.

NOTE: Required belt pull is independent of the number of V-belts used on a drive. The number of belts affects only the amount of overhang from the center of belt pull to the bearings.

The designer of driveR and driveN equipment usually must calculate belt pull or ask the drive designer to furnish values of belt pull in order to properly size shafts and bearings in the machine design stage. For the routine design of a drive to fit equipment already in existence, another situation exists. It is common practice in this case for the drive designer to assume that the driveN equipment can tolerate as much belt pull as the driveR machine, and to investigate allowable belt pull only in regard to the driveR.

The driveR usually is an electric motor or an engine. For electric motors, the minimum sheave diameters recommended by NEMA or the motor manufacturer are for the purpose of limiting belt pull to acceptable amounts. The variables affecting belt pull, as listed above, are taken into account in determining the minimum sheave diameter. It is assumed that motor shafts and bearings are adequate, providing that the recommendations on sheave size are followed, and, in this case, belt pull calculations are seldom required. If the motor manufacturer is asked to approve a drive on a motor for which he has not listed minimum sheave diameters, he will sometimes request belt pull calculations.

For internal combustion engines equipped with power takeoff units, the drive designer and the machine designer should collaborate in following the recommendations of the PTO manufacturer on maximum allowable belt pull and sheave overhang. If the PTO manufacturer specifies a formula for calculating belt pull, use that formula rather than the methods shown in this manual. This is because the belt pull formulas used by some PTO manufacturers contain a multiplier which results in belt pull values that are artificially high. This provides, in effect, a service factor for the PTO. Such belt pull formulas should be used only for the unit for which they are given since they do not give a true value of belt pull.

Many handbooks, etc., show belt pull formulas, some of which give different values than those resulting from the methods shown below. This is because the handbook formulas sometimes short-cut the calculations by ignoring factors such as arc of contact correction or by assuming average values for such corrections. The methods given at top right result in accurate calculations of belt pull for drives operating at design loads and tensions. Belt tensions are based on a ratio between tightside and slackside tensions of 5:1 at 180° arc of contact, corrected for actual arc. This is standard practice in the V-belt industry. There are belt tension formulas other than those used below which are based on the same design tension ratios and which give the same results. The formulas have been selected for their ease of use. The equipment designer should recognize, however, that belts can be tensioned up to 1.5 times the design tension (see Tensioning Section, Page D22). This higher tension doesn't exist for the life of the drive, but bearings and shafts must be able to tolerate it without damage for a reasonable period of time.

Formula Nos. D26 and D27, shown on this page, are correct for all Super HC® belts, Super HC PowerBand® belts, HiPower® II belts, HiPower II PowerBand belts, TriPower® Molded Notch belts and Polyflex® JB® belts. When the machine designer requests shaft load calculations from the drive designer, it is recommended that the following formulas and procedures be used:

Belt Pull Calculations

Step 1 Calculate Drive Tensions

- A. Belt pull is the vector sum of T_T and T_S , the tightside and slackside tensions.

T_T and T_S may be found from these formulas:

Formula No. D26

$$T_T = 41,250 * \left(\frac{HP}{K\phi V} \right)$$

*44,000 for Micro-V Belts

Formula No. D27

$$T_S = 33,000 (1.25 K\phi) \left(\frac{HP}{K\phi V} \right)$$

where: HP = Horsepower

$K\phi$ = Factor $K\phi$ from Table No. D26 on Page D24.

(Use Table No. D11 on Page D12 for V-flat drives.)

V = Belt speed, feet per minute

$V = \frac{(\text{pitch diameter, in.}) (\text{rpm})}{3.82}$ (Formula No. D11 on Page D14)

*1.33 for Micro-V Belts

Formula No. D28

$$T_T = 44,000 \left(\frac{HP}{K\phi 2V} \right)$$

Formula No. D29

$$T_S = 33,000 (1.33 K\phi) \left(\frac{DHP}{K\phi V} \right)$$

Step 2 Find Vector Sum of T_T and T_S

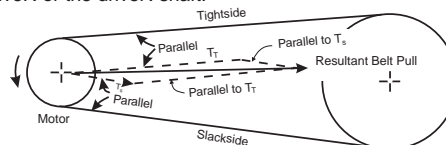
The vector sum of T_T and T_S can be found so that the direction of belt pull, as well as the magnitude, is known. This is necessary if belt pull is to be vectorially added to sheave weight, shaft weight, etc., to find true bearing loads. In this case, the easiest method of finding the belt pull vector is by graphical addition of T_T and T_S . If only the magnitude of belt pull is needed, numerical methods for the vector additions are faster to use.

- A. If both direction and magnitude of belt pull are required; the vector sum of T_T and T_S can be found by graphical vector addition, as shown in Figure No. D34. T_T and T_S vectors are drawn to a convenient scale, for example 1" = 100 pounds, and parallel to the tightside and slackside respectively. The same procedures can be used for finding belt pull on the driveN shaft. This method may be used for drives using idlers.

For two-wheel drives, belt pull on the driveR and driveN shafts is equal but opposite in direction. For drives using idlers, both magnitude and direction may be different.

- B. If only the magnitude of belt pull is needed, follow the steps below. Using this method only for V-V or V-flat drives with two wheels. Use the graphical method shown if the drive uses idlers.

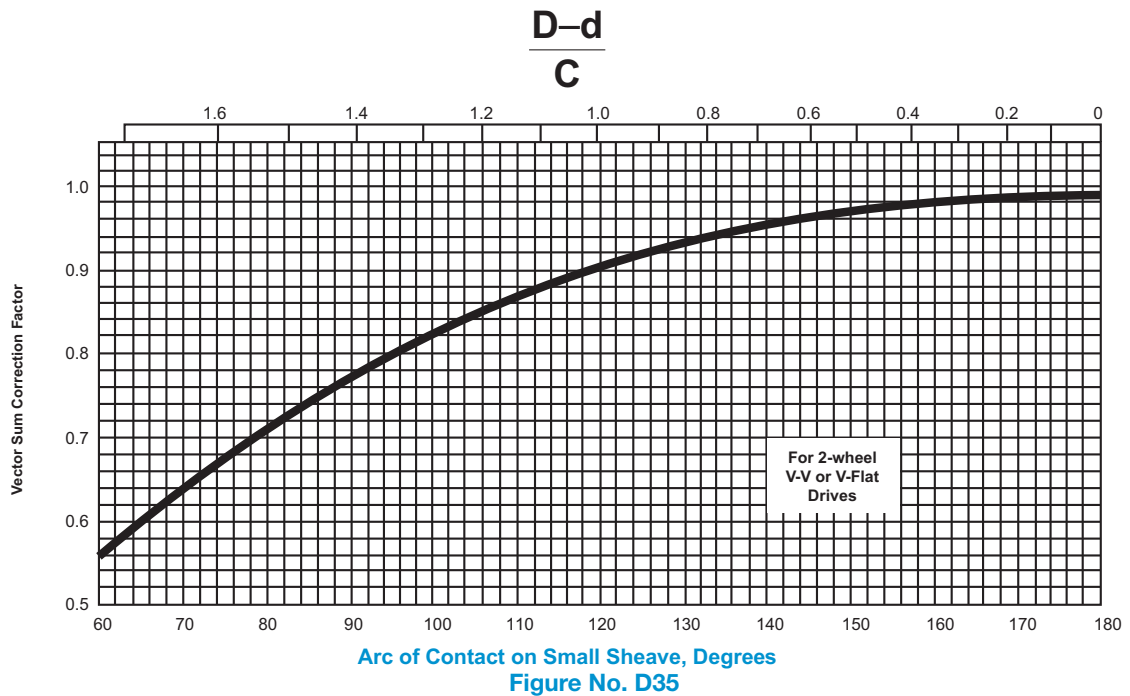
1. Add T_T and T_S from Step 1 to find T_T and T_S (arithmetic sum).
2. Using the values of $\frac{(D-d)}{C}$ for the drive (calculate if necessary... see Page D12) find the vector sum correction factor using Figure No. D34 on Page D34.
3. Multiply T_T and T_S by the vector sum correction factor to find the true vector sum of T_T and T_S . This is the belt pull on either the driveR or the driveN shaft.



Graphical Addition of T_T and T_S
Figure No. D34

11. Shaft and Bearing Load Calculations

Vector Sum Correction Factor



Shaft Load Calculations

If true side load on the shaft, including sheave weight is desired, the sheave weight can be added to the belt pull using the same graphical method shown in Figure No. D34 on Page D34. The sheave weight vector is vertical to the ground. Weights for standard sheaves are shown in the sheave specification tables on Pages C4 through C19.

Bearing Load Calculations

In order to find actual bearing loads, it is necessary to know weights of machine components and the value of all other forces contributing to the load. However, it is sometimes desired to know the bearing load contributed by the V-belt drive alone. You can find bearing load due to the drive if you know bearing spacing with respect to the sheave center and the shaft load as calculated above. For rough checks, machine designers sometimes use belt pull alone, ignoring sheave weight. If accuracy is desired, or if the sheave is unusually heavy, actual shaft load including sheave weight should be used.

A. Overhung Sheave

Formula No. D30

$$\text{Load at B, pounds} = \frac{\text{Shaft Load} \times (a + b)}{a}$$

Formula No. D31

$$\text{Load at A, pounds} = \text{Shaft Load} \times \frac{b}{a}$$

where: a and b = spacing, inches, per Figure No. D36

B. Sheave Between Bearings

Formula No. D32

$$\text{Load at D, pounds} = \frac{\text{Shaft Load} \times c}{(c + d)}$$

Formula No. D33

$$\text{Load at C, pounds} = \frac{\text{Shaft Load} \times d}{(c + d)}$$

where: c and d = spacing, inches, per Figure No. D37

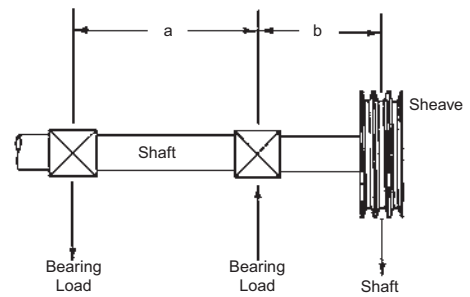


Figure No. D36 — Overhung Sheave

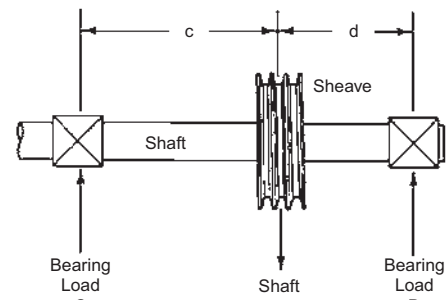


Figure No. D37 — Sheave Between Bearings

12. Belt Storage and Handling

Storage Recommendations

Proper preventive maintenance should not be limited to the actual belt drive operating on equipment, but should also include following proper storage procedures. In order to retain their serviceability and dimensions, proper storage procedures must be followed for all belt types. Quite often premature belt failures can be traced to improper belt storage procedures that damaged the belt before it was installed on the drive. By following a few common sense steps, these types of belt failures can be avoided.

General Guidelines

Recommended

Belts should be stored in a cool and dry environment with no direct sunlight. Ideally, less than 85° F and 70% relative humidity.

Store on shelves or in boxes or containers. If the belt is packaged in a box, store the belt in its individual box.

V-belts may be stored by hanging on a wall rack if they are hung on a saddle or diameter at least as large as the minimum diameter sheave recommended for the belt cross section.

When the belts are stored, they must not be bent to diameters smaller than the minimum recommended sheave or sprocket diameter for that cross section. (see Technical Information section) Belts should not be stored with back bends that are less than 1.3 times the minimum recommended sheave diameter for that cross section.

If stored in containers, make sure that the belt is not distorted when in the container. Limit the contents in a container so that the belts at the bottom of the container are not damaged by the weight of the rest of the belts in the container.

Not Recommended

Belts should not be stored near windows, which may expose the belts to direct sunlight or moisture.

Belts should not be stored near heaters, radiators, or in the direct airflow of heating devices.

Belts should not be stored near any devices that generate ozone. Ozone generating devices include transformers and electric motors. Belts should not be stored where they are exposed to solvents or chemicals in the atmosphere.

Do not store belts on the floor unless they are in a protective container. Floor locations are exposed to traffic that may damage the belts.

Do not crimp belts during handling or while stored.

Belts are crimped by bending them to a diameter smaller than the minimum recommended diameter sheave for that cross section. Do not use ties or tape to pull belt spans tightly together near the “end” of the belt. This will crimp the belt and cause premature belt failure. Do not hang on a small diameter pin that suspends all of the belt weight and bends the belt to a diameter smaller than the minimum recommended sheave diameter. Improper storage will damage the tensile cord and the belt will fail prematurely. Handle belts carefully when removing from storage and going to the application. Do not inadvertently crimp or damage the belts by careless handling.

Storage Methods

V-belts

V-belts can be coiled in loops for storage purposes. Each coil results in a number of loops. One coil results in three loops, two coils results in five loops, etc. The maximum number of coils that can be used depends on the belt length. If coiling a belt for storage, consult the table on the next page and follow the limits shown.

12. Belt Storage and Handling - continued

Table No. D37

Belt Cross Section	Belt Length (in)	Belt Length (mm)	Number of Coils	Number of Loops
3L, 4L, 5L, A, AX, AA, B, BX, 3V, 3VX, 9R, 13R, 13C, 13CX, 13D, 16R, 16C, 16CX, 9N	Under 60	Under 1500	0	1
	60 up to 120	1500 up to 3000	1	3
	120 up to 180	3000 up to 4600	2	5
	180 and over	4600 and over	3	7
BB, C, CX, 5V, 5VX, 16D, 22C, 22CX, 15N	Under 75	Under 1900	0	1
	75 up to 144	1900 up to 3700	1	3
	144 up to 240	3700 up to 6000	2	5
	240 and over	6000 and over	3	7
CC, D, 22D, 32C	Under 120	Under 3000	0	1
	120 up to 240	3000 up to 6100	1	3
	240 up to 330	6100 up to 8400	2	5
	330 up to 420	8400 up to 10,600	3	7
	420 and over	10,600 and over	4	9
8V, 25N	Under 180	Under 4600	0	1
	80 up to 270	4600 up to 6900	1	3
	270 up to 390	6900 up to 9900	2	5
	390 up to 480	9900 up to 12,200	3	7
	Over 480	12,200 and over	4	9

PowerBand® V-belts

These belts may be stored by hanging on a wall rack if they are hung on a saddle or diameter at least as large as the minimum diameter sheave recommended for the belt cross section, and the belts are not distorted.

PowerBand® V-belts up to 120 inches (3000 mm) may be stored in a nested configuration. Nests are formed by laying a belt on its side on a flat surface and placing as many belts inside the first belt as possible without undue force. When nests are formed, do not bend the belts to a diameter that is smaller than the minimum recommended sheave diameter. Nests may be stacked without damaging the belts if they are tight and stacked with each nest rotated 180° from the nest below.

PowerBand® V-belts over 120 inches (3000 mm) may be rolled up and tied for shipment. These individual rolls may be stacked for easy storage. When the belts are rolled, they must not be bent to a diameter that is smaller than the minimum diameter recommended for the cross section.

Storage Effects

Belts may be stored up to six years if properly stored at temperatures less than 85°F and relative humidity less than 70%.

If the storage temperature is higher than 85°F, the storage limit for normal service performance is reduced by one half for each 15°F increase in temperature. Belts should never be stored at temperatures above 115°F.

At relative humidity levels above 70%, fungus or mildew may form on stored belts. This has minimal affect on belt performance, but should be avoided.

When equipment is stored for prolonged periods of time (over six months), the belt tension should be relaxed so that the belt does not take a set, and the storage environment should meet the 85°F and 70% or less relative humidity condition. If this is not possible, belts should be removed and stored separately in a proper environment.

Sub Section III Technical Data

Made-to-Order Belts

Gates offers one of the industries largest selection of standard V-belts. Often there are applications where a custom V-belt is needed. Gates engineers and manufacturing specialists can help design the perfect V-belt for your particular application.

- Size – custom length and widths
- Tensile cords – Aramid or fiberglass
- Rubber compound – diene, chlorprene, EPDM
- Construction type – raw-edge, fabric wrapped, smooth running, bareback clutching
- Private Brand Label

Adjustments to material compounds, tensile cord usage, and finishing can deliver the results required by your particular application. For more information, contact your Gates authorized distributor or your Gates Sales Representative.

Made-to-Order Metals

When standard products won't work, call the Gates Made-to-Order Metals Team. Our dedicated made-to-order metal staff specializes in providing prototype and production pulleys, sheaves and sprockets to meet your design expectations. No order is too large or too small.

- Pulleys, Sheaves and Sprockets - All Gates Synchronous Profiles and Pitches, Micro-V® and V-Belt, Plain or Profiled Idlers
- Bores - Plain, Straight, Tapered, Splined or any special bore. Manufactured to accept Taper-Lock®, Ringfeder®, QD®, Torque Tamer, Trantorque® or other special bushings.
- Styles - Bar Stock, Idlers, Ringfeder Connections, Torque Tamers, Custom Configurations, Special Hubs and more.
- Material - Aluminum, Steel, Ductile, Cast Iron, Phenolic, Stainless Steel or Plastics
- Finishes – Hard Coat, Food Grade, Zinc, Black Anodize, Nickel Plating, Painted, Custom Plating or any Special Coatings
- Processes - Hob Cutting, Shaper Cutting, Die Casting and Molding
- Other Services – Sub-Assemblies, Press Bearings, Sprocket/Bushing Balance, and Index Marking

For more information





Call 1-800-709-6001

Email us at makemymetal@gates.com

Visit www.gates.com/mtometals









Belt Troubleshooting


V-belt Drive Symptoms		
Premature Belt Failure		
Symptoms	Probable Cause	Corrective Action
<ul style="list-style-type: none"> Broken Belt(s) 	<ol style="list-style-type: none"> Under-designed drive Belt rolled or pried onto sheave Object falling into drive Severe shock load 	<ol style="list-style-type: none"> Redesign to manufacturers recommendations Use drive take-up when installing Provide adequate guard or drive protection Redesign to accommodate shock load
<ul style="list-style-type: none"> Belts fail to carry load, no visible reason 	<ol style="list-style-type: none"> Under-designed drive Damaged tensile member Worn sheave grooves Center distance movement 	<ol style="list-style-type: none"> Redesign to manufacturers recommendations Follow correct installation procedure Check for groove wear; replace as needed Check drive for center distance movement during operation
<ul style="list-style-type: none"> Edge cord failure 	<ol style="list-style-type: none"> Sheave misalignment Damaged tensile member 	<ol style="list-style-type: none"> Check alignment and correct Follow correct installation procedure
<ul style="list-style-type: none"> Belt de-lamination or undercord separation 	<ol style="list-style-type: none"> Sheaves too small for belt section Use of too small backside idler 	<ol style="list-style-type: none"> Check drive design, replace with larger sheaves Increase backside idler to acceptable diameter
Severe Or Abnormal Belt Wear		
Symptoms	Probable Cause	Corrective Action
<ul style="list-style-type: none"> Wear on top surface of belt 	<ol style="list-style-type: none"> Belt rubbing against guard Idler malfunction 	<ol style="list-style-type: none"> Repair or replace guard Replace or repair idler
<ul style="list-style-type: none"> Wear on top corners of belt 	<ol style="list-style-type: none"> Belt-to-sheave fit incorrect (belt too small for groove) 	<ol style="list-style-type: none"> Use correct belt/sheave match

Heavy Duty V-Belt Drive Design Manual

Belt Troubleshooting – continued




<ul style="list-style-type: none"> Wear on belt sidewalls 	<ol style="list-style-type: none"> Belt slip Sheave Misalignment Worn sheaves Incorrect belt 	<ol style="list-style-type: none"> Retension until slipping stops Realign drive Replace sheaves Replace with correct belt size
<ul style="list-style-type: none"> Wear on belt bottom corners 	<ol style="list-style-type: none"> Belt-to-sheave fit incorrect Worn sheaves 	<ol style="list-style-type: none"> Use correct belt/sheave match Replace sheaves
<ul style="list-style-type: none"> Wear on bottom surface of belt 	<ol style="list-style-type: none"> Belt bottoming against sheave groove bottom Worn sheaves Debris in sheaves 	<ol style="list-style-type: none"> Use correct belt/sheave match Replace sheaves Clean sheaves
<ul style="list-style-type: none"> Undercord cracking 	<ol style="list-style-type: none"> Sheaves too small for belt section Belt slip Backside idler diameter too small Improper belt storage 	<ol style="list-style-type: none"> Use larger diameter sheaves Retension to manufacturers recommendations Increase backside idler to acceptable diameter Don't coil belt too tightly, kink or bend. Avoid heat and direct sunlight
<ul style="list-style-type: none"> Sidewall burning or hardening 	<ol style="list-style-type: none"> Belt slipping Worn sheaves Under designed drive Shaft movement 	<ol style="list-style-type: none"> Retension until slipping stops Replace sheaves Redesign to manufacturers recommendations Check for center distance changes
<ul style="list-style-type: none"> Belt surface hard or stiff 	<ol style="list-style-type: none"> Hot drive environment 	<ol style="list-style-type: none"> Improve ventilation to drive

Belt Troubleshooting – continued


<ul style="list-style-type: none"> Belt surface flaking, sticky or swollen 	<ol style="list-style-type: none"> Oil or chemical contamination 	<ol style="list-style-type: none"> Do not use belt dressing; eliminate sources of oil, grease, or chemical contamination.
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<ul style="list-style-type: none"> Excessive belt stretching 	<ol style="list-style-type: none"> Belt slipping Worn sheaves Underdesigned drive 	<ol style="list-style-type: none"> Retension until slipping stops Replace sheaves Redesign to manufacturers recommendations
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Problems With Banded (Joined) Belts



Symptoms	Probable Cause	Corrective Action
<ul style="list-style-type: none"> Tie band separation 	<ol style="list-style-type: none"> Worn or incorrect sheaves Improper groove spacing 	<ol style="list-style-type: none"> Replace sheaves Use sheaves manufactured to industry specifications
<ul style="list-style-type: none"> Top of tie band frayed, worn, or damaged 	<ol style="list-style-type: none"> Interference with guard Backside idler malfunction or damaged 	<ol style="list-style-type: none"> Check and adjust guard Replace or repair backside idler
<ul style="list-style-type: none"> Banded belt comes off sheaves repeatedly 	<ol style="list-style-type: none"> Debris in sheaves Sheave misalignment 	<ol style="list-style-type: none"> Clean grooves and use single belts to prevent debris from being trapped in grooves Realign drive
<ul style="list-style-type: none"> One or more belt ribs run out of the sheave 	<ol style="list-style-type: none"> Sheave misalignment Belt undertensioned 	<ol style="list-style-type: none"> Realign drive Retension belts to manufacturers recommendations

V-belt Turns Over or Comes Off Sheave

Symptoms	Probable Cause	Corrective Action
<ul style="list-style-type: none"> Involves single or multiple belts 	<ol style="list-style-type: none"> Shock loading or vibration Foreign material in grooves Sheave misalignment Worn sheave grooves Damaged tensile member Incorrectly placed flat idler Mismatched belt set Poor equipment structural design 	<ol style="list-style-type: none"> Check drive design; use banded (joined) belts Shield grooves and drive Realign drive Replace sheaves Use correct installation tension and storage procedure Place flat idler on slack side of drive close to driveR sheave Replace with new matched set; do not mix old and new belts. Check for center distance stability and rigidity

Heavy Duty V-Belt Drive Design Manual

Belt Troubleshooting – continued

Belt Stretches Beyond Available Take-Up		
Symptoms	Probable Cause	Corrective Action
<ul style="list-style-type: none"> Multiple belts stretch unequally 	<ol style="list-style-type: none"> Misaligned drive Debris in sheaves Broken tensile member or cord Mismatched belt set Belts from different manufacturers used 	<ol style="list-style-type: none"> Realign drive and retension belts Clean sheaves Replace all belts; install properly Install matched belt set Replace all belts with belts made by same manufacturer
<ul style="list-style-type: none"> Single belt or where all belts stretch evenly 	<ol style="list-style-type: none"> Insufficient take-up allowance Grossly overloaded or under designed drive Broken tensile members 	<ol style="list-style-type: none"> Check take-up; use allowance specified by manufacturers Redesign to manufacturers recommendations Replace belt or entire belt set and install properly
Belt Noise		
Symptoms	Probable Cause	Corrective Action
<ul style="list-style-type: none"> Belt squeals or chirps 	<ol style="list-style-type: none"> Belt slip Contamination 	<ol style="list-style-type: none"> Retension to manufacturers recommendations Clean belts and sheaves
<ul style="list-style-type: none"> Slapping sound 	<ol style="list-style-type: none"> Loose belts Mismatched belt set Misalignment 	<ol style="list-style-type: none"> Retension to manufacturers recommendations Install matched belt set Realign drive so all belts share load equally
<ul style="list-style-type: none"> Rubbing sound 	<ol style="list-style-type: none"> Guard interference 	<ol style="list-style-type: none"> Repair, replace or redesign guard
<ul style="list-style-type: none"> Grinding sound 	<ol style="list-style-type: none"> Damaged bearings 	<ol style="list-style-type: none"> Replace, align and lubricate
<ul style="list-style-type: none"> Unusually loud drive 	<ol style="list-style-type: none"> Incorrect belt for sheaves Incorrect tension Worn sheaves Debris in sheaves 	<ol style="list-style-type: none"> Use correct belt size and type Check belt tension and adjust Replace sheaves Clean sheaves; improve shielding; remove rust, paint; or remove dirt from grooves
Unusual Vibration		
Symptoms	Probable Cause	Corrective Action
<ul style="list-style-type: none"> Belts flopping 	<ol style="list-style-type: none"> Loose belts (under tensioned) Mismatched belts Misaligned drive 	<ol style="list-style-type: none"> Retension to manufacturers recommendations Install new matched belt set Realign drive
<ul style="list-style-type: none"> Unusual or excessive vibration 	<ol style="list-style-type: none"> Incorrect belt Poor equipment structural design Excessive sheave eccentricity Loose drive components 	<ol style="list-style-type: none"> Use correct belt/sheave match Check structure for adequate strength and rigidity Replace defective sheave Check machine components, guards, motor mounts, motor pads, bushings, brackets and framework for adequate strength and stability and proper installation

Heavy Duty V-Belt Drive Design Manual

Belt Troubleshooting – continued

Problems With Sheaves		
Symptoms	Probable Cause	Corrective Action
<ul style="list-style-type: none"> Broken or damaged sheaves 	<ol style="list-style-type: none"> Incorrect sheave installation Foreign objects falling in drive Incorrect belt installation 	<ol style="list-style-type: none"> Do not over tighten bushing bolts Use adequate drive guard Do not pry belts onto sheaves
Problems With Other Drive Components		
Symptoms	Probable Cause	Corrective Action
<ul style="list-style-type: none"> Bent or broken shafts 	<ol style="list-style-type: none"> Extreme belt overtension Overdesigned drive Accidental damage Machine design error Sheave mounted too far away from outboard bearing 	<ol style="list-style-type: none"> Retension to manufacturers recommendations Redesign to manufacturers recommendations Redesign drive guard Check machine design Move sheaves closer to outboard bearing
Hot Bearings		
Symptoms	Probable Cause	Corrective Action
<ul style="list-style-type: none"> Drive requires overtensioning 	<ol style="list-style-type: none"> Worn sheave grooves – belts bottoming and won't transmit power until overtensioned Improper belt tension 	<ol style="list-style-type: none"> Replace sheaves and tension belts properly Retension to manufacturers recommendations
<ul style="list-style-type: none"> Sheaves too small 	<ol style="list-style-type: none"> Follow NEMA motor manufacturers recommendations 	<ol style="list-style-type: none"> Redesign drive using proper sheave diameters
<ul style="list-style-type: none"> Poor bearing condition 	<ol style="list-style-type: none"> Bearings underdesigned Bearings not properly maintained 	<ol style="list-style-type: none"> Check bearing selection Align and lubricate bearings
<ul style="list-style-type: none"> Sheaves mounted too far out on shaft 	<ol style="list-style-type: none"> Drive installation error 	<ol style="list-style-type: none"> Move sheaves as close to outboard bearings as possible
<ul style="list-style-type: none"> Belt slippage 	<ol style="list-style-type: none"> Belts undertensioned 	<ol style="list-style-type: none"> Retension to manufacturers recommendations
Performance Problems		
Symptoms	Probable Cause	Corrective Action
<ul style="list-style-type: none"> Incorrect driven speed 	<ol style="list-style-type: none"> Drive design error Belt slip 	<ol style="list-style-type: none"> Redesign drive using correct sheaves sizes for desired speed ratio Retension to manufacturers recommendations

Heavy Duty V-Belt Drive Design Manual

Useful Formulas and Calculations

Gates V-Belts and PowerBand® Belts

Horsepower Ratings

Horsepower rating for Gates V-belts and PowerBand belts can be calculated from the formula below. This formula is useful for computer work, and for calculating ratings which are out of the range of speed or diameter conditions shown in the horsepower rating tables in this manual.

The formula gives the basic horsepower rating, corrected for speed ratio. Multiply the horsepower rating from the formula by **Factor $K\phi$** and the **belt length correction factor** to obtain the horsepower per belt for a specific drive.

Formula No. D34

$$Hp = dr \left[K_1 - K_2/d - K_3 (dr)^2 - K_4 \log (dr) \right] + K_{SR}$$

Where: d = pitch diameter of the small sheave, inches
 r = rpm of the fastest shaft divided by 1000
 K_{SR} = speed ratio factor listed in Table Nos. D44 through D49 on Page D45
 $K_1 K_2 K_3 K_4$ = cross section parameters listed in Table Nos. D38 through D43 below

Table No. D38

Horsepower Formula Parameters For Super HC® Molded Notch V-Belts

Belt Type	Cross Section	K_1	K_2	K_3	K_4
Super HC Molded Notch and Super HC Molded Notch PowerBand	3VX	1.1691	1.5295	1.5229×10^{-4}	0.15960
	5VX	3.3038	7.7810	3.6432×10^{-4}	0.43343

Table No. D41

Horsepower Formula Parameters for Tri-Power® Molded Notch V-Belts

Belt Type	Cross Section	K_1	K_2	K_3	K_4
Tri-Power Molded Notch V-Belts	AX	1.4206	1.9869	2.2000×10^{-4}	0.40578
	BX	1.9992	3.0509	3.0994×10^{-4}	0.55186
	CX	3.2167	5.7396	5.2996×10^{-4}	0.84056

Table No. D39

Horsepower Formula Parameters for Super HC V-Belts

Belt Type	Cross Section	K_1	K_2	K_3	K_4
Super HC and Super HC PowerBand	5V	3.3140	10.123	5.8758×10^{-4}	0.46527
	8V	8.6628	49.323	1.5804×10^{-3}	1.1669

Table No. D42

Horsepower Formula Parameters for Classical Predator

Belt Type	Cross Section	K_1	K_2	K_3	K_4
Classical Predator	AP	2.2298	4.7223	$3.3572E-04$	0.30629
	BP	4.0208	12.167	$5.6304E-04$	0.54321
	CP	7.5874	33.208	$9.7446E-04$	0.99756

Table No. D40

Horsepower Formula Parameters for Hi-Power® II V-Belts

Belt Type	Cross Section	K_1	K_2	K_3	K_4
Hi-Power II and Hi-Power II PowerBand	A	1.3948	2.6198	2.9043×10^{-4}	0.27041
	B	2.2149	5.8478	4.7867×10^{-4}	0.41948
	C	3.6653	13.7060	8.1326×10^{-4}	0.66836
	D	6.7891	39.3520	1.5676×10^{-3}	1.18980

Table No. D43

Horsepower Formula Parameters for Narrow Predator

Belt Type	Cross Section	K_1	K_2	K_3	K_4
Narrow Predator	5VP	6.2957	25.122	$6.2946E-04$	0.51000
	8VP	17.914	145.92	$1.5177E-03$	1.4167

Heavy Duty V-Belt Drive Design Manual

Useful Formulas and Calculations – continued

Gates V-Belts and PowerBand® Belts

Table No. D44

Speed Ratio Factor For Super HC® Molded Notch V-Belts and PowerBand Belts

Speed Ratio Range	K _{SR} Values	
	Cross Section	
	3VX	5VX
1.00-1.01	0.0000	0.0000
1.02-1.03	0.0157	0.0801
1.04-1.06	0.0315	0.1600
1.07-1.09	0.0471	0.2398
1.10-1.13	0.0629	0.3201
1.14-1.18	0.0786	0.4001
1.19-1.25	0.0944	0.4804
1.26-1.35	0.1101	0.5603
1.36-1.57	0.1259	0.6405
1.58 & over	0.1416	0.7202

Table No. D47

Speed Ratio Factor For Super HC V-Belts and PowerBand Belts

Speed Ratio Range	K _{SR} Values	
	Cross Section	
	5V	8V
1.00-1.01	0.0000	0.0000
1.02-1.05	0.0963	0.4690
1.06-1.11	0.2623	1.2780
1.12-1.18	0.4572	2.2276
1.19-1.26	0.6223	3.0321
1.27-1.38	0.7542	3.6747
1.39-1.57	0.8833	4.3038
1.58-1.94	0.9941	4.8438
1.95-3.38	1.0830	5.2767
3.39 & over	1.1471	5.5892

Table No. D45

Speed Ratio Factor For Hi-Power® II V-Belts and PowerBand Belts

Speed Ratio Range	K _{SR} Values			
	Cross Section			
	A	B	C	D
1.00-1.01	0.0000	0.0000	0.0000	0.0000
1.02-1.03	0.0249	0.0556	0.1303	0.3742
1.04-1.06	0.0499	0.1113	0.2608	0.7489
1.07-1.08	0.0748	0.1670	0.3914	1.1239
1.09-1.12	0.0995	0.2222	0.5208	1.4953
1.13-1.16	0.1245	0.2779	0.6514	1.8703
1.17-1.22	0.1495	0.3336	0.7819	2.2450
1.23-1.32	0.1741	0.3887	0.9110	2.6156
1.33-1.50	0.1992	0.4447	1.0422	2.9924
1.51 & over	0.2240	0.5000	1.1719	3.3648

Table No. D48

Speed Ratio Factor For Tri-Power® Molded Notch V-Belts

Speed Ratio Range	K _{SR} Values		
	Cross Section		
	AX	BX	CX
1.00-1.02	0.0000	0.0000	0.0000
1.03-1.07	0.0418	0.0642	0.1208
1.08-1.13	0.0836	0.1283	0.2414
1.14-1.21	0.1253	0.1924	0.3619
1.22-1.30	0.1669	0.2563	0.4821
1.31-1.44	0.2088	0.3205	0.6030
1.45-1.64	0.2504	0.3845	0.7233
1.65-2.01	0.2922	0.4486	0.8440
2.02-3.00	0.3339	0.5127	0.9646
3.01 & over	0.3757	0.5769	1.0854

Table No. D46

Speed Ratio Factor For Narrow Predator

Speed Ratio Range	K _{SR} Values	
	Cross Section	
	5VP	8VP
1.00 to 1.01	0.0000	0.0000
1.02 to 1.02	0.1317	0.7650
1.03 to 1.03	0.2635	1.5305
1.04 to 1.05	0.3951	2.2951
1.06 to 1.06	0.5271	3.0615
1.07 to 1.08	0.6588	3.8266
1.09 to 1.11	0.7905	4.5918
1.12 to 1.15	0.9223	5.3569
1.16 to 1.23	1.0539	6.1218
1.24 and over	1.1858	6.8877

Table No. D49

Speed Ratio Factor For Classical Predator

Speed Ratio Range	K _{SR} Values		
	Cross Section		
	AP	BP	CP
1.00 to 1.01	0.0000	0.0000	0.0000
1.02 to 1.02	0.0291	0.0750	0.2046
1.03 to 1.04	0.0582	0.1500	0.4093
1.05 to 1.05	0.0873	0.2250	0.6141
1.06 to 1.07	0.1164	0.3000	0.8188
1.08 to 1.10	0.1455	0.3750	1.0235
1.11 to 1.13	0.1746	0.4499	1.2280
1.14 to 1.19	0.2037	0.5249	1.4327
1.20 to 1.28	0.2328	0.5999	1.6373
1.29 and over	0.2620	0.6749	1.8421

Span Length, Two Wheel Drives

Belt span length is needed for the deflection method of measuring V-belt installation tension. Span length can be measured on the drive or measured from a scale layout of the drive.

For V or V-flat drives using only two wheels (no idlers) span length can be calculated from the following formula:

Formula No. D35

$$t = C \left[1 - 0.125 \left(\frac{D-d}{C} \right)^2 \right]$$

where: t = span length, inches
 C = center distance, inches
 D = large sheave or pulley diameter, inches
 d = small sheave diameter, inches

NOTE: D and d are Outside Diameters for Super HC and Datum Diameters for Hi-Power II and Tri-Power Molded Notch V-Belts.

Useful Formulas and Calculations – continued

Required	Given	Formula
Speed ratio (R)	Shaft speeds (rpm)	$R = \frac{\text{rpm (faster shaft speed)}}{\text{rpm (slower shaft speed)}}$
	Pulley diameter (D & d)	$R = \frac{D \text{ (larger pulley diameter)}}{d \text{ (smaller pulley diameter)}}$
	Number of pulley grooves (N & n)	$R = \frac{N \text{ (larger pulley groove no.)}}{n \text{ (smaller pulley groove no.)}}$
Horsepower (hp) (33,000 lb-ft/min)	Torque (T) in lb-in Shaft speed (rpm)	$hp = \frac{T \times rpm}{63,025}$
	Effective tension (Te) in lb. Shaft speed (rpm)	$hp = \frac{Te \times V}{33,000}$
Design horsepower (Dhp)	Rated horsepower (hp) Service factor (SF)	$Dhp = hp \times SF$
Power (kw)	Horsepower (hp)	$kw = .7457 \times hp$
Torque (T) in lb-in	Shaft horsepower (hp) Shaft speed (rpm)	$T = \frac{63,025 \times hp}{rpm}$
	Effective tension (Te) in lb. Pulley radius (R) in inches	$T = Te \times R$
Torque (T) in N-mm	Torque (T) in lb-inches	$T = 112.98 \times T$
Belt velocity in ft/min	Pulley pd in inches Pulley speed in rpm	$V = \frac{pd \times rpm}{3.82}$
Belt velocity in m/s	Pulley pd in mm Pulley speed in rpm	$V = .0000524 \times pd \times rpm$
Belt pitch length (PL) in inches (approximate)	Center distance (C) in inches Pulley diameters (D & d) in inches	$PL = 2C + [1.57 \times (D + d)] + \frac{(D - d)^2}{(4C)}$
Arc of contact on smaller pulley (A/Cs)	Pulley diameters (D & d) in inches Center distance (C) in inches	$A/Cs = 180 - \left[\frac{(D - d) \times 60}{(4C)} \right]$
Torque (T) due to flywheel effect (WR ²) in lb-inches (accel. and/or decel.)	Final speed (RPM) Initial speed (rpm) Flywheel effect (WR ²) in lb-ft ² Time (t) in seconds	$T = \frac{.039 \times (RPM - rpm) \times WR^2}{t}$
Flywheel effect (WR ²) in lb-ft ²	Face width of rim (F) in inches Material density (Z) in lbs/in ³ Outside rim diameter (D) in inches Inside rim diameter (d) in inches	$WR^2 = \frac{F \times Z \times (D^4 - d^4)}{1467}$

Useful Formulas and Calculations – continued

Power Transmission Conversions

FORCE CONVERSION CONSTANTS

Metric to U.S.

Newtons x 3.5969 = Ounces_f
 Newtons x 0.2248 = Pounds_f
 Kilograms_f x 2.2046 = Pounds_f

U.S. to Metric

Ounces_f x 0.2780 = Newtons
 Pounds_f x 4.4482 = Newtons
 Pounds_f x 0.4536 = Kilograms_f

Metric to Metric

Kilograms_f x 9.8067 = Newtons
 Newtons x 0.1020 = Kilograms_f

TORQUE CONVERSION CONSTANTS

Metric to U.S.

Newton Meters x 141.6119 = Ounce_f Inches
 Newton Meters x 8.8508 = Pound_f Inches
 Newton Meters x 0.7376 = Pound_f Feet

U.S. to Metric

Ounce_f Inches x 0.0071 = Newton Meters
 Pound_f Inches x 0.1130 = Newton Meters
 Pound_f Feet x 1.3558 = Newton Meters

Metric to Metric

Newton Meters x 10.1972 = Kilogram_f Centimeters
 Kilogram_f Centimeters x 0.0981 = Newton Meters
 Newton Meters x 0.1020 = Kilogram_f Meters
 Kilogram_f Meters x 9.8067 = Newton Meters

POWER CONVERSION CONSTANTS

Metric to U.S.

Kilowatt x 1.3410 = Horsepower
 Watt x 0.0013 = Horsepower

U.S. to Metric

Horsepower x 745.6999 = Watt
 Horsepower x 0.7457 = Kilowatt

LINEAR BELT SPEED CONVERSION CONSTANTS

Metric to U.S.

Meters per second x 196.8504 = Feet per Minute

U.S. to U.S.

Feet per Second x 60.00 = Feet per Minute
 Feet per Minute x 0.0167 = Feet per Second

U.S. to Metric

Feet per Minute x 0.005080 = Meters per Second
 Square Miles x 2.5900 = Square Kilometers

Other Conversions

LENGTH CONVERSION CONSTANTS

Metric to U.S.

Millimeters x 0.0394 = Inches
 Meters x 39.3701 = Inches
 Meters x 3.2808 = Feet
 Meters x 1.0936 = Yards
 Kilometers x 3280.84 = Feet
 Kilometers x 0.6214 = Statute Miles
 Kilometers x 0.5396 = Nautical Miles

U.S. to Metric

Inches x 25.4000 = Millimeters
 Inches x 0.0254 = Meters
 Feet x 0.3048 = Meters
 Yards x 0.9144 = Meters
 Feet x 0.0003048 = Kilometers
 Statute Miles x 1.6093 = Kilometers
 Nautical Miles x 1.8532 = Kilometers

AREA CONVERSION CONSTANTS

Metric to U.S.

Square Millimeters x 0.0016 = Square Inches
 Square Centimeters x 0.1550 = Square Inches
 Square Meters x 10.7639 = Square Feet
 Square Meters x 1.1960 = Square Yards
 Hectares x 2.4711 = Acres
 Square Kilometers x 247.105 = Acres
 Square Kilometers x 0.3861 = Square Miles

U.S. to Metric

Square Inches x 645.160 = Square Millimeters
 Square Inches x 6.4516 = Square Centimeters
 Square Feet x 0.0929 = Square Meters
 Square Yards x 0.8361 = Square Meters
 Acres x 0.4047 = Hectares
 Acres x 0.004047 = Square Kilometers
 Square Miles x 2.5900 = Square Kilometers

Heavy Duty V-Belt Drive Design Manual

Useful Formulas and Calculations – continued

Other Conversions —continued

WEIGHT CONVERSION CONSTANTS

Metric to U.S.

Grams x 15.4324 = Grains
 Grams x 0.0353 = Ounces (Avd.)
 Grams x 0.0338 = Fluid Ounces (water)
 Kilograms x 35.2740 = Ounces (Avd.)
 Kilograms x 2.2046 = Pounds (Avd.)
 Metric Tons (1000 Kg) x 1.1023 = Net Ton (2000 lbs.)
 Metric Tons (1000 Kg) x 0.9842 = Gross Ton (2240 lbs.)

U.S. to Metric

Grains x 0.0648 = Grams
 Ounces (Avd.) x 28.3495 = Grams
 Fluid Ounces (water) x 29.5735 = Grams
 Ounces (Avd.) x 0.0283 = Kilograms
 Pounds (Avd.) x 0.4536 = Kilograms
 Net Ton (2000 lbs.) x 0.9072 = Metric Tons (1000 Kg)
 Gross Ton (2240 lbs.) x 1.0160 = Metric Tons (1000 Kg)

DECIMAL AND MILLIMETER EQUIVALENTS OF FRACTIONS

Inches			Inches		
Fractions	Decimals	Millimeters	Fractions	Decimals	Millimeters
1/64	.015625	.397	33/64	.515625	13.097
1/32	.03125	.794	17/32	.53125	13.494
3/64	.046875	1.1911	35/64	.546875	13.89
1/16	.0625	1.588	9/16	.5625	14.288
5/64	.078125	1.984	37/64	.578125	14.684
3/32	.09375	2.3811	19/32	.59375	15.08
7/64	.109375	2.778	39/64	.609375	15.478
1/8	.125	3.175	5/8	.625	15.875
9/64	.140625	3.572	41/64	.640625	16.272
5/32	.15625	3.969	21/32	.65625	16.669
11/64	.171875	4.366	43/64	.671875	17.066
3/16	.1875	4.763	11/16	.6875	17.463
13/64	.203125	5.159	45/64	.703125	17.859
7/32	.21875	5.556	23/32	.71875	18.256
15/64	.234375	5.953	47/64	.734375	18.653
1/4	.250	6.350	3/4	.750	19.050
17/64	.265625	6.7477	49/64	.765625	19.44
9/32	.28125	7.144	25/32	.78125	19.844
19/64	.296875	7.5411	51/64	.796875	20.24
5/16	.3125	7.938	13/16	.8125	20.638
21/64	.328125	8.334	53/64	.828125	21.034
11/32	.34375	8.731	27/32	.84375	21.431
23/64	.359375	9.128	55/64	.859375	21.828
3/8	.375	9.525	7/8	.875	22.225
25/64	.390625	9.922	57/64	.890625	22.622
13/32	.40625	10.319	29/32	.90625	23.019
27/64	.421875	10.716	59/64	.921875	23.416
7/16	.4375	11.113	15/16	.9375	23.813
29/64	.453125	11.509	61/64	.953125	24.209
15/32	.46875	11.906	31/32	.96875	24.606
31/64	.484375	12.303	63/64	.984375	25.003
1/2	.500	12.700	1	1.000	25.400



Heavy Duty V-Belt Drive Design Manual

Industry V-Belt Drive Standards

V-belt dimensions, sheave groove dimensions and certain drive design data for 3V/3VX, 5V/5VX and 8V belts are standardized. Copies of the following standards are available from the respective standards organizations:

"Engineering Standard Specifications for Drives Using Narrow V-Belts and Sheaves (3V/3VX, 5V/5VX and 8V Cross Sections)" IP-22 (1991)

Joint publication of: Mechanical Power Transmission Assn.
932 Hungerford Drive #36
Rockville, Maryland 20850
The Rubber Manufacturers Assn., Inc.
1400 K Street, N.W.
Washington, D.C. 20005
The Rubber Association of Canada
89 Queens Way, West
Mississauga, Ont., Canada L5B2V2

V-belt dimensions, sheave groove dimensions and certain drive design data for A, B, C and D belts are standardized. Copies of the following standards are available from the respective standards organizations:

"Engineering Standard Specifications for Drives Using Classical V-Belts and Sheaves (A, B, C and D Cross Sections)" IP-20 (1988)

Joint publication of: Mechanical Power Transmission Assn.
932 Hungerford Drive #36
Rockville, Maryland 20850
The Rubber Manufacturers Assn., Inc.
1400 K Street, N.W.
Washington, D.C. 20005
The Rubber Association of Canada
89 Queens Way, West
Mississauga, Ont., Canada L5B2V2

"API Specifications for Oil Field V-Belting, API Standard 1-B"—American Petroleum Institute (March 1978), Washington, D.C.

Issued by: American Petroleum Institute
Production Department
300 Corrigan Tower Building
Dallas, Texas 75201

In addition to the standards, the Rubber Manufacturers Association, Inc., publishes a series of bulletins under the heading "Power Transmission Belt Technical Information." These bulletins contain discussions and recommendations on V-belt application subjects of general interest. Applicable bulletins published to date are:

IP-3-1 V-Belt Heat Resistance (1987)

IP-3-2 V-Belt Oil Resistance (1987)

IP-3-3 Static Conductive V-Belts (1985)

IP-3-4 Storage of V-Belts (1987)

IP-3-6 Effect of Idlers on V-Belt Performance (1987)

IP-3-7 V-Flat Drives (1972)

IP-3-8 High Modulus Belts (1987)

IP-3-9 Joined V-Belts (1987)

IP-3-10 V-Belt Drives With Twist (1987)

IP-3-13 Mechanical Efficiency of Power Transmission Belt Drives (1987)

IP-3-14 A Drive Procedure for Variable Pitch Multiple V-Belt Drives (1987)

ISO (International Organization for Standardization) has published the following international standards pertaining to industrial V-belt drives:

- | | |
|----------------------|---|
| ISO 255-1981 | Pulleys for Classical and Narrow V-Belts — Geometrical Inspection of Grooves. |
| ISO 1081-1980 | Drives Using V-Belts and Grooved Pulleys — Terminology. |
| ISO 4183-1980 | Grooved Pulleys for Classical and Narrow V-Belts. |
| ISO 4184-1980 | Classical and Narrow V-Belts — Lengths. |
| ISO 5290-1985 | Grooved Pulleys for Joined Narrow V-Belts — Groove Sections 9J, 15J, 20J and 25J. |
| ISO 5291-1987 | Grooved Pulleys for Joined Conventional V-Belts — Groove Sections AJ, BJ, CJ and DJ. |

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