

## Outside Air Applications

## dixonvalve.com • Customer Service: 877.963.4966



Dixon<sup>®</sup>'s couplings and retention devices are designed to work safely for their intended use. The selection of the proper hose, coupling and retention device, and the proper application of the coupling to the hose are of utmost importance.

Users must consider the size, temperature, application, media, pressure and hose and coupling manufacturer's recommendations when selecting the proper hose assembly components. Dixon<sup>®</sup> recommends that all hose assemblies be tested in accordance with the Association for Rubber Products Manufacturer's (ARPM) recommendations and be inspected regularly (before each use) to ensure that they are not damaged or have become loose. Visit ARPMINC.com for more information.

Where safety devices are integral to the coupling, they must be working and utilized. The use of supplementary safety devices such as safety clips or safety cables are recommended.

If any problem is detected, couplings must be removed from service immediately.

Dixon<sup>®</sup> is available to consult, train and recommend the proper selection and application of all fittings we sell. We strongly recommend that distributors and end users make use of Dixon<sup>®</sup>'s Testing and Recommendation Services. Call 877.963.4966 or click dixonvalve.com to learn more.

## The Importance of Whip Hose



The constant vibration created by air tools, like air drills and pavement breakers, is destructive to air hose couplings, especially the quick-acting type. To provide a safer working enviroment, connect one end of a 3' to 10' length of air hose to the tool using Dixon<sup>®</sup>'s No. 3500 Steel Nipple. This nipple is designed to specifically handle vibration applications. Connect the other end of hose to the air supply using the standard quick-acting coupling. The Whip Hose should remain permanently connected to the tool.

## **OSHA Regulations**

ASME Air Receiver Manifold-1910.169; 1926.306 King™ Safety Cable- 1926.302 (b1) Air King™ Safety Clip-1926.302 (b2) Safety Check Valve- 1926.302 (b7) Safety Vented Ball Valve- 1910.147

The regulations may be viewed in full on the OSHA website, osha.gov. Please check the website for updates.

## Installation and Inspection Procedures

#### Procedure # 1000

Boss™ clamp selection

Procedure # 2000

Installation of Boss™ 2 bolt clamp

#### Procedure # 2001

Installation of Boss™ 4 bolt clamp





#### Procedure # 2300

Installation of King<sup>™</sup> Cable Safety Cable

#### Procedure # 2306

Crimping Unirange, Air King™, Dix-Lock™ and Dual-Lock couplings

#### Procedure # 3001

**Bolt Clamp Inspection** 





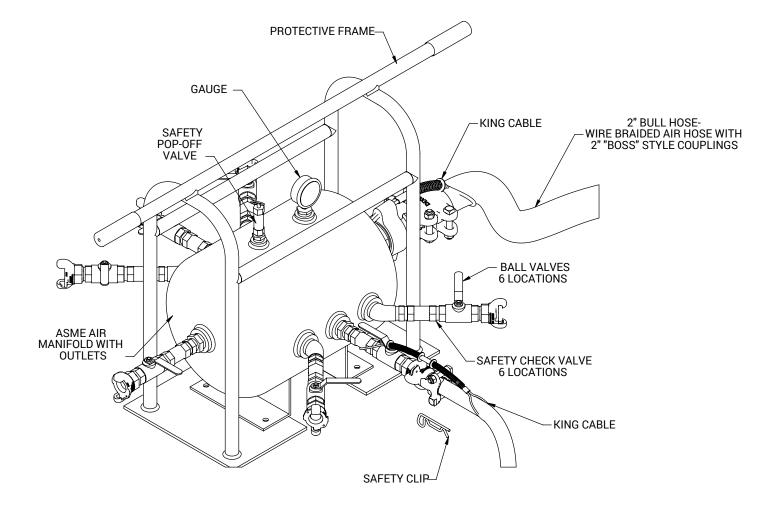
YouTube Videos

Scan me with your Smart Phone.

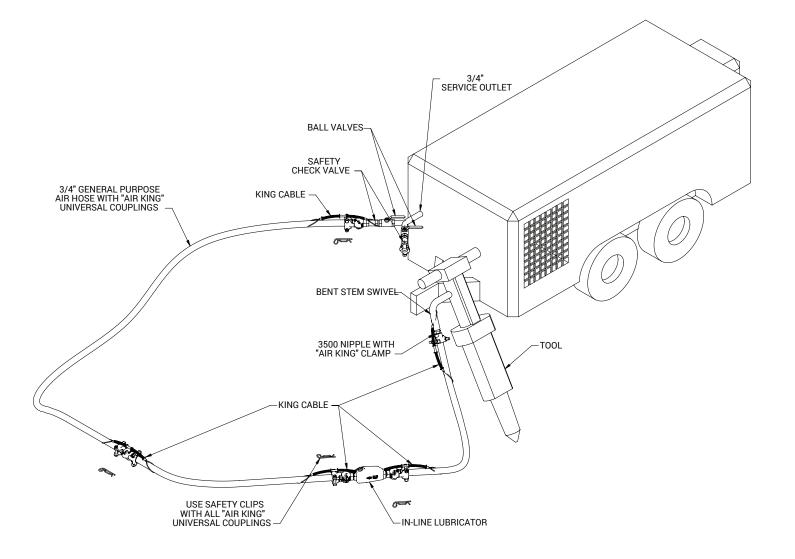
A printed copy of the complete Installation and Inspection Procedures Manual is available upon request.

All dimensions are nominal.

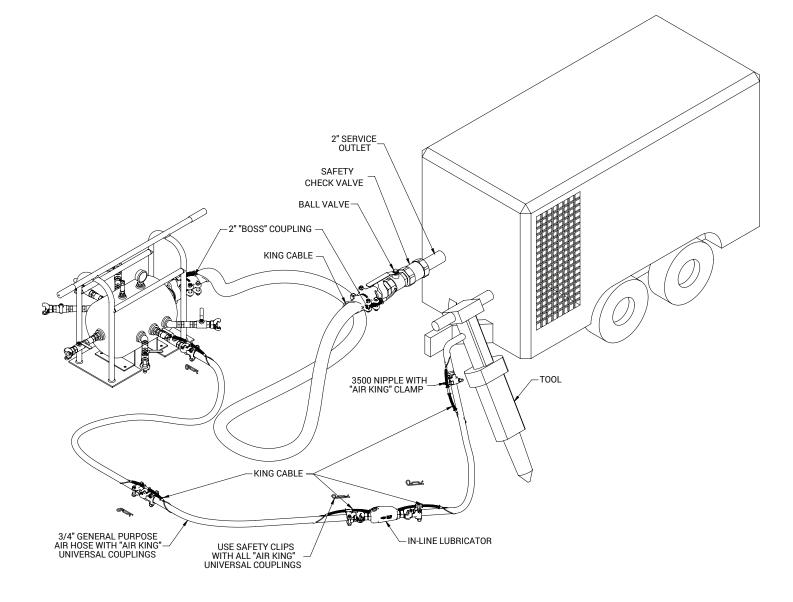
## Detailed view of manifold assembly



## Compressor 125 CFM



# Compressor 600 CFM



## Air King™ Universal Couplings

#### Service:

- The maximum recommended working pressure for Air King<sup>™</sup> is 150 PSI at ambient temperature 70°F (21°C).
- for air and water service only.

Warning: Not to be used for steam.

#### Features:

- A universal head that is identical for all parts in the 1/4" to 1" range. With this head, any Dixon<sup>®</sup> fittings within that range can be connected regardless of hose shank or thread size.
- · Couplings with optional ferrules permanently attached are provided ready to install.
- Safety There are three safety features built into every Air King™:
  - 1. Washer design (A) Dixon<sup>®</sup> AWR4 washers supplied with every Air King<sup>™</sup> are designed to seal up to 150 PSI. The washer design helps keep the coupling together while pressurized.
  - Internal lug design (B) –Cast inside each Air King<sup>™</sup> lug is a ninety-degree step that locks with an opposite step on the outside of the adjoining Air King<sup>™</sup> part. These step-locks provide additional holding power to keep the Air King<sup>™</sup> connected up to its 150 PSI rating at 70° F (21°C) ambient temperature.
  - Safety Clip (C) Unexpected twisting of hose assemblies can occur during use. To eliminate the possibility of accidentally disconnecting, each Air King<sup>™</sup> comes with a Safety Clip. This clip is designed to be inserted into the locking holes (D) on the fittings. The use of a Safety Clip assures the users that the fittings have been properly connected.

#### Connecting:

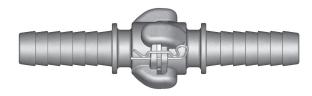
- · Push two couplings together and turn the one in your right hand until they seat.
- Insert an Air King<sup>™</sup> safety clip through the hole in the flanged area of the head. If a safety clip is not available, use a cotter pin or wire type retainer. Lanyards (not pictured, see page 9) are available separately to fasten the Safety Clip to the locking head.

#### Disconnecting:

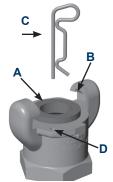
 Remove the safety clip, cotter pin or wire. Press the couplings together and turn the one your right hand until they unseat. Never attempt to disconnect any hose while pressure is in the line.

#### Interchange:

Although Air King<sup>™</sup> may couple with other manufacturers' fittings, we do not recommend their use with other products. Not all universal locking heads are made to the same standard.



Air King<sup>™</sup> meets pressure requirements as specified in Commercial Item Description A-A-59553 that supersedes Mil Spec. WWC-633D.



877.963.4966

## Air King™ Male NPT Ends

#### Feature: • male NPT thread with hex for a wrench

0	Size	Iron	Brass	316 Stainless Steel
- 3		Part #	Part #	Part #
1	1/4"	AMB1	ABB1	
3	3/8"	AMB	ABB	RAMB
1	/2"	AM2	AB2 <sup>1</sup>	RAM2
3	3/4"	AM7	AB7 <sup>1</sup>	RAM7
	1"	AM12	AB12 <sup>1</sup>	RAM12

<sup>1</sup> global investment cast

		C	imension	s		
Size	А	В	С	D	E	NPT
1/4"	2-1⁄2"	2-9/16"	1"	9/16"	<sup>5</sup> ⁄8"	1⁄4"
3/8"	2-1⁄2"	2-9/16"	1"	9/16"	<sup>5</sup> /8"	<sup>3</sup> ⁄8"
1/2"	2-1⁄2"	2-11/16"	1-1⁄8"	1⁄2"	3/4"	1⁄2"
3/4"	2-1⁄2"	2-13/16"	1-3⁄8"	9-16"	13/16"	<sup>3</sup> /4"
1"	2-1⁄2"	2-13/16"	1-1⁄2"	3⁄8"	13/16"	1"

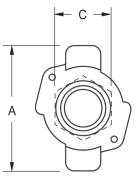
### Feature:

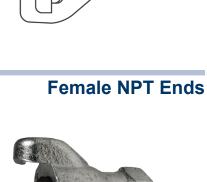
female NPT thread with hex for a wrench

		ŭ.	1
Size	Iron	Brass	316 Stainless Steel
3126	Part #	Part #	Part #
1⁄4"	AMC1	ABC1	
3⁄8"	AMC	ABC	RAMC
1/2"	АМЗ	AB3 <sup>1</sup>	RAM3
3/4"	AM8	AB8 <sup>1</sup>	RAM8
1"	AM13	AB13 <sup>1</sup>	RAM13

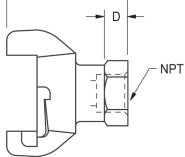
<sup>1</sup> global investment cast

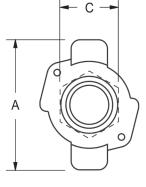
Dimensions					
Size	А	В	С	D	NPT
1/4"	2-1⁄2"	2-7/16"	1-1⁄8"	<sup>3</sup> /8"	1⁄4"
3/8"	2-1⁄2"	2-7/16"	1-1⁄8"	<sup>3</sup> ⁄8"	<sup>3</sup> ⁄8"
1⁄2"	2-1⁄2"	2-7/16"	1-1⁄8"	<sup>3</sup> ⁄8"	1⁄2"
3/4"	2-1⁄2"	2-7/16"	1-7/16"	3/8"	3⁄4"
1"	2-1⁄2"	2-1/16"	1-5⁄8"	3⁄8"	1"













В

- D

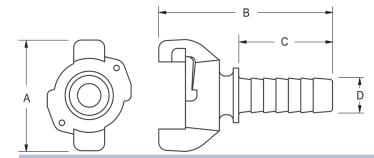
• E →

NPT



## **Hose Ends**





#### Features:

- can be used with Air King<sup>™</sup> ferrules
- supplied with safety clip
- pressure rating: 150 PSI at ambient temperature 70°F (21°C)
- supplied with rubber washers, part # AWR4
- meets pressure requirements as specified in A-A-59553 commercial item description superseding Mil Spec.WWC-633D

Size	Iron	Brass	316 Stainless Steel
Size	Part #	Part #	Qty
3/8"	AMH <sup>1</sup>	ABH	RAMH
1/2"	AM1	AB1 <sup>1</sup>	RAM1
5/8"	AM5	AB5	
3/4"	AM6	AB6 <sup>1</sup>	RAM6
1"	AM11	AB11 <sup>1</sup>	RAM11

<sup>1</sup> global investment cast

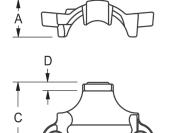
Features:

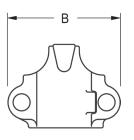
Dimensions					
Size	A	В	С	D	
3/8"	2-1⁄2"	3-7/16"	1-5⁄8"	7/16"	
1/2"	2-1⁄2"	3-7/16"	1-5⁄8"	17/32"	
5/8"	2-1⁄2"	4-1/4"	2-7/16"	11/16"	
3/4"	2-1⁄2"	4"	2-1/16"	25/32"	
1"	2-1⁄2"	4-25/32"	2-11/16"	1-1/16"	



## Clamps







• Torque values for clamps are based on dry bolts. The use of lubricant on bolts will adversely effect clamp performance.

	Hose OD		Zinc Plated Iron	
Size	From:	To:	Part #	Torque <sup>1</sup>
3⁄8"	44/64"	56/64"	<b>CD</b> <sup>3</sup>	6
1⁄2"	1"	1-12/64"	A4	6
3/4"	1-8/64"	1-20/64"	<b>A9</b> <sup>3</sup>	21
1"	1-20/64"	1-32/64"	A10 <sup>2,3</sup>	21
1"	1-32/64"	1-52/64"	A14	21

<sup>1</sup> recommended torque rating in lbs.

<sup>2</sup> can be used with AM6 and AM11

<sup>3</sup> global investment cast carbon steel

Note: Torque values for clamps are based on dry bolts. The use of lubricant on bolts will adversely effect clamp performance

	Dimensions		
А	В	С	D
17/32"	1-11/16"	1-7/16"	1⁄8"
25/32"	2-1/16"	1-17/32"	5/32"
7⁄8"	2-13/16"	1-21/32"	1⁄8"
1"	2-19/32"	1-15/16"	9/32"
3/4"	3-1/32"	2-1⁄4"	5/32"
	17/32" 25/32" 7⁄8" 1"	17/32"         1-11/16"           25/32"         2-1/16"           ½"         2-13/16"           1"         2-19/32"	17/32"         1-11/16"         1-7/16"           25/32"         2-1/16"         1-17/32"           %"         2-13/16"         1-21/32"           1"         2-19/32"         1-15/16"

## Air Kina™ Blank Ends

#### Features:

- · Blank end fittings have no outlet and are used to block the line at any coupling point.
- The end opposite the coupling head is flat, with an eye for a chain to secure the fitting when not in use.

Iron	Brass	316 Stainless Steel
Part #	Part #	Part #
AM0	AB0 <sup>1</sup>	RAM0

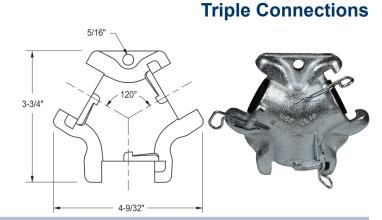
<sup>1</sup> global investment cast

#### Feature:

· Triple connection consists of three universal couplings that provide an extra outlet when connected to the line.

Iron	Brass
Part #	Part #
AM10	AB10 <sup>1</sup>

<sup>1</sup> global investment cast



2-1/2

2-1/2

5/16"

## Air King<sup>™</sup> Safety Pins, Clips, Lanyards and Washers

The use of an Air King™ safety clip or wire type retainer is necessary to ensure the couplings will not become accidentally disconnected. The clip will not go through the locking holes unless the couplings are locked in place. Only one safety clip or wire type retainer is required for each assembly.

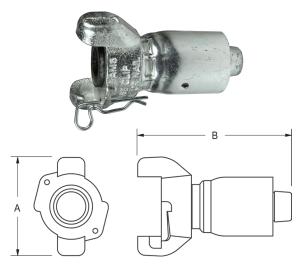
Standard Safety Clips Feature: • same size for all coupling sizes	$\bigcirc$	Air King™ Sat Feature: ● heavy duty, ov	-	
Wire Diameter Part #		Wire Diameter	Part #	
.080 AC1		.058 .091	AKSP1 AKSP25	
Lanyards Feature: • same size for all coupling sizes	synthetic cord	Stainless Ste Feature: • same size for sizes		
Part #		51205		
ACL8 Feature:		Wire Diameter	Part #	
<ul> <li>breaking strength: 160 lb</li> </ul>	• overall length: 7" eye to eye	.072	AC7	
304 Stainless Part #			-	
LR7				
Feature:	Was	shers		

- 2 lug couplings use the same size washer (AWR4, AWS6)
- 4 lug couplings use the same size washer (AWR14)
- rubber temperature range: -20°F to 160°F (-29°C to 71°)
- neoprene temperature range: -20°F to 190°F (-29° to 88°C) •
- neoprene is oil resistant

Nashers				
Part #	Material	Style		
AWR4 <sup>1</sup>	rubber	2 lug		
AWS6 neoprene 2 lug		2 lug	AWR4	
AWR14	rubber	4 lug	AWIN <del>4</del>	
<sup>1</sup> made from				

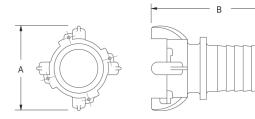


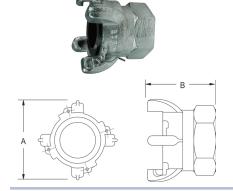
## Air King<sup>™</sup> with Ferrules



## 4-Lug Quick Acting Couplings







## Features:

- working pressure: 150 PSI at ambient temperature 70°F (21°C)
- design provides quick, easy and effective coupling of air hose
- interlocking ferrule can be crimped or swaged to achieve maximum coupling sealing and retention with a low profile streamline appearance
- for air and water service only

Style	Hose OD			Iron	316 Stainless Steel
	From	То		Part #	Part #
1/2"	54/64"	1-2/64"	ΑΛ	/1WF	RAM1WF
3/4"	1-4/64"	1-22/64"	AM6WF		RAM6WF
1"	1-18/64"	1-34/64"	AM11WF-1		
1"	1-30/64"	1-46/64"	AM11WF		
	Dimensions				
Size	А				В
1⁄2"	21/2"			3-7/16"	
3/4"		21⁄2"		3-15/16"	

4-25/32"

#### Features:

1"

- · Not to be used for steam service. Must use safety clips.
- Safety clips are same size for both 2-lug and 4-lug Universal Couplings, see page 9. Use safety clips on all Universal Coupling applications.
- Boss™ clamps recommended, see pages 20 and 21 for clamp selection.
- rated to 150 PSI working pressure at 70° F ambient temperature
- supplied with safety clip and rubber washers

21/2"

	Hose Ends	
Size	Iron	Brass
3126	Part #	Part #
1¼"	AM16	AB161
11⁄2"	AM21	AB211
2"	AM26	AB26
4 10 10 10 10 10 10	end and the state of the state of the state of the	

<sup>1</sup> item will be discontinued when stock is depleted

	Dimensio	115
Size	A	В
11⁄4"	5⁵⁄8"	3¾"
11⁄2"	51⁄8"	3¾"
2"	6-1/16"	3¾"

#### Female NPT Ends

Size	<i>Iron</i> Part #	<i>Brass</i> Part #
1¼"	AM18	AB181
1½"	AM23	AB231
2"	AM28	AB28

<sup>1</sup> item will be discontinued when stock is depleted

Dimensio	ns
A	В
2-15/16"	33⁄4"
3"	3¾"
3-3/32"	33⁄4"
	3"

#### **Rubber Washer for 4-lug**

Part #

AWR14



10

fits all sizes

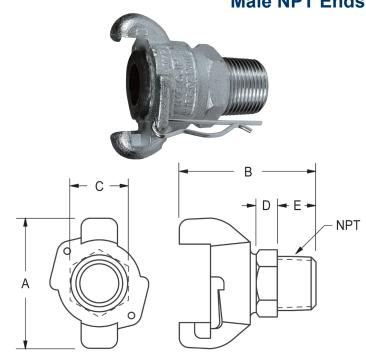
## GLOBAL Air King™ Male NPT Ends

#### Features:

- male NPT thread with hex for a wrench
- supplied with safety clip and rubber washers

Size	Plated Steel	
Size	Part #	
1/2"	GAM2	
3/4"	GAM7	
1"	GAM12	

		l	Dimension	S		
Size	А	В	С	D	E	NPT
1⁄2"	21⁄2"	2-11/16"	1"	<sup>3</sup> ⁄8"	7⁄8"	1⁄2"
3/4"	21⁄2"	2-11/16"	1-11/32"	21/64"	7⁄8"	3⁄4"
1"	21⁄2"	2-¾"	11⁄2"	5/16"	1"	1"



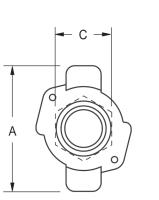
#### Features:

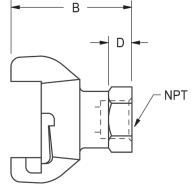
- female NPT thread with hex for a wrench
- · supplied with safety clip and rubber washers

Size	Plated Steel
	Part #
1/2"	GAM3
3/4"	GAM8
1"	GAM13

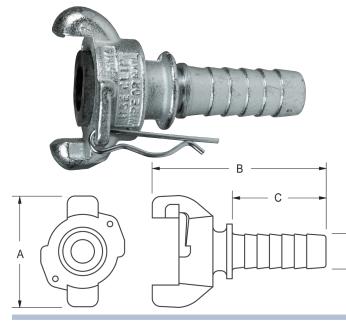
		Dimensior	าร		
Size	Α	В	С	D	NPT
1/2"	21⁄2"	2-1⁄8"	1-1⁄8"	3/8"	1⁄2"
3/4"	21⁄2"	2-5/32"	1-7/16"	<sup>3</sup> ⁄8"	<sup>3</sup> /4"
1"	21⁄2"	2-13/16"	1-5⁄8"	3⁄8"	1"







## **Hose Ends**



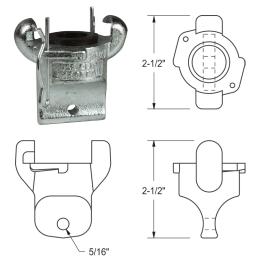
Feature:

supplied with safety clip and rubber washers

Cine	Plated Steel	
Size	Part #	
1/2"	GAM1	
3/4"	GAM6	
1"	GAM11	

		Dimensions		
Size	A	В	С	D
1/2"	21⁄2"	3-3⁄8"	1-21/32"	17/32"
3/4"	21⁄2"	3-31/32"	2-1⁄8"	25/32"
1"	21⁄2"	4-21/32	2-25/32"	1-1/16"

**Blank Ends** 



#### Features:

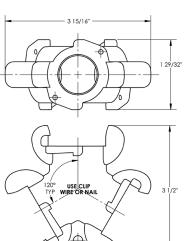
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- Blank end fittings have no outlet and are used to block the line at any coupling point.
- The end opposite the coupling head is flat, with an eye for a chain to secure the fitting when not in use.

Plated Steel
Part #
GAM0

## **Triple Connection**





1/4" DIA

#### Feature:

• Triple connection consists of three universal couplings that provide an extra outlet when connected to the line.

Plated Steel	
Part #	
GAM10	

## 4-Lug Quick Acting Couplings - Hose Ends

#### Features:

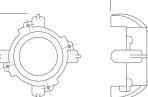
- supplied with safety clip and rubber washers
- pressure rating: 150 PSI at ambient temperature 70°F (21°C)
- use with Boss™ clamps
- not to be used for steam service
- must use safety clips, safety clips are same size for both 2-lug and 4-lug Air King<sup>™</sup> Couplings

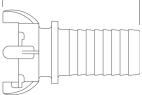




Plated Steel Part #
GAM16
GAM21
GAM26

Dimensions				
Size	А	В		
11⁄4"	3¾"	5⁵⁄s"		
11⁄2"	3¾"	51/8"		
2"	3¾"	6-1/16"		



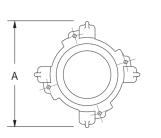


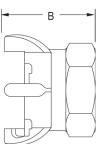
В

## 4-Lug Quick Acting Couplings - Female NPT Ends

Size	<i>Plated Steel</i> Part #
11⁄4"	GAM18
11⁄2"	GAM23
2"	GAM28







#### Dimensions

Size	A	В
11⁄4"	3¾"	2-15/16"
11⁄2"	3¾"	3"
2"	3¾"	3-3/32"

## Boss™ Coupling System

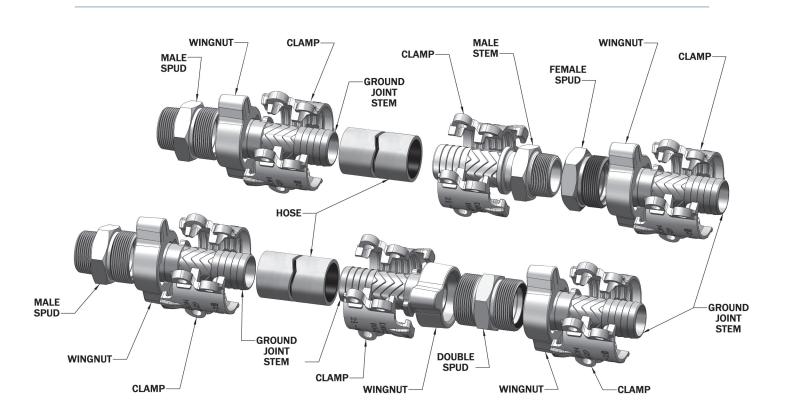
<u>Features</u>: The spud part of the coupling serves as one half of the connection and is usually fixed to the equipment. The stem part that is clamped to the hose is the other half. The two halves are connected or disconnected by rotating the wing nut onto the spud. When connected they achieve a mechanical, as well as, a pressure seal.

<u>Services:</u> Boss<sup>™</sup> couplings are all-purpose hose couplings, universally recommended for steam hose connections. They are also widely used for air, water, fluid petroleum, chemicals and liquid petroleum gas up to 1" ID. Boss<sup>™</sup> couplings can be applied to many types of rubber, synthetic, plastic, metallic or semi-metallic hose. Consult Dixon<sup>®</sup> for specific media capabilities.

**Purpose:** Boss<sup>™</sup> couplings supply a convenient threaded fitting to connect two lengths of hose, or a single length to a male or female threaded (NPT) outlet.

#### Materials:

- stem: 1/4" 1" plated steel, 11/4" 4" plated iron, 6" tubular steel
- spud: ¼" 1" plated steel, 1¼" 6" plated iron
- wing nut: 1/4" plated steel, 3/8" 6" plated iron



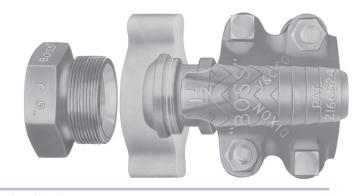
Worn-out hose couplings can be dangerous. They should be checked regularly and replaced when necessary. Each coupling user should review applications and add safety devices where indicated.

### Boss<sup>™</sup> FITTINGS

## **Ground Joint**

#### Features:

- positive metal-to-polymer seal
- leakproof seal forms when the metal head of the stem makes contact with the patented polymer seat in the spud
- non-metallic polymer seat resists most chemicals found in manufacturing facilities
- recommended for steam service up to 450°F (232°C)
- easy to seal
- use with Boss<sup>™</sup> clamps





Hose Shank x NPT	Complete Female Part #	Stem Part #	Wing Nut Part #	Knurled Nut Part #	Female Spud Part #	Male Spud Part #	Double Spud Part #
1⁄4"	GF1 <sup>1</sup>	GBA	SLS4		GBC <sup>1</sup>		
3/8"	GF31	GCA	СВ		GCC <sup>1</sup>	GMC <sup>1</sup>	
1/2"	GF6	GB1	<b>B</b> 2		GB3	GM3	GDB3
<sup>1</sup> / <sub>2</sub> " X <sup>3</sup> / <sub>4</sub> "	GF26-1	GB6-1	B12				
3/4"	GF26	GB6	B12	KB12	GB8	GM8	GDB13
1"	GF36	GB11	B12	KB12	GB13	GM13	GDB13
1¼"	GF51	GB16	B17		GB18	GM18	GDB23
11⁄2"	GF61	GB21	B17		GB23	GM23	GDB23
2"	GF81 <sup>2</sup>	GB26 <sup>3</sup>	B27		GB28	GM28	GDB28
21/2"	GF96	GB31	<b>B</b> 32		GB33	GM33	GDB33
3"	GF111	GB36 <sup>3</sup>	<b>B</b> 37		GB38	GM38	GDB38
4"	GF141	GB46	B47		GB48		
6"	GF2011	GB66	<b>B</b> 67		GB681		



<sup>1</sup> ¼", <sup>3</sup>/<sub>8</sub>" and 6" come only with copper seat spuds.

not to be used with #250, #275 or #306 Boss™ clamps

GB26 and GB36 have a machined shank to accomodate a Boss™ clamp, King Crimp™ sleeve or ferrule. The King Crimp™ sleeve or ferrule is not to be used for steam service.

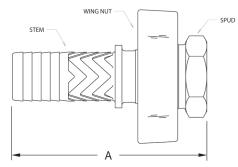
 'A' dimension represents a complete coupling length with a female spud

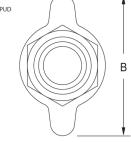
· 'B' dimension is the largest dimension over the wing nut

<sup>1</sup> <sup>1</sup>/<sub>4</sub>" coupling has a hex style nut

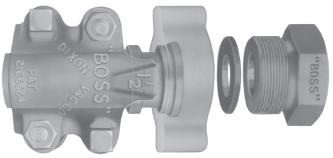
<sup>2</sup> 4" and 6" couplings have a 3 wing nut design

Dimensions					
A	В				
21/2"	1-5/32" <sup>1</sup>				
3-1/32"	13⁄4"				
3-21/32"	23/8"				
4-15/16"	3-9/16"				
5-3/16"	3-9/16"				
7"	41⁄4"				
7¼"	41⁄4"				
7-5/8"	55⁄8"				
9-5/32"	6¾"				
9-11/32"	7 <sup>3</sup> /4"				
111⁄2"	91⁄2" <sup>2</sup>				
12"	12¼" <sup>2</sup>				
	A 21/2" 3-1/32" 3-21/32" 4-15/16" 5-3/16" 7" 71/4" 7-5/8" 9-5/32" 9-11/32" 111/2"				





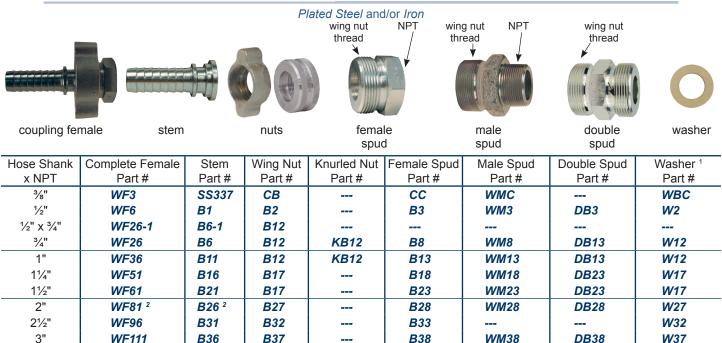
## Washer Type



#### Features:

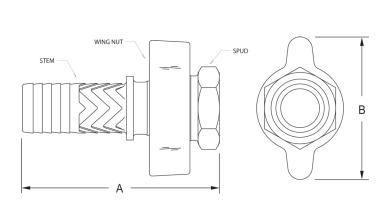
•

- recommended for steam service up to 450°F (232°C)
- easy to seal
- Klingersil<sup>®</sup> C-4401 washer is inserted between the stem and spud
- leakproof seal forms by rotating the wing nut and hammering it tight
- use with Boss<sup>™</sup> clamps found on pages 20 and 21



<sup>1</sup> washer is nitrile rubber bonded, non-asbestos Klingersil<sup>®</sup> C-4401

<sup>2</sup> not to be used with #250, #275 or #306 Boss™ clamps



• 'A' dimension represents a complete coupling length with a female spud.

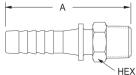
'B' dimension is the largest dimension over the wing nut.

Dimensions					
Size	A	В			
3⁄8"	2-25/32"	13⁄4"			
1⁄2"	3-7/16"	2 <sup>3</sup> /8"			
3/4"	4-25/32"	3-9/16"			
1"	4-31/32"	3-9/16"			
11⁄4"	6-21/32"	4¼"			
11⁄2"	61/8"	41⁄4"			
2"	7-15/32"	55%"			
21⁄2"	8-25/32"	6¾"			
3"	9-7/16"	7¾"			

### Boss<sup>™</sup> FITTINGS

Features:

- use with Boss™ clamps on pages 20 and 21
   hex dimension is the distance across the flats



• recommended for steam service up to 450°F (232°C)



	Dimen	Steel	
Hose x NPT Size	A	Hex	Part #
<sup>1</sup> ⁄4" X <sup>1</sup> ⁄8"	21⁄4"	9/16"	MS4X2
1⁄4" x 1⁄4"	23/8"	9/16"	MSA
<sup>1</sup> ⁄4" X <sup>3</sup> ⁄8"	2-7/16"	11/16"	MSB
3⁄8" X 1⁄4"	25⁄8"	11/16"	MS6X4
3⁄8" X 3⁄8"	2-11/16"	11/16"	MSC
<sup>3</sup> ∕8" X <sup>1</sup> ∕2"	2-15/16"	7⁄8"	MS6X8
1⁄2" X 1⁄4"	3"	13/16"	MS8X4
1⁄2" X 3⁄8"	3"	7⁄8"	MS8X6
1⁄2" X 1⁄2"	3-3/16"	7⁄8"	MS1
<sup>1</sup> /2" X <sup>3</sup> /4"	3-3/16"	1-1/8"	MS8X12
<sup>3</sup> /4" X <sup>1</sup> /2"	4-3/32"	11⁄8"	MS12X8
<sup>3</sup> ⁄4" X <sup>3</sup> ⁄4"	4-3/32"	11⁄8"	MS6
³⁄₄" x 1"	4-11/32"	13⁄8"	MS12X16
1" x ¾"	4-13/32"	13⁄8"	MS16X12
1" x 1"	4-19/32"	13/8"	MS11

#### Features:

castings

• use with Boss™ clamps on pages 20 and 21

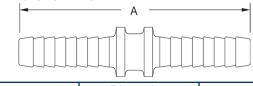
· hex dimension is the distance across the flats

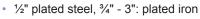
recommended for steam service up to 450°F (232°C)

A A		plated iron	brass		316 stainless
Hose x NPT Size	Dime	nsions	Plated Iron	Brass	316 Stainless
	А	Hex	Part #	Part #	Part #
1/2"	31⁄4"	7⁄8"			RMS1
3/4"	4-5/32"	11⁄8"		BMS6	RMS6
1"	4-21/32"	1 <del>3</del> ⁄8"		BMS11	RMS11
1¼"	6-1/32"	21⁄8"	MS16	BMS16	RMS16
11⁄2"	6-5/16"	2-7/16"	MS21	BMS21	RMS21
2"	61/8"	21⁄8"	MS26	BMS26	RMS26
21⁄2"	85⁄8"	35⁄8"	MS31		RMS31
3"	91⁄2"	41⁄8"	MS36	BMS36	<b>RLP36</b> <sup>1</sup>
4"	11"	5"	MS46		<b>RLP46</b> <sup>1</sup>
<sup>1</sup> tubular steel	-	-	-	-	-

#### Features:

collars engage grip fingers of Boss™ clamps





## **Hose Menders**



Size	Dimension A	Part #	Size	Dimension A	Part #
1/2"	4"	M1	11⁄2"	8 <sup>3</sup> ⁄8"	M21
3/"	6"	<i>M</i> 6	2"	9-1/16"	M26
1"	6-13/16"	M11	21⁄2"	101⁄2"	M31
1¼"	71⁄8"	M16	3"	111/8"	M36

## **Holedall Fittings**

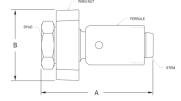
#### Applications:

- designed for air and liquid applications where a permanent, low profile clamping system is desired
- not for steam service

#### Features:

- supplied with carbon steel ferrules
- consult Dixon<sup>®</sup> for swage and/or crimp specifications





Size	Hose OD		Plated Iron / Steel	Stainless Steel
	From:	To:	Part #	Part #
	1-10/64"	1-14/64"	GF26P1	
3/4"	1-15/64"	1-18/64"	GF26P2	
	1-19/64"	1-22/64"	GF26P3	
	1-30/64"	1-34/64"	GF36P1	
1"	1-35/64"	1-38/64"	GF36P2	
	1-39/64"	1-42/64"	GF36P3	
	1-20/64"	2"	GF61P1	RGF61P1
11⁄2"	2-1/64"	2-8/64"	GF61P2	RGF61P2
	2-9/64"	2-16/64"	GF61P3	
	2-36/64"	2-40/64"	GF81P1	RGF81P1
2"	2-41/64"	2-48/64"	GF81P2	RGF81P2
	2-49/64"	2-56/64"	GF81P3	
	3-26/64"	3-40/64"	GF111P1	
3"	3-41/64"	3-48/64"	GF111P2	
	3-49/64"	3-56/64"	GF111P3	

Dimensions

В

3-9/16"

3-9/16"

4¾"

5%"

7¾"

А

4¾"

51/8"

7-1/16"

7-7/16"

8-13/16"

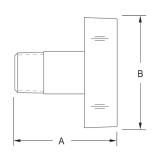
- 'A' dimension represents a complete coupling length with a female spud.
- · 'B' dimension is the largest dimension over the wing nut.

## Adapters

#### Features:

- plated steel and / or iron
- designed to fit the standard ground joint spuds on page 15
- supplied with a wing nut, as shown
- for safety tags and safety tape, see page 49





Male NPT					
Size	Part #				
3/4"	GMAS6				
1"	GMAS11				
1¼"	GMAS16				
11⁄2"	GMAS21				
2"	GMAS26 <sup>1</sup>				
3"	GMAS36				

<sup>1</sup> uses a special wing nut, part # B27-1

Size

<sup>3</sup>/4"

1"

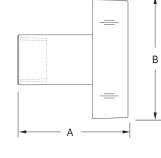
11⁄2"

2"

3"

\_

Dimensions					
Size	А	В			
3/4"	3-1/16"	3-9/16"			
1"	3-5/16"	3-9/16"			
11⁄4"	4"	41⁄4"			
11⁄2"	4-1/8"	41⁄4"			
2"	4-5/16"	5%"			



Female NPT								
Part #								
GFAS6								
GFAS11								
GFAS16								
GFAS21 <sup>1</sup>								
GFAS26								
GFAS36								

#### <sup>1</sup> part is produced as a welded fabrication

Dimensions						
Size	А	В				
3/"	31⁄8"	3-9/16"				
1"	3-5/16"	3-9/16"				
11⁄4"	4"	4¼"				
11/2"	3-25/32"	4¼"				
2"	5"	55%"				

## Boss<sup>™</sup> FITTINGS Wing Nut Caps

#### Features:

- plated steel and / or iron
- supplied with 12" chain and washer
- · for best results, use with washer style spuds and washers on page 16



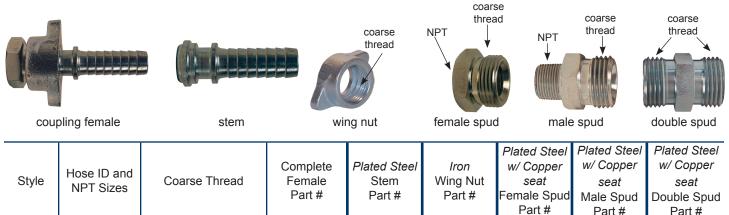
Size	Part #
3⁄4" and 1"	B12SC
1¼" and 1½"	B17SC
2"	B27SC
3"	B37SC



## **Ground Joint Air Hammer Couplings**

#### Features:

- · rounded steel head of stem fits concave inserts in spuds for superior sealing
- metal-to-metal copper seat seal
- use with Boss<sup>™</sup> clamps on page 20 and 21



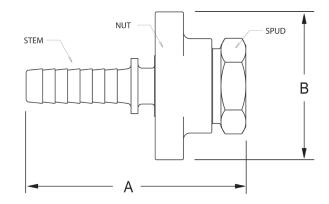
		Part #	Part #	Part #	Female Spud	Male Spud	Double Spud
					Part #	Part #	Part #
1⁄2"	1-31/64" OD x 8 T.P.I.	GDF6	GBA45	J47	GJ65	GJ60	GJ75
3/4"		GDF8	GBA46	J47	GJ55	GJ50	GJ75
3/4"		GDF10	GBB18	DLB12	GDL8	GDL7	GDL25
1"	1-47/64" OD x 8 T.P.I.	GDF12	GBB11	DLB12	GDL13	GDL10	GDL25
	3/" 3/4" 3/4"	<sup>3</sup> / <sub>4</sub> " 1-31/64" OD x 8 T.P.I. <sup>3</sup> / <sub>4</sub> " 1-47/64" OD x 8 T.P.I	1/2"         GDF6           3/4"         1-31/64" OD x 8 T.P.I.         GDF8           3/4"         1-47/64" OD x 8 T.P.I         GDF10	½"         GDF6         GBA45           ¾"         1-31/64" OD x 8 T.P.I.         GDF6         GBA45           ¾"         1-47/64" OD x 8 T.P.I.         GDF10         GBB18	½"         GDF6         GBA45         J47           ¾"         1-31/64" OD x 8 T.P.I.         GDF6         GBA45         J47           ¾"         1-47/64" OD x 8 T.P.I.         GDF10         GBB18         DLB12	½"         GDF6         GBA45         J47         GJ65           ¾"         1-31/64" OD x 8 T.P.I.         GDF6         GBA46         J47         GJ55           ¾"         1-47/64" OD x 8 T.P.I.         GDF10         GBB18         DLB12         GDL8	½"         1-31/64" OD x 8 T.P.I.         GDF6 GDF8         GBA45 GBA46         J47 J47         GJ65 GJ55         GJ60 GJ50           ¾"         1-47/64" OD x 8 T.P.I.         GDF10         GBB18         DLB12         GDL8         GDL7

#### Dimensions

Style	Size	A	В
Compost	1⁄2"	4-5/32"	2-15/16"
Compact	3/4"	4-15/16"	2-15/16"
Heavy	3/"	5"	35⁄8"
	1"	5-13/32"	35⁄8"

• 'A' dimension represents a complete coupling length with a female spud

· 'B' dimension is the largest dimension over the wing nut



## Boss<sup>™</sup> Clamps

## **A**WARNING

- The bolts used in the Boss™ interlocking clamps are not standard bolts. They vary from standard bolts in their length, diameter, overall thread length and material hardness. These bolts can be retorqued, but it is *not* recommended that the bolts or clamps be reused, as they are designed for a single bend only. Dixon<sup>®</sup> recommends using only factory supplied replacement bolts.
- Torque values for clamps are based on dry bolts. The use of lubricant on bolts will adversely effect clamp performance. *Do not lubricate nuts and bolts.*
- For all Bolt Tightening Sequences, please visit dixonvalve.com Features:
- recommended for steam service up to 450°F (232°C)
- recommended torque rating in ft. lbs.
- replacement nuts and bolts are available, contact Dixon® for more information
  - Boss™ Clamp 2 Bolt Type, 2 Gripping Fingers



Hose ID	Hose	e OD to	Zinc Plated Iron Part #	Opt Qty	Stainless Steel ⁴ Part #	Torque <sup>2</sup> ft. lbs.	<i>Brass</i> Part #	Torque
1/4"	36/64"	42/64"	<b>BD</b> <sup>3</sup>	100		6		
3/8"	44/64"	56/64"	<b>CD</b> <sup>3</sup>	100		6		
1/2"	52/64"	60/64"	<b>DD</b> <sup>3</sup>	100		6		
1/2"	60/64"	1-4/64"	<b>B4</b> <sup>3</sup>	25	RB4	12	BB4	10
1/2"	1-4/64"	1-12/64"	B5	25		12		
3/4"	1-10/64"	1-20/64"	BU9 <sup>3</sup>	50	RBU9	21	BBU9	18
3/4"	1-20/64"	1-32/64"	B9	25	RB9	21		
3⁄4"	1-32/64"	1-44/64"	<b>B10</b> <sup>3</sup>	25		21		

#### Boss™ Clamp 4 Bolt Type, 2 Gripping Fingers

Hose	Hose	e OD	Zinc Plated Iron	Opt	Stainless Steel <sup>4</sup>	Torque <sup>2</sup>	Brass	Torque
ID	from	to	Part #	Qty	Part #	ft. Ibs.	Part #	Torque
1"	1-34/64"	1-46/64"	BU14	25	RBU14	21	BBU14	18
1"	1-44/64"	1-60/64"	B14	25	RB14	21	BB14	18
1"	1-60/64"	2-8/64"	B15	20		21		
11⁄4"	1-32/64"	1-50/64"	BU18	20		40		
11⁄4"	1-50/64"	2-6/64"	BU19	10		40		
11⁄4"	2-8/64"	2-24/64"	B19	10	RB19	40		
11⁄2"	1-52/64"	2"	BU22	10		40		
11⁄2"	2"	2-14/64"	B22	10		40		
11⁄2"	2-12/64"	2-24/64"	BU24	10	RBU24	40		
11⁄2"	2-24/64"	2-36/64"	B24	10	RB24	40		
11⁄2"	2-36/64"	2-48/64"	B25	10		40		
2"	2-22/64"	2-34/64"	BU28	9		60		
2"	2-32/64"	2-50/64"	BU29	10	RBU29	60	BBU29 <sup>1</sup>	40
2"	2-48/64"	3-4/64"	B29	10	RB29	60		
2"	3-6/64"	3-28/64"	B30	5		60		
21⁄2"	3-6/64"	3-28/64"	BU34	5		60		
21/2"	3-32/64"	3-60/64"	B34	5		150		
3"	3-32/64"	3-60/64"	BU35	5	RBU35	150		
3"	3-52/64"	4-4/64"	B35	5				
3"	4-4/64"	4-28/64"	B39	5		200		

<sup>1</sup> will become obsolete as inventory is depleted

<sup>2</sup> torque applies to plated iron and stainless steel clamps

<sup>3</sup> global investment cast carbon steel

<sup>4</sup> When installing stainless steel bolts and nuts, the use of anti-seize or anti-galling lubricant is advised. A light coat is required on the bolt threads to prevent thread galling and artificial torque reading.



## 

- The bolts used in the Boss™ interlocking clamps are not standard bolts. They vary from standard bolts in their length, diameter, overall thread length and material hardness. These bolts can be retorqued, but it is *not* recommended that the bolts or clamps be reused, as they are designed for a single bend only. Dixon<sup>®</sup> recommends using only factory supplied replacement bolts.
- Torque values for clamps are based on dry bolts. The use of lubricant on bolts will adversely effect clamp performance. *Do not lubricate nuts and bolts.*

#### Features:

Hose

ID

1/2"

recommended for steam service up to 450°F (232°C)

from

58/64"

- recommended torque rating in ft. lbs.
- replacement nuts and bolts are available, contact Dixon<sup>®</sup> for more information

Hose OD

#### Boss™ Clamp 4 Bolt Type, 4 Gripping Fingers

Zinc Plated Iron

Part #

968

Opt

Qty

50

Torque ft. lbs.

6

1"	1-26/64"	1-36/64"	156	20	21
11⁄4"	1-44/64"	1-56/64"	187	10	21
11⁄4"	1-56/64"	2-4/64"	206	20	21
11⁄2"	2"	2-8/64"	212	10	21
11/2"	2-4/64"	2-16/64"	225	10	40
2"	2-16/64"	2-32/64"	<b>250</b> <sup>1</sup>	10	40
2"	2-32/64"	2-48/64"	275 <sup>1</sup>	10	40
2"	2-48/64"	3-4/64"	<b>306</b> <sup>1</sup>	5	60
21/2"	3-4/64"	3-32/64"	350	5	60
3"	3-32/64"	3-48/64"	375	5	60
3"	3-48/64"	4"	401	5	150
3"	4"	4-12/64"	418	2	200
3"	4-12/64"	4-32/64"	450	2	200

to

1-2/64"



Boss<sup>™</sup> FITTINGS

Boss<sup>™</sup> Clamps

<sup>1</sup> not to be used with GF8	I, GB26, WF81, B26,	RGF81, RGB26, BGF81,	BGB26, RWF81, RB26
--------------------------------------	---------------------	----------------------	--------------------

## Boss™ Clamp 6 Bolt Type, 3 Gripping Fingers

Hose	Hose	e OD	Zinc Plated Iron	Opt	Torque ft lba
ID	from	to	Part #	Qty	Torque ft. lbs.
3"	4-16/64"	4-52/64"	BS39	2	150
4"	4-40/64"	5"	B45	3	150
4"	4-56/64"	5-16/64"	BS49	2	200
4"	5-16/64"	5-38/64"	BU49	2	200
4"	5-34/64"	5-60/64"	B49	2	200

#### Boss™ Clamp 6 Bolt Type, 6 Gripping Fingers

Hose	Hose	e OD	Zinc Plated Iron	Opt	Torque ft. lbs.
ID	from	to	Part #	Qty	Torque It. Ibs.
6"	6-56/64"	7-24/64"	750	1	200
6"	7-32/64"	8"	850	1	200



## Dix-Lock™ N Series Quick Acting Couplings

#### Features:

- · dual-guide sleeve tabs ensure smooth action
- · corrosion resistant coatings and materials improve performance
- pneumatically energized seal for optimal performance at a variety of pressures
- · wide variety of end configurations
- connecting: convenient push-twist and click
- disconnecting: retract sleeve, twist and pull
- Never attempt to disconnect any hose while pressure is in the line.



#### Materials:

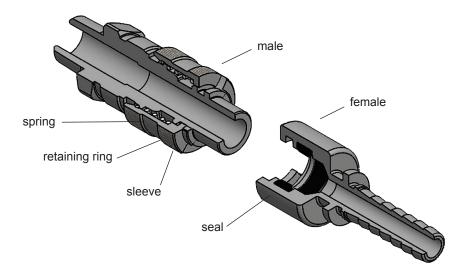
- female and male bodies: Trivalent Chrome plated steel optional - brass or 303 stainless steel
- sleeve: zinc die cast
- optional brass or 303 stainless steel
- · retaining ring and spring: stainless steel
- seal: nitrile (buna-n)
- optional FKM

#### Specifications:

- pressure: 300 PSI in brass; 500 PSI in steel, 303 stainless steel at ambient temperature 70°F (21°C)
- The operating temperature range is -40°F to +250°F (-40°C to +121°C).

#### Interchange:

- interchanges with MIL-C-3486 and A-A-50431A standards
- interchanges with Bowes 51000-Series and National Series-B



## Dix-Lock<sup>™</sup> N-Series Bowes Interchange Plug Standard Hose Barbs

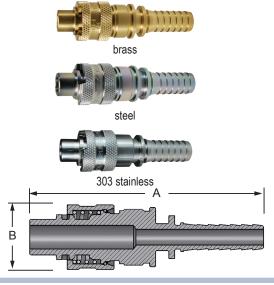
Body	Hose		Br	ass	Ste	eel		3 Stainless Steel	
Size	ID		Previous Part #	Part #	Previous Part #	Part #	Previous Part #	Part #	
3⁄8"	1/2"				QM1	N3CS4			
	<sup>3</sup> ⁄8"		QB2	N4S3-B	QM2	N4S3			
1/2"	1⁄2"		QB3	N4S4-B	QM3	N4S4			
/2	3⁄4" 1"		QB4	N4S6-B	QM4	N4S6	QSS4	N4S6-S	
			QB5	N4S8-B	QM5	N4S8		N4S8-S	
Dimensions									
Body Size Hose Shank			А			В			
3/2" 1/2" 4 74 0 99									

	Shark		
3/8"	1/2"	4.74	0.99
1/2"	3/8"	4.54	1.37
1/2"	1⁄2"	4.95	1.37
1⁄2" 1⁄2"	3/4"	4.95	1.37
1/2"	1"	5.77	1.37

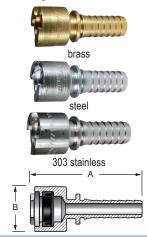
Body	Hose		ass	Ste	el	303 Stainless Steel			
Size	ID	Previous Part #	Part #	Previous Part #	Pa	art #	Previous Part #	Part #	
<sup>3</sup> ⁄8"	1⁄2"			QM20	3N	CS4			
	<sup>3</sup> ⁄8"	QB21	4NS3-B	QM21	4N	S3			
1/2"	1⁄2"	QB22	4NS4-B	QM22	4N	S4			
/2	<sup>3</sup> ⁄4"	QB23	4NS6-B	QM23	4N	S6	QSS23	4NS6-S	
	1"	QB25	4NS8-B	QM25	4N	S8		4NS8-S	
		-	Dime	nsions					
Body	Sizo	Hose	А			В			
Douy	Size	Shank		~			D		
3/8	"	1⁄2"	3	.40			0.97		
1/2	1/" <sup>3</sup> /8"		2	.97			1.35		
1/2" 1/2		1⁄2"	3	.39			1.35		
1/2	1/2" 3/4"		3	.39			1.35		
1/2	"	1"	4	.20			1.35		

Body	Ihreads		Brass		St	teel		303 Stainless Steel	
Size			Previous Part #	Part #	Previous Part #	Part #	Previous Part #	Part #	
3/8"	1⁄2"-14	NPTF			QM40	N3M4			
78	1⁄2"-14	BSPT				N3BM4			
	3⁄8"-18	NPTF	QB41	N4M3-B	QM41	N4M3			
	3⁄8"-19	BSPT				N4BM3			
	1⁄2"-14	NPTF	QB42	N4M4-B	QM42	N4M4			
1/2"	1⁄2"-14	BSPT		N4BM4-B		N4BM4			
/2	<sup>3</sup> ⁄4"-14	NPTF	QB43	N4M6-B	QM43	N4M6	QSS43	N4M6-S	
	<sup>3</sup> ⁄4"-14	BSPT		N4BM6-B		N4BM6			
	1"-11½	2 NPTF	QB45	N4M8-B	QM45	N4M8			
	1"-11	BSPT		N4BM8-B		N4BM8			
				Dimensio	ns				
Body Size Threa			ds	А		В		Hex	
3/11 1/11		2.20		0.00	4	4.0/40			

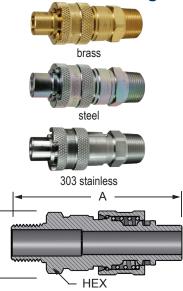
Body Size	Threads	A	В	Hex
3/8"	1⁄2"	3.36	0.99	1-3/16"
1/2"	3/8"	3.46	1.37	11⁄8"
1⁄2"	1⁄2"	3.65	1.37	11⁄8"
1⁄2"	3/4"	3.65	1.37	11⁄8"
1⁄2"	1"	3.89	1.37	13⁄8"



## Dix-Lock<sup>™</sup> N-Series Bowes Interchange Coupler Standard Hose Barbs



## Dix-Lock<sup>™</sup> N-Series Bowes Interchange Plug Male Thread



В

## **Dix-Lock™ N-Series Bowes Coupler Male Thread**



303 stainless

	← A →
∮ B ↓	
	└── HEX

Body	Threads	Brass		Si	teel	303 Stainless Steel	
Size	Threads	Previous Part #	Part #	Previous Part #	Part #	Previous Part #	Part #
3/8"	1/2"-14 NPTF			QM60	3NM4		
<b>%</b>	1⁄2"-14 BSPT				3NBM4		
	3⁄8"-18 NPTF	QB61	4NM3-B	QM61	4NM3		
	%"-19 BSPT				4NBM3		
	1⁄2"-14 NPTF	QB62	4NM4-B	QM62	4NM4		
1/2"	1⁄2"-14 BSPT		4NBM4-B		4NBM4		
/2	¾"-14 NPTF	QB63	4NM6-B	QM63	4NM6	QSS63	4NM6-S
	¾"-14 BSPT		4NBM6-B		4NBM6		
	1"-11½ NPTF	QB65	4NM8-B	QM65	4NM8		
	1"-11 BSPT		4NBM8-B		4NBM8		

#### Dimensions

Body Size	Threads	А	В	Hex
3/8"	1/2"	1.80	1.10	1-3/16"
1/2"	<sup>3</sup> ⁄8"	1.66	1.50	1-3/8"
1/2"	1⁄2"	1.85	1.50	1-3/8"
1/2"	3/"	1.85	1.50	1-3/8"
1⁄2"	1"	1.95	1.50	1-1/2"

## Dix-Lock<sup>™</sup> N-Series Bowes **Plug Female Thread**



Body	The	Threads		Brass		Ste	el		303 Stainless Steel	
Size	1 110	eaus	Prev Pai	ious rt #	Part #	Previous Part #	Part #	Previous Part #	Part #	
	3/8"-18 NPTF		QB	81	N4F3-B	QM81	N4F3			
	³∕8"-19	BSPP					N4BF3			
	1⁄2"-14	NPTF	QB	82	N4F4-B	QM82	N4F4			
1/2"	1⁄2"-14	BSPP			N4BF4-B		N4BF4			
/2	³⁄4"-14	NPTF	QB	83	N4F6-B	QM83	N4F6	QSS83	N4F6-S	
	³⁄4"-14	BSPP			N4BF6-B		N4BF6			
	1"-111	2 NPTF	QB	85	N4F8-B	QM85	N4F8			
	1"-11	BSPP			N4BF8-B		N4BF8			
					Dime	nsions				
Body	/ Size	Threa	ids		А		3	Hex		
1/2" 3/8"				2.92	1.	35	1!	/8"		
1/2" 1/2"				2.92	1.	35	11⁄8"			
1/2" 3/4"				3.42	1.	35	1 <del>3</del> ⁄8"			
1	2"	1"			3.59	1.	35	11	/2"	

## Dix-Lock<sup>™</sup> N-Series Bowes **Coupler Female Thread**



Å B ↓	A	→

Body	The	eads	B	rass	Ste	el		303 Stainless Steel	
Size	Size		Previous Part #	Part #	Previous Part #	Part #	Previous Part #	Part #	
	³∕8"-18	NPTF	QB101	4NF3-B	QM101	4NF3			
	³∕8"-19	BSPP				4NBF3			
	1⁄2"-14	NPTF	QB102	4NF4-B	QM102	4NF4			
1/2"	1⁄2"-14	BSPP		4NBF4-B		4NBF4			
/2	³⁄4"-14	NPTF	QB103	4NF6-B	QM103	4NF6	QSS103	4NF6-S	
	<sup>3</sup> ⁄4"-14	BSPP		4NBF6-B		4NBF6			
	1"-11½	NPTF	QB105	4NF8-B	QM105	4NF8			
	1"-11	BSPP		4NBF8-B		4NBF8			
				Dime	nsions				
Body	Body Size Threa		ıds	А		В	H	ex	
1	1/2"         3/8"           1/2"         1/2"			1.71	1	.50	1-3	8/8"	
1				1.71		1.50		1-3/8"	
1	1/2" 3/4"			1.71	1	1.50		1-3/8"	
1	2"	1"		1.86	1	1.79		1-1/2"	

303 stainless

HEX

## Dix-Lock<sup>™</sup> N-Series Bowes Interchange Safety-Lock Hose Barb Plugs

#### Feature:

 positive safety lock; with locking nut in place sleeve cannot be moved to open coupling

Body	Hose	L	Brass	St	eel	303 Stainless Steel
Size	ID	Previous Part # Part #		Previous Part #	Part #	Part #
1⁄2"	1/2" 3/4"		N4S4-B-LS N4S6-B-LS		N4S4-LS N4S6-LS	 N4S6-S-LS

Dimensions

Body Size	Hose Shank	А	В
3/8"	1⁄2"	4.95	1.37
1⁄2"	3/4"	4.95	1.37



## Dix-Lock<sup>™</sup> N-Series Bowes Interchange Male Safety-Lock Plugs

#### Feature:

 positive safety lock; with locking nut in place sleeve cannot be moved to open coupling

Body	Threads		Brass		Steel	303 Stainless Steel	
Size	Theads	Previous Part #	Part #	Previous Part #	Part #	Part #	
	1/2"-14 NPTF	QB66	N4M4-B-LS	QM66	N4M4-LS		
1/1	1⁄2"-14 BSPT				N4BM4-LS		
1⁄2"	3/4"-14 NPTF	QB88	N4M6-B-LS	QM88	N4M6-LS	N4M6-S-LS	
	¾"-14 BSPT				N4BM6-LS		

#### Dimensions

Body Size	Threads	А	В
3/8"	1⁄2"	3.65	1.37
1/2"	3/4"	3.65	1.37





## **Dix-Lock™ N-Series Bowes Interchange Caps**



Body		Brass		Steel		
Size	Cap Lanyard	Previous Part #	Part #	Previous Part #	Part #	
1/2"	steel cable	QBCAP	N4DC-B	QMCAP	N4DC	

## Dix-Lock<sup>™</sup> N-Series Bowes Interchange Converter



Body	Orafianation	Steel			
Size	Configuration	Previous Part #	Part #		
1/2"	coupler to coupler	QM0	4N4N		

## Dix-Lock<sup>™</sup> N-Series Bowes Interchange Seals



Body		l	Nitrile	FKM
Size	Coupler Style	Previous Part #	Part #	Part #
3/8" 1/2"	all all	QBM1 QBM2	3N-SKIT 4N-SKIT	 F-4N-SKIT

#### Features:

- working pressure: 300 PSI at ambient temperature 70°F (21°C)
- for crimp recommendations please visit dixonvalve.com
- also available in stainless steel, contact Dixon<sup>®</sup> for further information

#### Materials:

- Machined components are manufactured using solid steel, brass, or 303 stainless steel bar stock.
- · Stainless Steel retaining ring and spring maximize corrosion resistance and extend service life.
- Steel componentry is plated using ROHS Compliant Trivalent Chrome.

#### Interchange Data:

- Bowes Interchange Bayonet Style
- Interchangeable with Bowes 51000-Series, National Series 'B' and MacDonald Quick-Action

#### Seal Components:

Nitrile (Buna-N) pneumatically energized seals are standard, temperature range -40°F to 250°F (-40°C to 121°C).

## Dix-Lock<sup>™</sup> N-Series Bowes Interchange Coupling with Ferrule Male Head

Body	Hose	Hose	OD	Plate	ed Steel		Brass
Size	ID	From:	To:	Previous Part #	Part #	Previous Part #	Part #
1/2"	1/2"	54/64"	1-2/64"	QM3WF	N4S4-WF	QB3WF	N4S4-B-WF
/2	3⁄4"	1-10/64"	1-22/64"	QM4WF	N4S6-WF	QB4WF	N4S6-B-WF



## **Dix-Lock™ N-Series Bowes Interchange Coupling with Ferrule Female Head**

Body	Hose	Hose OD		Plate	d Steel	Brass	
Size	ID	From:	To:	Previous Part #	Part #	Previous Part #	Part #
1/2"	1⁄2"	54/64"	1-2/64"	QM22WF	4NS4-WF	QB22WF	4NS4-B-WF
/2	3⁄4"	1-10/64"	1-22/64"	QM23WF	4NS6-WF	QB23WF	4NS6-B-WF



## Dix-Lock<sup>™</sup> N-Series Bowes Interchange Coupling with Ferrule Male Locking Head

Body	Hose	Hose OD		Plat	ted Steel	Brass		
Size	ID	From:	To:	Previous Part #	Part #	Previous Part #	Part #	
1⁄2"	1/2" 3/4"	54/64" 1-10/64"	1-2/64" 1-22/64"	QM33WF QM44WF	N4S4-LS-WF N4S6-LS-WF	QB33WF QB44WF	N4S4-B-LS-WF N4S6-B-LS-WF	



## Dual-Lock P-Series Quick Acting Couplings

#### Features:

- spring loaded interlocking engagement
- full opening permits full flow to tool
- optional locking key prevents sleeve retraction
- trivalent chrome plated
- connecting: push and twist
- Locking clip is available to prevent unintentional disconnection.
- disconnecting: pull and twist
   Never attempt to disconnect any hose while pressure is in the line.

#### Materials:

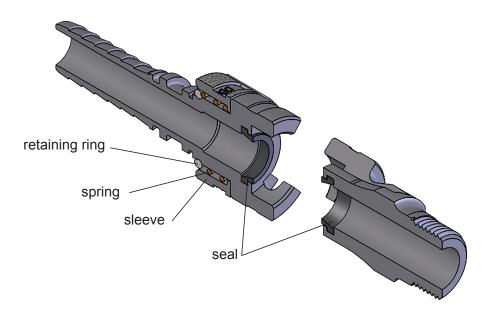
- body: trivalent chrome plated steel
- optional brass or 303 stainless steel
- sleeve: steel
- optional brass or 303 stainless steel • retaining ring and spring: phosphor bronze
- seal: nitrile (buna-n)
- optional FKM

#### Specifications:

- The recommended working pressure: 300 PSI at ambient temperature 70°F (21°C)
- The operating temperature range is -40°F to +250°F (-40°C to +121°C).

#### Interchange:

interchangeable with Thor PHC-Series and National Series-A



## DUAL-LOCK

brass

steel

303 stainless

R

## **Dual-Lock P-Series Thor Interchange Coupler Hose Barb Couplers**

Body		Brass		Steel		303 Stainless Steel	
-	Hose ID		Devit #	Previous	Dental	Previous	Dautat
Size	Previous Part #	Part #	Part #	Part #	Part #	Part #	
	3/8"			PHL6	4PS3		
	1/2"		4PS4-B	PHL8	4PS4		
1/2"	3/4"	PHLB12	4PS6-B	PHL12	4PS6	PHL12SS	4PS6-S
	3/4"				4PS6-91		
	1"	PHLB16	4PS8-B	PHL16	4PS8		

steel/PTFE coating

Dimensions							
Size	A	В					
3/8"	3.53"	1.55"					
1/2"	3.95"	1.55"					
3/4"	3.95"	1.55"					
1"	6.06"	1.55"					

## **Dual-Lock P-Series Thor Interchange Male Couplers**

Body		Ste	el	303 Stainless Steel	
Size	Threads	Previous Part #	Part #	Previous Part #	Part #
	%"-18 NPTF 1⁄2"-14 NPTF	PML6 PML8	4PM3 4PM4		
1⁄2"	3⁄4"-14 NPTF	PML12	4PM6	PML12SS	4PM6-S
	¾"-14 NPTF 1"-11½ NPTF		4PM6-9 <sup>1</sup> 4PM8		

steel/PTFE coating

 Dimensions

 Size
 A
 B

 ½"
 2.93"
 1.55"

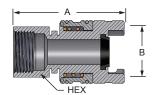
 ¾"
 2.98"
 1.55"

 1"
 2.98"
 1.55"

## **Dual-Lock P-Series Thor Interchange Female Couplers**

Body		Brass	Stee	e/	303 Stain	less Steel
Size Threads	Part #	Previous Part #	Part #	Previous Part #	Part #	
1⁄2"	½" - 14 NPTF ¾" - 14 NPTF	 4PF6-B	PFL8 PFL12	4PF4 4PF6	 PFL12SS	 4PF6-S

Dimensions							
Size	A	В	Hex				
1/2"	2.75"	1.55"	1.25"				
3/4"	2.75"	1.55"	1.25"				









303 stainless

B





303 stainless

## **Dual-Lock P-Series Thor Interchange Male Plugs**

and head	Body		Br	ass	S	Steel	303 Stain	less Steel
	Size	Threads	Previous Part #	Part #	Previous Part #	Part #	Previous Part #	Part #
brass	1/2"	%"-18 NPTF 1⁄₂"-14 NPTF 3⁄4"-14 NPTF	 PMB8 PMB12	 P4M4-B P4M6-B	PM6 PM8 PM12	P4M3 P4M4 P4M6	  PM12SS	  P4M6-S
	72	3/4"-14 NPTF 1"-11½ NPTF	 PMB16	Р4М8-В Р4М8-В	 PM16	P4M6-9 <sup>1</sup> P4M8		
steel	1 steel/	PTFE coating — A ——►			I	Dimensions		
			<b>▲</b>	Size	А	В		Flat
				<sup>3</sup> /8"	2.00"	1.55"	'	0.88"
	_	1	В	1⁄2"	2.25"	1.55"	'	0.97"
				3/4"	2.55"	1.55"		1.13"
303 stainless	FLAT	Y	<u> </u>	1"	3.25"	1.55"		1.38"

Must be used with couplers on page 29

## **Dual-Lock P-Series Thor Interchange Female Plugs**

	Body		B	rass		Ste	el	303 3	Stainle	ess Steel	
	-	Threads	Previous			Previous	Dent #	Previ	ous	Dort #	
	Size		Part #	Pa	art #	Part #	Part #	Part	#	Part #	
		3⁄8"-18 NPTF		-		PF6	P4F3				
		1⁄2"-14 NPTF	PFB8	P41	F4-B	PF8	P4F4				
	1⁄2"	3⁄4"-14 NPTF	PFB12	P41	F6-B	PF12	P4F6	PF12	SS	P4F6-S	
brass		3⁄4"-14 NPTF					P4F6-9 <sup>1</sup>				
The second se		1"-11½ NPTF	PFB16	P41	F8-B	PF16	P4F8				
	1 steel/l	steel/PTFE coating									
BETTY IN											
All and a state with a	I <b>⊲</b> — → I			Dimensions							
steel				0:		•					
				Size		A	B			Flat	
		******		3/8"		1.79"	1.55'			0.88"	
				1/2"		2.25"	1.55	'		1.31"	
E	3			3/4"		2.34"	1.55'	'		1.31"	
303 stainless				1"		2.76"	1.55'	'		1.44"	
000 3000000		() Annound									
-			FLAT								

Must be used with couplers on page 29

## Dual-Lock P-Series Thor Interchange Hose Barb Couplers with Knurled Flanged Sleeve

#### Features:

Trivalent Chrome Plated

Large, raised collar sleeve permits easier handling when wearing gloves.

	Body Size	Hose ID		<i>Trivalent Chrome I</i> Previous Part #	Plated Steel Part #
	1⁄2"	3/8" 1/2" 3/4"		PHL6FS PHL8FS PHL12FS	4PS3-FS 4PS4-FS 4PS6-FS
► A				Dimensions	
		_	Size	A	В
			3/8"	3.53"	1.55"
			1/2"	3.95"	1.55"
			3/"	3.95"	1.55"

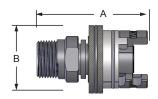
## Dual-Lock P-Series Thor Interchange Male Couplers with Knurled Flanged Sleeve

#### Features:

- Trivalent Chrome Plated
- Large, raised collar sleeve permits easier handling when wearing gloves.

_				
	Body			Chrome Plated Steel
	Size	Threads	Previous	Part #
	0120		Part #	i alt <i>i</i>
		³∕₅" - 18	PML6FS	4PM3-FS
	1/2"	1⁄2" - 14	PML8FS	4PM4-FS
		<sup>3</sup> ⁄4" - 14	PML12FS	4PM6-FS
		Dimensions	-	-
	Size	A	В	
	3/8"	2.93"	1.55"	
	1/2"	2.98"	1.55"	
	3/4"	2.98"	1.55"	
_				





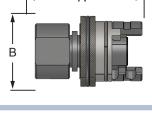
### Dual-Lock P-Series Thor Interchange Female Couplers with Knurled Flanged Sleeve

#### Feature:

· Large, raised collar sleeve permits easier handling when wearing gloves.

-	and the second	
CALIFORNIA IN THE PARTY		and the second second

Body		Trivalent Chrome Plated Steel			
Size	Threads	Previous Part #	Part #		
1/2"	<sup>1</sup> ⁄2" - 14 <sup>3</sup> ⁄4" - 14	PFL8FS PFL12FS	4PF4-FS 4PF6-FS		
	Dimensions				
Size	А	В			
1/2"	2.75"	1.55"			
3/4"	2.75"	1.55"			



## **Dual-Lock P-Series Thor Interchange Replacement Seals**

Body	Coupler	Nitrile		FKM
Size	Style	Part #	Previous Part #	Part #
1/2"	all	4P-SKIT	452963	F-4P-SKIT

## **Thor Interchange Locking Key**

#### Features:

fits couplings with locking sleeve

٠	prevents	slee	eve	retraction	

Body	Coupler		Steel
Size	Style	Previous Part #	Part #
1/2"	all	855231	4P-CLIP

## Dual-Lock P-Series Thor Interchange Couplers with Ferrule

#### Features:

- working pressure: 300 PSI at ambient temperature 70°F (21°C)
- trivalent chrome plated coupling with plated steel ferrule
- also available in brass and stainless steel
- · for crimp recommendations visit dixonvalve.com
- %" and 1" sizes available upon request, contact Dixon®

Body	Hose	Hose	e OD	Trivalent Chrome Plated Steel			
Size	ID	From:	To:	Previous Part #	Part #		
1/2"	1/2" 3/4"	54/64" 1-10/64"	1-2/64" 1-22/64"	PHL8WF PHL12WF	4PS4-WF 4PS6-WF		

## part # 1217AR-4AK

## **Air Receiver Manifold Assembly**

## Tank provides (1) 2" Ground Joint inlet for supply hose and (7) 3/4" outlets for tool hoses.

#### Features:

- all tank outlets have female NPT threads
- portable easy carry handles standard
- solid base with mounting holes standard
- approximate tank dimensions are 12" x 17"; 40" x 24" with frame
- painted safety orange
- spring-loaded Safety Shut-off Valves (Cut-off Flow Rate 160-180 CFM at 90 PSI)
- · safety Pop-off Valve (200 PSI) to protect against over-pressurizing of tank
- drain valve provides for removal of accumulated oil and water
- locking handle ball valve
- mounting points for King<sup>™</sup> Safety Whipsocks

#### Specifications:

- 7 gallon capacity provides air reserve needed for operation of tools
- 200 PSI maximum working pressure for tank (Working pressure of the system is limited to maximum working pressure of the components, i.e. 150 PSI for Air King<sup>™</sup>)
- 0-300 PSI gauge



#### Approvals:

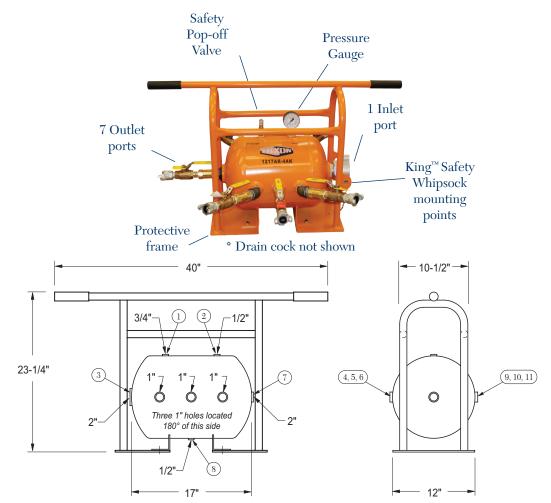
- built to ASME Code, National Board registered
- conforms to OSHA Standards 1910.169 and 1926.306



1217AR-4AK



1217AR-4FR



Dixon<sup>®</sup> 1217AR-4AK air receiver manifold assembly with Air King<sup>™</sup> outlet ports includes the following components:

Part # / Locations	Qty	Description
1217AR-4	1	ASME compressed air receiver
1217FRAME	1	protective frame
Location 1	1	HB2F6M <sup>3</sup> / <sub>4</sub> " male x <sup>1</sup> / <sub>4</sub> " female hex bushing
	1	GL345 0-300 PSI gauge
Location 2	1	$HB2F4M \frac{1}{2}$ " male x $\frac{1}{4}$ " female hex bushing
	1	SV200 safety pop-off valve
Location 3	1	GM28 2" male spud
	1	B27SC wing nut cap
Locations	6	HB1075G 1" male x <sup>3</sup> /4" female bushings
4, 5, 6, 9,	6	BCN75 <sup>3</sup> / <sub>4</sub> " brass hex nipples
10, 11	6	BBLV75 ball valves
	6	SCVS6 safety shut-off valves
	6	AM7 Air King™ universal couplings
	4	<i>SE45100</i> 45° street elbow (1 each in locations 4, 6, 9 and 11 only)
Location 7	1	HB2075 2" male x <sup>3</sup> / <sub>4</sub> " female bushing
	1	BCN75 ¾" brass hex nipples
	1	BBLV75 ball valve
	1	SCVS6 safety shut-off valve
	1	AM7 Air King™ universal coupling
Location 8	1	HB2F4M <sup>1</sup> / <sub>2</sub> " male x <sup>1</sup> / <sub>4</sub> " female hex bushing
	1	D04 ¼" drain cock
		Labor cost for assembly of complete unit
1217AR-4AK	1	7 gallon ASME compressed air receiver manifold complete assembly with Air King™
		Tank and Frame only
1217AR-4FR	1	7 gallon ASME compressed air receiver with frame only
Dixon	<sup>®</sup> recoi	mmends the use of safety clips and King™ safety cables on all air hose connections.

## ASME Air Receiver Manifold with King<sup>™</sup> Safety Whipsock for Supply Hose



#### Features:

- built to ASME Code, National Board registered
- conforms to OSHA standards 1910, 169 and 1926.306
- 7 gallon capacity
- painted supply orange
- all openings are female NPT thread
- working pressure: 200 PSI
- includes KSW32 2" King Safety Whipsock for Air Supply Hose
- shackles included to attach King Safety Whipsock to frame

Qty	Part #		
1"	1217AR-4AK-KSW		

### **ASME Air Tank with Fittings and Watts Filter**



#### Application:

 Designed to remove compressed air contaminants such as water, compressor oil, dirt, pipe scale and water particles from the air supply at the point of entry into the ASME air receiver manifold.

#### Features:

- includes basic 1217AR-4AK ASME manifold assembly
- F602-16WJR 2" auto drain filter with 26 ounce metal bowl and related plumbing installed on the inlet port of the ASME air receiver manifold
- air supply hose connects directly to GM28 2" male spud on the filter air inlet
- includes a B27SC wing nut cap with a chain

Inlet	Outlet	et Part #		
2"	3/4"	1217AR-4AKWF		

### **Wilkerson Combination Unit with Protective Frame**



#### Features:

- · provides downstream air preparation with protective frame
- C31-08AMB 1" FRL with metal bowls and auto drain filter
- FBV100 1" brass ball valve and AM12 Air King™ on inlet port
- BBV100DTW 2-way ball valve installed between regulator and lubricator provides option for non-lubricated air
- · heavy duty frame protects air prep components
- operating:

maximum pressure: 250 PSIG

temperature range: 40°F to 150°F (4°C to 66°C) flow: 320 SCFM

Size	Part #
1"	C31-08FRAME

# Safety Check Valve

#### Features:

- does not prevent backflow
- high flow valve to provide optimum performance
- · controls excess air flow (SCFM) in only one direction
- not for use in applications where 100% of the available air is required, i.e. sand blast, pile driving rigs, expansion joint blow down pipes, etc.
- automatically senses change in air flow and shuts off the flow in the event of a surge in excess of valve flow rating thus preventing hose whip
- conforms to OSHA regulation 1926.302 (b) (7) requiring a safety device at the source of the air supply and at branch air lines.
- · applications include temporary plant/factory air, construction sites, shipyards or utilities

#### Materials:

- solid brass body and valve
- stainless steel spring and roll pin

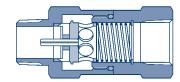
#### **Specifications:**

- maximum working pressure: 350 PSI
- maximum temperature: 250°F (121°C)
- Safety Check Valves operate by using the pressure differential across the valve to operate the valve and spring assembly. The pressure differential is directly related to the flow of air through the valve.
- When the pressure differential is within the operating limits -- below the cutoff flow -- of the unit, the force on the valve exerted by the spring is greater than that caused by the pressure differential (see open position graphic below). The valve remains open and normal operation continues.
- When the pressure differential is above the cutoff limit, the force on the valve exerted by the pressure differential is
  greater than the force exerted by the spring, and the valve closes (see the closed position graphic below).
- After the repair is made, normal operation is automatically enabled when pressure across the valve equalizes through the bleeder hole.
- The valve spring size can be specified by determining the air flow during normal operation and by estimating the air flow if a failure or rupture occurs.

#### Questions to ask when selecting a safety shut-off valve:

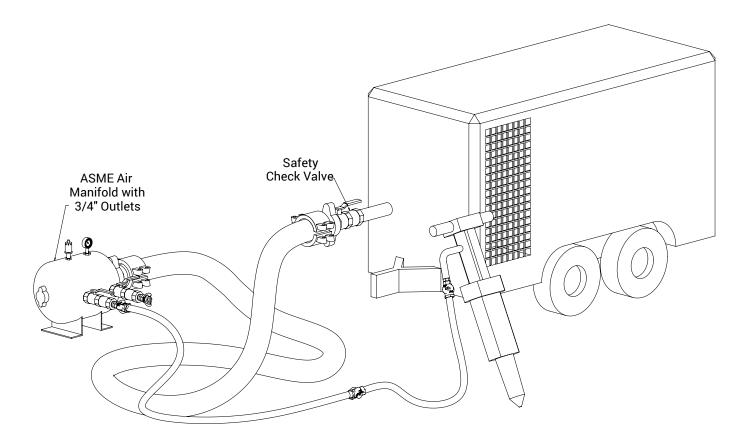
- 1. What is the hose ID size you are using?
- 2. What is the operating pressure of the compressor, in PSI?
- 3. What is the SCFM of your compressor? (printed on the side of most air compressors)
- 4. How much air flow, in SCFM, does the tool(s) require?
- 5. What is the maximum air flow possible, in SCFM, through your air hose, at the end of the length of the hose? Contact Dixon<sup>®</sup> for recommendations if the hose length is over 100'.





Check Valve In Open Position

**Check Valve In Closed Position** 



#### Installation:

A safety shut-off valve should be placed immediately after the air control valve and before the hose on a compressor, and on each discharge port on a manifold (see drawing above).

#### Sizing the safety shut-off valve:

- 1. The safety shut-off valve NPT size must be the same as the nominal ID size of the air line on which it is used. Note: Never increase or decrease the hose size from the compressor to the tool or from the compressor to the manifold.
- 2. One safety shut-off valve must be used on each hose outlet from the manifold.
- 3. To avoid nuisance cut-off's, the shut-off valve selected should have a cut-off range of 110% of the maximum anticipated air flow to the tool, or tools, to be used.
- 4. The maximum SCFM of the supply side air line must be above the cut-off range of the valve. The cut-off range of Dixon<sup>®</sup>'s shut-off valves is given at 90 PSI. To determine the cut-off range at other PSI's, use the formula or the sample numbers in the Cut-off Rate Chart below to find the flow rate multiplier. Multiply the flow rate multiplier by the numbers in the cut-off flow range column to find the cut-off range at your PSI.

#### Safety Shut-off Valve Cut-off Rates at PSI's Other Than 90 PSI

Flow rate multiplier =	$\backslash$	<u>PSIG + 14.7</u> 104.7	Inlet pressure ( <b>PSI</b> )	25	50	75	100	125
	v	104.7	Flow rate multiplier	.62	.79	.93	1.05	1.16

#### **Operation**:

Before starting the compressor the air control valve should be closed completely. When the compressor unloads, open the air control valve *very slowly*. Full port ball valves tend to work better than gate or butterfly type valves.

The air control valve must be fully open for the safety shut-off valve to work. Some portable air compressor manufacturers recommend start-up with the air control valve slightly open. In this case you may have to close the valve and reopen it slowly to the full open position, or wait for the safety shut-off valve to reset itself.

If the valve fails to operate despite meeting all conditions, check the hose line for obstructions or a hose mender restricting normal air flow.

### **SCV-Series Selection Guide:**

- Sketch the position of the tool, fittings, safety check and supply line. Measure the length of hose from the safety check to the tool. There should be no jump sizes in the hose between the safety check and the tool. You will need one safety check valve for each branch line feeding the tool. A safety check in the main supply line is also recommended.
- 2. Determine the hose size you want to protect. Select the same size safety check as the hose size. For example, a %" hose will require a %" safety check. Do not use a different size safety check. One exception to this rule is for %" hose, use a ½" safety check valve.
- 3. Determine the maximum operating air flow (SCFM) required through the safety check during normal use. For example, the maximum air consumption of the largest tool used on that supply line. Determine the optimum cutoff flow by multiplying the maximum operating air flow by 110%.
- 4. Add to the length of hose, you measured in step 1, length adders to compensate for system components. Add 0.91m (3') for each elbow, 0.91m (3') for each tee, 3.05m (10') for each globe valve, 0.61m (2') for each gate valve, 0.91m (3') for each hose fitting. This calculation will result in the total length for your safety check valve selection. Find the column in the Unobstructed Air Flow Chart, below, that corresponds to your hose size and the row that corresponds to your calculated total length. Where they intersect, is the unobstructed air flow in SCFM.
- 5. If the optimum cutoff flow is 80% of the unobstructed air flow or less, you should use the optimum cutoff flow (110% of the maximum calculated air flow) to select the appropriate safety check valve. To do this, find the safety check that has a corresponding cutoff flow rate in the product list on the next page.
- 6. If the optimum cutoff flow is greater than 80% of the unobstructed air flow, there may be a problem with the safety check valve sensing the difference between normal air demand and a line rupture. You may want to consider removing fittings from the flow path, reducing the length of your hose or increasing your hose diameter. If you are not sure, call your Dixon<sup>®</sup> distributor for assistance.
- 7. Always install one safety check and test the performance of the system before you continue other installations. When start-up is underway, open the air control valve at the compressor or manifold *very slowy* to allow air to bleed through the check valve so that pressure is equalized on each side of the valve. If the valve fails to operate despite meeting all conditions, check the supply line for obstructions or a hose mender restricting normal air flow.

### **Unobstructed Air Flow Chart (SCFM)**

Total Length					Н	ose Size (I	D)				
(feet)	1⁄4"	<sup>3</sup> ⁄8"	1⁄2"	5⁄8"	3⁄4"	1"	11⁄4"	11⁄2"	2"	21⁄2"	3"
5	28	66	124	199	294	550	1200	1800	3300	5300	7900
8	27	65	123	196	290	540	1140	1700	3100	5000	7500
10	27	64	121	194	286	531	1100	1640	3000	4600	7200
20	26	62	116	189	278	520	960	1420	2500	4200	6300
30	24	58	108	175	258	480	850	1280	2300	3800	5600
50	22	54	101	163	240	447	720	1080	2000	3200	4700
75	20	47	86	140	207	385	670	960	1850	3000	4400
100	17	41	77	124	178	340	620	940	1760	2800	4200
150	15	35	65	105	158	290	590	870	1630	2600	3900
200	13	30	57	92	136	253	550	820	1520	2400	3600
250	11	27	51	83	123	228	520	780	1450	2300	3400
300	10	25	47	56	114	210	500	750	1390	2200	3300

Length Adders: 3' for each elbow 3' for each tee 10' for each globe valve

2' for each gate valve

3' for each hose fitting

 $\bullet$  Use  $1\!\!/_2$  " Safety Check Valve for  $5\!\!/_8$  " hose.

Not recommended for applications requiring 100% of the available air supply. These applications include, but are not limited to, sand blast equipment, pile driving rigs, and expansion joint blow down pipes.

It is recommended to install auxiliary safety devices, including King<sup>™</sup> Safety Cables, to ensure optimum safety for the operator in the event of a coupling failure or hose rupture. (see page 40)



NPT and Hose ID Size	Part #	Cut-off Flow Range (SCFM at 90 PSI)
1/4"	SCVL2	23-29
3/8"	SCVM3	39-47
/8	SCVS3	52-65
1/2"	SCVM4	70-78
/2	SCVS4	80-96
	SCVL6	72-88
	SCVM6	92-108
3/"	SCVR6	112-128
74	SCVJ6	132-148
	SCVS6	160-180
	SCVH6	180-200
	SCVL8	165-195
1"	SCVM8	220-260
I	SCVS8	280-320
	SCVH8	310-340
	SCVL10	260-290
11⁄4"	SCVM10	300-340
1 74	SCVS10	440-500
	SCVH10	570-630
	SCVL12	300-360
11⁄2"	SCVM12	470-530
172	SCVS12	640-720
	SCVH12	750-830
	SCVL16	510-590
2"	SCVM16	725-825
2	SCVS16	900-1050
	SCVH16	1100-1200
	SCVL24	1200-1400
3"	SCVS24	2400-2700
	SCVS3           SCVM4           SCVS4           SCVL6           SCVR6           SCVJ6           SCVS6           SCVS6           SCVH6           SCVS8           SCVM8           SCVS8           SCVH8           SCVS10           SCVS10           SCVS10           SCVS12           SCVM12           SCVS12           SCVS12           SCVI6           SCVS12           SCVS16           SCVS12           SCVI6           SCVS12           SCVI6           SCVI12           SCVS12           SCVI6           SCVI6           SCVI6           SCVI12           SCVI12           SCVI12           SCVI16           SCVI6           SCVI6	2850-3050

### **Performance Specifications**

- · high flow design results in maximum flow with minimal pressure drop
- · automatically and instantly protects the operator against hose whip in the event of a damaged hose or coupling
- In the event of a hose rupture or coupling failure, the valve will automatically reset after the problem is fixed. • SCV-Series is available in a large selection of sizes ranging from 1/4" to 3", NPTF or BSPP/BSPT threads.
- Valve operation is fully compliant with OSHA Safety Regulation 1926.302(b)(7), (referenced on Page 5).

Performance Specifications	Operating Bar (PSI)	Minimum Burst Bar (PSI)	Temperature °C (°F)	Air Flow <sup>1</sup> 30.5m (100')
1/4"	350 (24 Bar)	138 (2,000)	121 (250)	17 SCFM
3/8"	350 (24 Bar)	138 (2,000)	121 (250)	41 SCFM
1/2"	350 (24 Bar)	138 (2,000)	121 (250)	77 SCFM
3/4"	350 (24 Bar)	138 (2,000)	121 (250)	178 SCFM
1"	350 (24 Bar)	138 (2,000)	121 (250)	340 SCFM
1¼"	350 (24 Bar)	138 (2,000)	121 (250)	620 SCFM
11⁄2"	350 (24 Bar)	138 (2,000)	121 (250)	940 SCFM
2"	350 (24 Bar)	138 (2,000)	121 (250)	1,760 SCFM
21/2"	350 (24 Bar)	138 (2,000)	121 (250)	2,800 SCFM
3"	350 (24 Bar)	138 (2,000)	121 (250)	4,200 SCFM



<sup>1</sup> Air flow rating is based upon calculated values using unobstructed air flow for the applicable hose size.

### KING<sup>™</sup> SAFETY CABLE

## King™ Cable

#### Features:



- must be installed in the extended position (no slack)
- cable reaches across hose fittings to provide standby safety for hose
- spring-loaded loops in the cable ends open easily to pass over the couplings for a firm grip on the hose
- no tools needed easy to install and remove
- · cables shipped with safety restraint labels attached
- highly resistant to rust and corrosion
- hose-to-hose or hose-to-rigid outlet
- maximum operating pressure: 200 PSI
- minimizes damage to equipment and injuries to operators in the event hose, couplings or clamps fail, or there is an accidental separation of the assembly

#### Materials:

- For WB1, WB3, WA2, WA4, WSR1, WSR3, WSR2, WSR4, WSR1C, WB1C, WSR1E: wire rope: galvanized carbon steel ferrules: aluminum springs: galvanized carbon steel
- For WB1SS, WA2SS, WSR1SS, WSR2SS: wire rope: 304 stainless steel ferrules: copper springs: 304 stainless steel
- For WA2B:
  - wire rope: galvanized carbon steel ferrules: copper springs: galvanized carbon steel

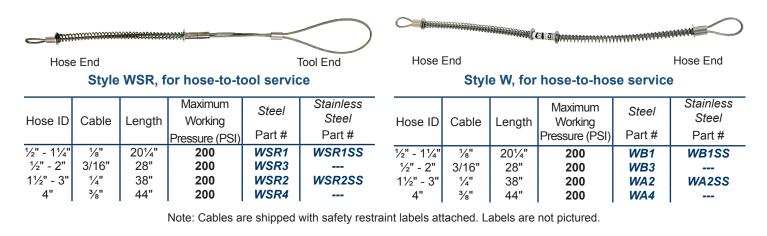


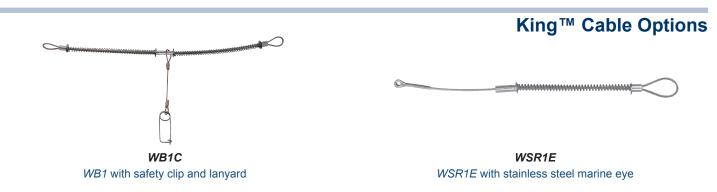
Correct Installation King™ Safety Cable installed in the extended position (no slack). Incorrect Installation King™ Safety Cable is not installed in the extended position (too much slack).

For OSHA regulations please reference osha.gov

### Features:

- hose-to-hose or hose-to-rigid outlet
- King Cable™ is the low cost answer to eliminate
- injuries caused by broken air hose connections
- highly resistant to rust and corrosion
- no tools needed easy to install and remove
- maximum working pressure 200 PSI





Hose ID	Cable	Part #	Description	Max. Work. Press. PSI
1/2" - 11/4" 1/2" - 11/4" 1/2" - 11/4" 11/2" - 3"	1/8" 1/8" 1/8" 1/8" 1/4"	WB1C WSR1E	WSR1 with safety clip and lanyard used to lock Air King™ couplings WB1 with safety clip and lanyard used to lock Air King™ couplings WSR1 with stainless steel safety marine eye used to connect safety cable to a bolt on tool WA2 with bronze/copper ferrule for special environmental conditions	200 200 200 200

For King<sup>™</sup> Cable installation procedures please reference *dixonvalve.com* 

# Nylon King Cable<sup>TM</sup>

### **Applications:**

pneumatic, hydraulic and water hoses

### Features:

- strong, flexible nylon webbing
- superior corrosion and spark resistance over metal restraints
- rubber grommets securely choke eyes around hose
- must be installed in the extended position (no slack)
- shipped with labels detailing working pressures and safety instructions
- maximum working temperature: 200°F (93°C)
- minimizes damage to equipment and injuries to operators in the event hose, couplings or clamps fail, or there is an accidental separation of the assembly
- contact Dixon at 888.226.4673 for additional options

### Materials:

- Strap: nylon
- Grommets: rubber

	Recommended for use on the following hose inside diameters:						Nylon		
Length	1⁄4"	1⁄2"	3/4"	1"	2"	3"	4"	6"	5.4.4
	Hose maximum working pressure (PSI) for above hose ID's							Part #	
30"	26,000	6,500	2,900	1,650	400			-	WBN130
40"				1,650	400	175	100	-	WBN140
30"	52,000	13,000	5,800	3,300	750			-	WBN230
64"					750	350	200	90	WBN264
44"				7,300	1,800	820	450	-	WBN344
64"					2,300	1,040	580	260	WBN464



### King<sup>™</sup> Safety Whipsocks

### Application:

• ideally suited for applications where the media being transferred is under higher working pressures such as air, water, hydraulic and slurry

#### Materials:

- wire rope: galvanized carbon steel
- ferrules: aluminum

### Features:

- King™ Safety Whipsocks keep the hose under control in the event of a high-pressure hose assembly failure.
- dual anchor points secured beyond the fittings eliminate hose whip
- be sure the anchoring points are rated for the application
- galvanized steel woven stockings extend down the hose to grip securely over a larger area preventing whip, abrasion and wear
- securing both eye-to-rigid or eye-to-eye anchor points reduce whip in the event of a hose connection failure
- contact Dixon<sup>®</sup> with questions regarding working pressure, available options or custom configurations

Part #	Max. Working Pressure PSI	Length	OD Range	Size
KSW06	5000	15.75"	.315"5512"	3/8"
KSW08	3000	21.65"	.5512"7874"	1/2"
KSW12	2000	25.20"	.7874" - 1.181"	3/4"
KSW16	1500	34.25"	1.181" - 1.575"	1"
KSW20	1000	38.19"	1.575" - 1.969"	11⁄4"
KSW24	700	49.21"	1.969" - 2.362"	11⁄2"
KSW32	1300	51.18"	2.362" - 2.756"	2"
KSW40	800	53.15"	2.756" - 3.346"	21/2"
KSW48	750	72.44"	3.346" - 3.937"	3"
KSW56	550	72.05"	3.937" - 4.724"	31/2"
KSW64	550	86.61"	4.724" - 5.512"	4"
KSW96	250	93.31"	5.512" - 7.087"	6"



KSW32



KSW40

### King<sup>™</sup> Safety Shackle

### Applications:

- 2 shackles are used to anchor the King<sup>™</sup> Safety Whipsock
- securing both eyes to a rigid anchor point to reduce whip in the event of a hose or connection failure

#### Features:

recommended bolt, nut, and cotter pin style shackle



caution working load must be rated for the application



Size	Working Load	Fits KSW Eye	Micro Alloy Steel Part #
1/4"	1/2 ton (1000 lbs)	KSW06-KSW12	KSS04
3/8"	1½ ton (3000 lbs)	KSW16-KSW40	KSS06
1/2"	3 ton (6000 lbs)	KSW48-KSW96	KSS08

## Dixon<sup>®</sup> In-Line Lubricators



### Features:

- The minimum flow rate that must be achieved for the PL series lubricators to work is 30 SCFM. A flow rate less than 30 SCFM will not create the pressure difference needed between chambers to force the oil into the air stream.
- Install within 25 feet of the air tool requiring lubrication. Refer to the arrow for proper air flow direction.
- · transparent sight disc allows visual inspection of oil level
- · oil flow regulated by screwdriver adjustment of oil adjustment valve inside body
- not recommended for constant flow applications
- for use on reciprocating tools only
- · can dispense standard air tool lubricant or Dixon® anti-freeze lubricant
- lubricator body is 356-T6 aluminum

### **Description:**

 The lubricator has two reservoirs. The upper reservoir holds the oil, and a lower reservoir that is the passageway for the air to enter. The air and oil mixture exits through the lower reservoir. The oil adjustment valve between the two compartments initially allows air to enter the reservoir to pressurize it, and then it controls the amount of oil entering the air stream.

#### How it works:

Before the hose is charged with air, the pressure in both chambers of the lubricator are equal. When the tool is turned on it draws air from the compressor through the lower chamber. As air passes through the lower chamber it creates an area of low pressure. When the pressure in the lower chamber is less than the pressure in the upper chamber the dual purpose oil adjustment valve allows oil to flow at the set rate into the airstream of the chamber below to lubricate the tool. When the flow of air stops, the oil adjustment valve allows pressure to build in the top chamber until the pressure is equal between the top and bottom. As long as the pressure in the upper chamber no oil will flow through the oil adjustment valve.

Note: These lubricators are only recommended for use with tools that are frequently turned on and off.



### Installation:

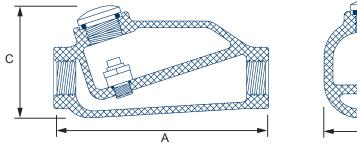
- At start up, additional lubricant is required to coat the inside of the line between the lubricator and the tool. To avoid operating a dry tool, add ½ ounce (15cc) of oil directly into the line.
- By removing the fill plug and using a screwdriver, the operator can adjust the amount of oil flowing into the air stream. It is not necessary to shut off the airflow to do this.
- The viscosity of the oil used and uniqueness of the application determine the right setting for proper lubrication. A setting of 5 is suitable for average conditions using 10-weight oil. Remember that the lag time between adjustment and resulting effect at the tool may be as long as an hour. Make small adjustments, and check the result.

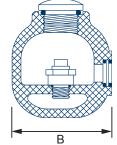
#### Storage:

 The simple principle behind the operation of this lubricator does not provide for oil shut off when the tool is not being used. To prevent a pressure differential from forcing the remaining oil from the reservoir into the air line, turn the lubricator upside down or open the fill plug to depressurize the reservoir.

#### Safety Notes:

- Wear eye protection when connecting or disconnecting couplings. Always use a whip hose with impact tools, King™ Cable to protect junctions, and couplings that are compatible with the media being transferred.
- Always unscrew fill plug slowly to depressurize upper chamber before filling or adjusting valve.





NPT Sizes	Part #	Oil Capacity	Max. Working Pressure	Air Flow at 70 PSI	Length A	Width B	Height C	Weight
1⁄2"	PL300	1.4 fluid ozs.	500 PSI	30 SCFM	41⁄2"	21⁄4"	21⁄4"	14 ozs.
3⁄4"	PL400	3.7 fluid ozs.	200 PSI	70 SCFM	6"	2³⁄4"	2³⁄4"	22 ozs.
3⁄4"	PL400L	11.0 fluid ozs.	300 PSI	70 SCFM	7"	31⁄2"	3¾"	38 ozs.
1"	PL500	16.0 fluid ozs.	250 PSI	100 SCFM	10"	4¼"	4"	69 ozs.

#### Feature:

 consists of 9076M particle filter with 40 micron sintered bronze element and PL400 (3.7 ounce) or PL400L (11.0 ounce) lubricator

NPT Size	Oil Capacity	Max. Work. Press. at ambient temp. <b>70°F (21°C)</b>	<i>Aluminum</i> Part #
3/4"	3.7 fluid ozs.	200 PSI	PL400WF
3/4"	11.0 fluid ozs.	300 PSI	PL400LWF

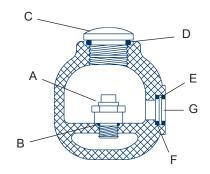
### **Repair Parts**

(same	for al	l sizes)
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Description	Part #
(A) oil adjustment valve assembly	851661
(B) valve gasket	452531
(C) fill plug	452525
(D) fill plug O-ring	844319
(E) sight disk	452532
(F) sight disk seal	847272
(G) sight disk lock nut	452533

### Available with Filter





### Type of oil to use:

• Any petroleum-base, non-detergent light weight oil (SAE 10/150SSU) which will readily break up into a mist, i.e., Mobil DTE light or comparable oil. *Do not use any* synthetic oil or oils containing additives or solvents.

Lubricant		Anti-Freeze	
Part #	Size	Part #	Size
DATL016	1 pint	DATL016W	1 pint
DATL128	1 gallon	DATL128W	1 gallon

## Accessories Air Accessories



Safety Pop-Off Valves Filters. Regulators and Lubricators Gauges Ball Valves Boss™ Fittings and Clamps 3500 Series nipples Bent Stem Swivels Compressor Y fitting

Please reference the current Dixon Price List catalog or dixonvalve.com for air accessories

### Gauges

#### Features:

- designed for long reliable service
- · materials available brass, stainless steel, plastic
- standard dry and liquid-filled pressure gauges, compound pressure gauges, vacuum gauges, and welding gauges

### Materials:

· materials available brass, stainless steel, plastic





### **3500 Nipples**

#### Features:

· used with whip hose to withstand vibration

#### Material:

zinc plated steel material

### **Specifications:**

 male nipple: hose size <sup>1</sup>/<sub>4</sub>" - 1", NPT size <sup>1</sup>/<sub>8</sub>" - 1" female nipple: hose size <sup>1</sup>/<sub>4</sub>" - <sup>3</sup>/<sub>4</sub>", NPT size <sup>1</sup>/<sub>4</sub>" - <sup>3</sup>/<sub>4</sub>"



### **Compressor Y**

#### Features:

· converts a single supply source to a dual outlet

#### Material:

• material: iron

### Specification:

female NPT 1" (1), male NPT <sup>3</sup>/<sub>4</sub>" (2)

### Features:

- National Board Certified Safety Valves
- · available in heavy duty high capacity, standard, and soft seat

#### Material:

· material brass and stainless steel

### Specification:

maximum operating temperature 400°F (204°C)



### Safety Pop-Off Valves



### **Safety Vented Ball Valves**



### Features:

- · handle position quickly indicates if valve is open or closed
- blow-out proof stem design
- RTFE seats and stuffing box ring

### Specification:

• rated to 600 PSI

### **Steel Bent Stem Swivels**



#### Features:

- convenient air tool connectors
- comes in <sup>7</sup>/<sub>8</sub>" thread which fits most chipping hammers

### Specification:

 designed for normal operation at 90 PSI as ambient temperature 70°F (21°C)

### **Hose Rack and Reels**



### Features:

- Reelcraft<sup>®</sup> spring driven hose reels
- 5000, 7000, and 80000 series available
- hose racks for hose sizes  $1^{1}\!\!\!/_2"$  to  $2^{1}\!\!\!/_2"$ , 50' to 200'

### Filters, Regulators and Lubricators

#### Features:

- Series 1, Watts and Wilkerson brands available
- inventories all components and sizes from 1/8" to 2"
- general purpose, rugged and reliable



### Safety Tag and Tape

#### Features:

- tags sold in quantities of 100
- · length of tape 55 yards, approximately 255 warnings





			•			
Tool	Class	Typical Air Consumption	Hose Size (inches)			
1001		(CFM)	0-10 ft.	10-50 ft.	50-200 ft.	
Paving Breakers	25 lb. 35 lb. 60 lb. 80 lb.	45 50 65 80	1/2 1/2 1/2 1/2 3/4	1/2 3/4 3/4 3/4 3/4	<sup>3</sup> ⁄4 <sup>3</sup> ⁄4 1 1	
Claydiggers		45	1/2	1/2	3/4	
Hand Drills	8 lb. 15 lb.	20 32	3/8 3/8	3/8 1/2	1/2 1/2	
Rock (Sinker) Drills	45 lb. 55 lb.	105 130	3/4 3/4	<sup>3</sup> ⁄4 1	1 1	
Tampers	5" butt 6" butt	20 30	3/8 1/2	1/2 1/2	1/2 3/4	
Sump Pump Sludge Pump	3 HP Ejector	100 90	<sup>3</sup> ⁄4 1	<sup>3</sup> ⁄4 1	1 1	
Vibrators	2½" 3"	60 60	1 1	1 1	1 1	
Chipping Hammers		25	3⁄8	1/2	1/2	
Impact Wrenches	3%" sq. dr. 1/2" 3/4" 1"	10 15 25 50	5/16 5/16 <sup>3/8</sup> <sup>1/2</sup>	3/8 3/8 1/2 3/4	3/8 1/2 1/2 1/2 3/4	
Drills	1/4" - 1/2"	22	3⁄8	3⁄8	1/2	
Grinders	die/burr small angle 3 HP vertical	20 20 75	3/8 3/8 1/2	3/8 3/8 3/4	1/2 1/2 1	

### Air Supply Requirements (operating pressure: 90 PSI)

### **Pressure Conversions**

100 PSI = 6.9 Bars	5 Bars = 72.5 PSI
250 PSI = 17.25 Bars	10 Bars = 145 PSI
600 PSI = 41.4 Bars	25 Bars = 362.5 PSI

### **Force Chart**

### Force (In Pounds)

Hose ID	25 PSI	50 PSI	75 PSI	100 PSI	150 PSI	200 PSI	250 PSI	300 PSI	500 PSI	1000 PSI
1/4"	1	2	4	5	7	10	12	15	25	49
3/8"	3	6	8	11	17	22	28	33	55	110
1/2"	5	10	15	20	29	39	49	59	98	196
3/4"	11	22	33	44	66	88	110	133	221	442
1"	20	39	59	79	118	157	196	236	393	785
11⁄4"	31	61	92	123	184	245	307	368	614	1227
11⁄2"	44	88	133	177	265	353	442	530	884	1767
2"	79	157	236	314	471	628	785	942	1571	3142
21⁄2"	123	245	368	491	736	982	1227	1473	2454	4909
3"	177	353	530	707	1060	1414	1767	2121	3534	7069
4"	314	628	942	1257	1885	2513	3142	3770	6283	12566
5"	491	982	1473	1964	2945	3927	4909	5891	9818	19635
6"	707	1414	2121	2827	4241	5655	7069	8482	14137	28274
8"	1257	2513	3770	5027	7540	10053	12566	15080	25133	50266
10"	1964	3927	5891	7854	11781	15708	19635	23562	39270	78540
12"	2827	5655	8482	11310	16965	22620	28274	33929	56549	113098

Note: For hose ID's from 1-1/4" to 12" the force in pounds is greater than the PSI.

• Force is the dynamic power which is exported longitudinally through a hose, towards the ends. To arrive at the number of pounds of force exerted, you merely multiply the area of the ID times the working pressure being used.

• Area of a circle: x r<sup>2</sup> (PI [3.1416] times radius squared)

• Force = Area x Pressure

Dixon<sup>®</sup> is recognized as the premier manufacturer and supplier of hose fittings and accessories spanning a wide range of industrial uses. Dixon<sup>®</sup>'s range includes products for food, dairy processing, beverage and brewery, mobile tankers, mining, construction, chemical processing, petroleum, oilfields, refining and manufacturing.

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