

Eaton® Synflex® Thermoplastic Hose and Fittings



A Complete
Hose Assembly
System

EATON

Powering Business Worldwide

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For decades, Synflex® thermoplastic hose and tubing has been replacing rubber hose or metal tubing designs. Synflex hose and tubing offers customers a number of benefits, including flexibility, durability, abrasion resistance, lighter weight materials, superior chemical resistance, variety of colors, high pressure capability and extended product performance.

Synflex, hose, tubing, fittings and accessories are available through distributors and direct sales offices throughout North America, Europe, Brazil and Asia.

Many locations also supply custom hose assemblies for specific applications and general industrial purposes.

This catalog contains the most popular lines of Synflex hose and tubing products. If these do not fit your particular needs, or you require a custom design, please contact Eaton customer service. As a customer-focused organization, satisfying customer needs with new products and innovative solutions is our goal.

Warranty

Current warranty information can be found at:
www.eaton.com/hydraulics/warranty

WARNING

Flexible hose lines offer many advantages over rigid tubing including routing ease, vibration absorption, sound deadening and the ability to accommodate movement of connected components. However, hose lines require caution in use not only to provide long service, but also to guard against potentially dangerous failure.

Important

The user should carefully observe the precautions listed in this catalog or brochure, including the recommendations on the selection of hose and fittings, and on fluid compatibility. In addition, care should be taken not to exceed the minimum bend radius listed for each hose size and type in the hose section. Maximum operating pressure should not exceed pressures listed in the hose data. Instructions for assembling fittings to different hose should be followed carefully to ensure the performance of the completed assembly.

WARNING

Eaton fitting tolerances are engineered to match approved Eaton Synflex hose tolerances. The use of Eaton fittings on hose supplied by other manufacturers and/or the use of Eaton hoses with fittings supplied by other manufactures may result in the production of unreliable and unsafe hose assemblies and is neither recommended nor authorized by Eaton or any of its affiliates or subsidiaries.

WARNING

Application considerations must be observed in selecting appropriate components for the application of these products contained herein. The failure to follow the recommendations set forth in this catalog may result in an unstable application which may result in serious personal injury or property damage.

EATON OR ANY OF ITS AFFILIATES OR SUBSIDIARIES SHALL NOT BE SUBJECT TO AND DISCLAIMS ANY OBLIGATIONS OR LIABILITIES (INCLUDING BUT NOT LIMITED TO ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES) ARISING FROM TORT CLAIMS (INCLUDING WITHOUT LIMITATION NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORIES OF LAW WITH RESPECT TO ANY HOSE ASSEMBLIES NOT PRODUCED FROM GENUINE SYNPLEX HOSE FITTINGS, HOSE AND SYNPLEX APPROVED EQUIPMENT, AND IN CONFORMANCE WITH EATON'S SYNPLEX PROCESS AND PRODUCT INSTRUCTIONS FOR EACH SPECIFIC HOSE ASSEMBLY.

FAILURE TO FOLLOW THESE PROCESSES, PRODUCT INSTRUCTIONS, AND LIMITATIONS COULD LEAD TO PREMATURE HOSE ASSEMBLY FAILURES RESULTING IN PROPERTY DAMAGE, SERIOUS INJURY, OR DEATH.

Routing

If the user follows the recommendations on hose line routing and installation as provided for herein, improved safety and longer service life of any hose installation will result.

Hose Installation

Proper installation of the hose is essential to the proper operation and safe use of the hose and related equipment. Improper installation of the hose can result in serious injury or property damage caused by spraying fluids or flying projectiles. In order to avoid serious bodily injury or property damage resulting from improper installation of the hose, you should carefully review the information in this catalog regarding hose installation.

Some of the factors you must consider in installing the hose properly are:

- Changes in length
- Proper bend radius
- Protection from high temperature sources
- Elbows and adapters to relieve strain
- Rubbing or abrasion
- Twisting
- Improper hose movement

These factors and the other information in this catalog regarding hose installation should be considered by you before installing the hose. If you have any questions regarding proper hose installation, please contact Eaton Technical Support at 1-888-258-0222.

Hose Maintenance

Proper maintenance of the hose is essential to the safe use of the hose and related equipment. Hose should be stored in a dry place. Hose should also be visually inspected. Any hose that has a cut or gouge in the cover that exposes the reinforcement should be retired from service. Hoses should also be inspected for kinking or broken reinforcement. If the outside diameter of the hose is reduced by 20% at the spot where it is bent then the hose should be retired from service. Inadequate attention to maintenance of the hose can result in hose leakage, bursting, or other failure which can cause serious bodily injury or property damage from spraying fluids, flying projectiles, or other substances.

Synflex Hose, Hose Fittings and Assembly Equipment Compatibility

Eaton equipment, Eaton hose fittings, and Eaton hose have been engineered and designed as a complete hose assembly system. Each component of the Synflex hose assembly system is compatible with other approved Eaton components to which it relates. Component compatibility, along with the use

of quality components, insures the production of reliable hose assemblies when properly assembled. Intermixing of fittings and hose not specifically engineered and designed for use with each other and Eaton equipment is not recommended and may result in the production of unsafe or unreliable hose assemblies. This can result in hose assembly leakage, hose separation or other failures which can cause serious bodily injury or property damage from spraying fluids, flying projectiles, or other substances. The Eaton warranty is limited to apply only when approved Eaton hose fittings and compatible Eaton Synflex hose are used with Eaton assembly equipment.

Hose and Field Attachable Hose Fittings

Synflex hose and Eaton's field attachable hose fittings have been engineered and designed as a complete system. Component compatibility along with the use of quality components insures the production of reliable hose assemblies when properly assembled. Intermixing fittings and hose not specifically engineered and designed for use with each other may result in the production of unsafe or unreliable hose assemblies. This can result in hose assembly leakage, hose separation, or other failures which can cause serious bodily injury or property damage from spraying fluids, flying projectiles, or other substances. The Eaton warranty is limited and applies only when Eaton's field attachable hose fittings are used on compatible Eaton hoses. See www.eaton.com/hydraulics/warranty for warranty information.

Thermoplastic Hose Selection

Application

		Agriculture & Horticulture	Air Tools	Carpet Cleaners	Carwash	Chemical Transfer	Cooling/Misting/Dust Suppression	Foam Systems	Food Processing	Forestry-Delimer	Gas Transfer*	General Construction	Handicap/Wheel Chair Lift	Hospital/Surgical Beds/Tables	General Hydraulic	
Hydraulic Hose	3R30	•	•		•	•	•						•	•	•	
	3130	•			•	•		•	•	•		•	•	•	•	
	3740									•					•	
	37AL									•					•	
	3580	•								•		•			•	
	25CT					•									•	
	30CT	•								•		•			•	
	3R80	•				•			•	•		•			•	
	3E80									•					•	
	3800					•									•	
Air & Water Hose	3V10														•	
	3VE0									•					•	
	3630	•	•	•	•						•					
	34PW								•							
	34BA										•					
	3440					•	•				•					
	35NG										•					
	Tubing	4212		•			•					•				
		4225		•			•					•				
	Truck Hose	4245/4247														
3270																
15CA																
3SCE																
4294		•								•		•				
4297	•								•		•					

For gas transfer applications, please contact the Eaton Technical Service team for additional information.

Thermoplastic Hose Selection

Application

		Lubrication Systems	Machine Tools/ Robotics	Marine	Material Handling/ Forklifts	Medical/ Salon Chairs	Nuclear	Pneumatic Systems	Pressure Washers	Recreational Vehicles	Rental Construction Equipment	Rescue Equipment	Tree Trimmers	Utility Vehicles	Water Jetter Drain/ Sewer
Hydraulic Hose	3R30					•				•					•
	3130	•	•	•	•	•			•	•	•		•		•
	3740						•				•		•	•	
	37AL										•		•	•	
	3580	•	•	•	•				•		•		•	•	
	25CT				•										
	30CT	•	•									•			
	3R80											•			
	3E80												•		
	3800								•	•	•	•			•
	3V10											•		•	
	3VE0											•		•	
Air & Water Hose	3630										•			•	
	34PW						•								
	34BA			•											
	3440														
	35NG														
Tubing	4212							•							
	4225							•							
Truck Hose	4245/4247													•	
	3270													•	
	15CA													•	
	3SCE													•	
	4294										•			•	
	4297										•			•	

GENERAL INFORMATION

HYDRAULIC HOSE

AIR & WATER HOSE & TUBING

TRUCK HOSE

AERQUIP/POLYON FITTINGS

AERQUIP/TTC FITTINGS

SYNFLEX FITTINGS

WEATHERHEAD (U & Z SERIES) FITTINGS

ASSEMBLY EQUIPMENT & INFORMATION

TECHNICAL DATA

Thermoplastic Hose Selection

Operating Pressures

Hose Series	-02		-03		-04		-05		-06		-08		-10		-12		-16		
	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	
Hydraulic Hose	3R30	--	--	120	1,750	103	1,500	--	--	86	1,250	70	1,000	--	--	--	--	--	--
	3130	172	2,500	210	3,050	207	3,000	175	2,550	157	2,300	140	2,050	--	--	87	1,250	70	1,000
	3740	--	--	--	--	--	--	--	--	--	--	--	--	--	--	87	1,250	70	1,000
	37AL	--	--	207	3,000	207	3,000	207	3,000	207	3,000	207	3,000	--	--	--	--	--	--
	3580	--	--	--	--	240	3,500	--	--	225	3,250	207	3,000	--	--	155	2,250	--	--
	25CT	--	--	--	--	--	--	--	--	--	--	172	2,500	--	--	--	--	--	--
	30CT	--	--	210	3,050	210	3,050	210	3,050	210	3,050	210	3,050	210	3,050	--	--	--	--
	3R80	--	--	350	5,100	350	5,100	--	--	280	4,050	245	3,550	--	--	157	2,300	140	2,050
	3E80	--	--	350	5,100	350	5,100	--	--	280	4,050	245	3,550	--	--	157	2,300	140	2,050
	3800	420	6,100	350	5,100	350	5,100	--	--	280	4,050	245	3,550	--	--	--	--	--	--
3V10	--	--	690	10,000	690	10,000	--	--	552	8,000	--	--	--	--	--	--	--	--	
3VE0	--	--	690	10,000	690	10,000	--	--	552	8,000	--	--	--	--	--	--	--	--	
Air & Water Hose	3630	--	--	17	250	17	250	17	250	17	250	17	250	17	250	17	250	17	250
	34PW	--	--	--	--	190	2,750	--	--	155	2,250	138	2,000	105	1,500	103	1,500	103	1,500
	34BA	--	--	--	--	--	--	--	--	17	250	--	--	--	--	--	--	--	--
	3440	--	--	--	--	190	2,750	--	--	155	2,250	138	2,000	103	1,500	103	1,500	103	1,500
	35NG	--	--	345	5,000	345	5,000	--	--	345	5,000	345	5,000	--	--	--	--	--	--
	FC701	--	--	--	--	--	--	--	--	--	--	--	--	--	--	172	2,500	172	2,500
	FC702	--	--	--	--	--	--	--	--	--	--	--	--	--	--	207	3,000	207	3,000
Tubing	4212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4225	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Truck Hose	4245/4247	17	250	20	300	20	300	17	250	--	--	--	--	--	--	--	--	--	--
	3270	--	--	--	--	--	--	--	--	24	350	16	237	15	225	13	200	--	--
	15CA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3SCE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4294	--	--	--	--	--	--	--	--	5	75	5	75	5	75	--	--	--	--
	4297	--	--	--	--	--	--	--	--	3.5	50	3.5	50	3.5	50	--	--	--	--

Thermoplastic Hose Selection

Construction and Specifications

	Hose Series	Tube	Reinforcement	Cover	SAE Specification	Additional Specifications	Description	Page #
Hydraulic Hose	3R30	Nylon	Braided Fiber	Polyurethane	100R3	--	Low pressure hydraulic hose	A4
	3130	Nylon	Braided or Spiral Fiber	Polyurethane	100R7	--	Medium pressure hydraulic hose	A5
	3740	Nylon	Braided Fiber	Polyurethane	100R7	--	Medium pressure, non-conductive hydraulic hose	A6
	37AL	Polyester	Braided Fiber	Polyurethane	100R7	ANSI 92.2	Medium pressure, non-conductive hydraulic hose	A7
	3580	Polyester	Braided Wire	Polyurethane	100R7	--	Medium pressure hydraulic hose	A8
	25CT	Polymeric	Braided Fiber	Polymeric	100R7	--	Medium pressure sewer hose	A9
	30CT	Polymeric	Braided Fiber	Polymeric	100R18	--	Constant pressure hydraulic hose	A10
	3R80	Nylon	Braided Fiber	Polyurethane	100R8	--	High pressure hydraulic hose	A11
	3E80	Nylon	Braided Fiber	Polyurethane	100R8	--	High pressure, non-conductive hydraulic hose	A12
	3800	Nylon	Braided Fiber	Polyurethane	100R8	--	High pressure hydraulic hose	A13
	3V10	Nylon	Spiral Fiber	Polyurethane	--	--	Very high pressure hydraulic hose	A14
	3VE0	Nylon	Spiral Fiber	Polyurethane	--	--	Very high pressure, non-conductive hydraulic hose	A15
Air & Water Hose	3630	PVC	Spiral Fiber	PVC	--	--	General purpose air and water hose	B2
	34PW	Polyolefin	Braided Fiber	Polyurethane	--	--	Pure water hose	B3
	3440	Polyolefin	Braided Fiber	Polyurethane	--	--	High moisture barrier water hose	B4
	34BA	Polyester	Braided Fiber	PVC	--	--	Breathing air hose	B5
	35NG	Nylon	Braided Fiber	Polyurethane	--	--	Compressed natural gas hose	B6
	FC701	Elastomer	Braided Fiber and Wire	Polyurethane	--	WEMI	Medium pressure sewer hose	B8
	FC702	Elastomer	Braided Fiber and Wire	Polyurethane	--	WEMI	Medium pressure sewer hose	B9
Tubing	4212	Nylon	--	--	--	--	Nylon tubing	B7
	4225	Nylon	--	--	--	--	Nylon tubing	B7
Truck Hose	15CA	Nylon	--	Braided Fiber	J844 Type B	DOT-FMVSS 106 (49 FR571.106)	Coiled air hose	C2
	3SCE	Nylon	--	Braided Fiber	J844 Type B	DOT-FMVSS 106 (49 FR571.106)	Coiled air hose	C2
	4245/4247	Nylon	--	--	J844 Type A, J1131, J2494-3	DOT-FMVSS 106	Type A air brake truck hose	C3
	3270	Nylon	--	Braided Fiber	J844 Type B, J1131, J2494-3	DOT-FMVSS 106	Type B air brake truck hose	C4
	4294	Nylon	--	Braided Fiber	--	--	Low-flex diesel fuel tubing	C5
	4297	Nylon	--	Braided Fiber	--	--	High-flex diesel fuel tubing	C6

PVC = Polyvinylchloride

Hydraulic Hose Selection

Operating Ranges

	Hose Series	Dash Size Range	Recommended Pressure Range @ Safety Factor		Temperature Range		Key Features and Applications	
			3:1	4:1	C°	F°		
			bar	psi				
HYDRAULIC HOSE	LP	3R30	-03 to -08	70 to 120	1,000 - 1,750	-40° to 100°	-40° to 212°	Low pressure hydraulic equipment
	MP	3130	-02 to -16	69 to 172	1,000 to 3,000	-40° to 100°	-40° to 212°	General hydraulics/pneumatics, best value 100R7 hose
		3740	-12 to -16	69 to 207	1,000 to 3,000	-40° to 100°	-40° to 212°	General hydraulic systems that may contact high voltage sources
		37AL	-03 to -08	207	3,000	-54° to 100°	-65° to 212°	General hydraulics, aerial lift (AL) equipment
		3580	-04 to -12	155 to 240	2,250 to 3,500	-40° to 107°	-40° to 225°	Wire reinforced, cut resistant, rugged, heavy design
	CP	25CT	-08	172	2,500	-54° to 94°	-65° to 200°	General hydraulics, constant pressure, material handling, freezer applications
		30CT	-04 to -08	276	3,000	-54° to 94°	-65° to 200°	General hydraulics, material handling, freezer applications
	HP	3R80	-03 to -16	184 to 460	2,000 to 5,000	-40° to 100°	-40° to 212°	Long life impulse cycling and flexing, reusable fittings
		3E80	-03 to -16	184 to 460	2,000 to 5,000	-40° to 100°	-40° to 212°	Non-conductive, aerial equipment
		3800	-02 to -08	322 to 552	3,500 to 6,000	-40° to 100°	-40° to 212°	100R8 performance with 100R7 dimensions, fitting versatility
VHP	3V10	-03 to -06	735 to 919	8,000 to 10,000	-40° to 66°	-40° to 150°	High-pressure performance, hydraulic jacks	
	3VE0	-03 to -06	735 to 919	8,000 to 10,000	-40° to 66°	-40° to 150°	Non-conductive, high-pressure performance, safety near high-voltage sources	

LP = Low pressure
 MP = Medium pressure
 CT = Constant pressure
 HP = High pressure
 VHP = Very high pressure

Hydraulic Hose Selection

Features and Fittings

	Hose Series	Bonded Layers	Twin or Multi-Line	Fitting Series					
				Aeroquip®		Synflex	Weatherhead®		
				Polyon	TTC w/ Sleeve**		336 'E'	U Series	Z Series w/ Sleeve**
<div style="display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div style="margin-bottom: 10px;">LP</div> <div style="margin-bottom: 10px;">MP</div> <div style="margin-bottom: 10px;">CP</div> <div style="margin-bottom: 10px;">HP</div> <div>VHP</div> </div>	3R30	•	•			903, 90A			
	3130	•	•	•	•	903, 90A, 9C6		•	•
	3740		•	•	•	903, 90A, 9C6		•	•
	37AL	•	•	•		903, 90A, 902, 908		•	
	3580	•	•			903, 90A			
	25CT		•			903, 90A			
	30CT	•	•			903, 90A, 90N			
	3R80*	•	•		•	90H, 90L	•		•
	3E80*	•	•		•	90H	•		•
	3800	•	•			903			•
	3V10	•	•			90H, 90V, 9CV			
	3VE0	•	•			90H, 90V, 9CV			

*Not all sizes are bonded.

**The Aeroquip TTC fitting and the Weatherhead Z Series fitting must be assembled with the required FF91064 Series sleeves.

Reference the appropriate fitting sections for available sizes of fittings qualified with select hose sizes.

GENERAL
INFORMATION

HYDRAULIC
HOSE

AIR & WATER HOSE
& TUBING

TRUCK
HOSE

AEROQUIP/POLYON
FITTINGS

AEROQUIP/TTC
FITTINGS

SYNFLEX
FITTINGS

WEATHERHEAD
(U & Z SERIES)
FITTINGS

ASSEMBLY
EQUIPMENT &
INFORMATION

TECHNICAL
DATA

Hydraulic Hose

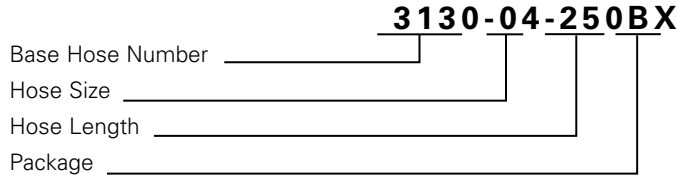
Synflex Hose Part Number Nomenclature _____	A2-3
Low Pressure Hose _____	A4
Medium Pressure Hose (Conductive & Non-Conductive) _____	A5-8
Constant Pressure Hose _____	A9-10
High Pressure Hose (Conductive & Non-Conductive) _____	A11-13
Very High Pressure Hose (Conductive & Non-Conductive) _____	A14-15
Twin Line, Tri-Line and Multi-Line Hose _____	A16



Synflex Hose

Part Number Nomenclature

A hose part number is composed of several different elements, all combined to make the final number. The following is a diagram of an example hose part number and the elements that go into creating that number.



The hose size is separated by another dash from the hose length. Hose length is in feet and is immediately followed by the packaging code.

Our example part number shows a Synflex 3130 hydraulic hose in a -04 or 1/4-inch size in a length of 250 feet. BX is the package code for a box or carton.

The hose base number indicates the specific Synflex hose. This is followed by a dash separating the base hose number from the hose size.

Synflex Part Number Cross Reference Chart

Old Part Numbers	New Catalog Part Numbers	Old Part Numbers	New Catalog Part Numbers	Old Part Numbers	New Catalog Part Numbers
N/A	3R30-03	3130-03B	3130-03	N/A	3VE0-06
3R30-03003	3R30-03-250BX	3130-03003	3130-03-250BX	3VE0-06003	3VE0-06-250BX
N/A	3R30-04	3130-04B	3130-04	N/A	3580-04
3R30-04003	3R30-04-250BX	3130-04003	3130-04-250BX	3580-04004	3580-04-250BX
N/A	3R30-06	3770-21333	3130-04-2-250BX	N/A	3580-06
3R30-06003	3R30-06-250BX	3130-05B	3130-05	N/A	3580-06-250BX
N/A	3R30-08	3130-05003	3130-05-250BX	3580-06004	3580-06-500R
3R30-08003	3R30-08-250BX	3130-06B	3130-06	N/A	3580-08
3740-12B	3740-12	3130-06003	3130-06-250BX	N/A	3580-12
3740-12008	3740-12-200BX	3770-21353	3130-06-2-250BX	N/A	25CT-08
3740-16B	3740-16	3130-06005	3130-06-500R	25CT-08003	25CT-08-250BX
37AL-03B	37AL-03	3130-08B	3130-08	N/A	30CT-03
37AL-03003	37AL-03-250BX	3130-08003	3130-08-250BX	N/A	30CT-04
37AL-04B	37AL-04	3770-21363	3130-08-2-250BX	30CT-04003	30CT-04-250BX
37AL-04003	37AL-04-250BX	3130-08RL	3130-08-500R	3770-20C33	30CT-04-2-250BX
3770-27A33	37AL-04-2-250BX	3130-12B	3130-12	N/A	30CT-05
37AL-04005	37AL-04-500RC	3130-12008	3130-12-200BX	30CT-05003	30CT-05-250BX
37AL-05B	37AL-05	3130-16B	3130-16	3770-20C43	30CT-05-2-250BX
37AL-05003	37AL-05-250BX	3130-16008	3130-16-200BX	N/A	30CT-06
37AL-05005	37AL-05-500RC	N/A	3800-02	30CT-06003	30CT-06-250BX
37AL-06B	37AL-06	3800-02003	3800-02-250BX	3770-20C53	30CT-06-2-250BX
37AL-06003	37AL-06-250BX	N/A	3800-03	N/A	30CT-08
3770-27A53	37AL-06-2-250BX	3800-03003	3800-03-250BX	30CT-08003	30CT-08-250BX
37AL-06005	37AL-06-500RC	N/A	3800-04	3770-20C63	30CT-08-2-250BX
37AL-08B	37AL-08	3800-04003	3800-04-250BX	N/A	30CT-10
37AL-08003	37AL-08-250BX	N/A	3800-06	30CT-10003	30CT-10-250BX
3770-27A63	37AL-08-2-250BX	3800-06003	3800-06-250BX	3R80-03B	3R80-03
37AL-08RL	37AL-08-500RC	N/A	3800-08	3R80-03003	3R80-03-250BX
3E80-03B	3E80-03	3800-08003	3800-08-250BX	3R80-04B	3R80-04
3E80-04B	3E80-04	N/A	3V10-03	3R80-04003	3R80-04-250BX
3E80-04003	3E80-04-250BX	3V10-03003	3V10-03-250BX	3R80-06B	3R80-06
3E80-06B	3E80-06	N/A	3V10-04	3R80-06003	3R80-06-250BX
3E80-06003	3E80-06-250BX	3V10-04003	3V10-04-250BX	3R80-08B	3R80-08
3E80-08B	3E80-08	N/A	3V10-06	3R80-08003	3R80-08-250BX
3E80-08003	3E80-08-250BX	3V10-06003	3V10-06-250BX	3R80-12B	3R80-12
N/A	3E80-12	N/A	3VE0-03	3R80-12006	3R80-12-200BX
N/A	3E80-16	3VE0-03003	3VE0-03-250BX	3R80-16B	3R80-16
3130-02B	3130-02	N/A	3VE0-04	3R80-16008	3R80-16-200BX
3130-02003	3130-02-250BX	3VE0-04003	3VE0-04-250BX		

Old Aeroquip Part Numbers	Old Weatherhead Part Numbers	New Synflex Base Part Number	Recommendations Part Numbers
FC372	H436	3130	
FC373 (-03 to -08)	H435	37AL	3740 (-12 & -16)
FC373 (-12 & -16)	H435	3740	37AL (-03 to -08)
FC374	H336	3R80	
FC375	H335	3E80	

Base Hose Number

The base hose number is simply the type of Synflex hose you wish to order. Base hose numbers are found at the top of each page within the hose section of the catalog as well as in the hose specification charts found on each hose page therein.

Hose Size

These are two digits after the base hose number. The hose size code follows industry standards and is the inner diameter of the hose in sixteenths of an inch.

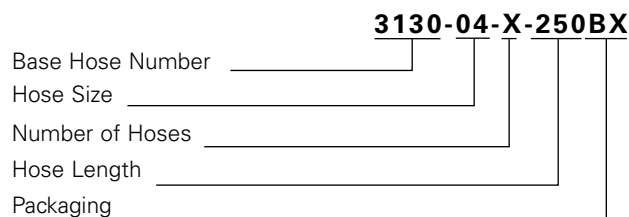
Metric equivalents are found with the hose specification charts on each hose page within the hose section of the catalog.

Hose Size	Hose I.D. in 1/16 Inch
-02	1/8"
-03	3/16"
-04	1/4"
-05	5/16"
-06	3/8"
-08	1/2"
-10	10/16"
-12	3/4"
-16	1"

Twin, Tri, or Multi-Lines

For twin-line, tri-line, and multi-line hose assemblies, referenced nomenclature applies. See page A16 for twin-line hose part numbers that are stock items. Contact your Eaton customer service representative for other variations of the multi-line product offering.

Twin-Line, Tri-Line, and Multi-Line Part Nomenclature



X	Number of Bonded Hoses
2	2 Bonded Hose
3	3 Bonded Hose
4	4 Bonded Hose
5	5 Bonded Hose
6	6 Bonded Hose

Hose Length

The hose length is indicated in feet. Metric equivalents are found in the length section of the hose specification charts. Noted below are the standard length options offered for Eaton Synflex hoses.

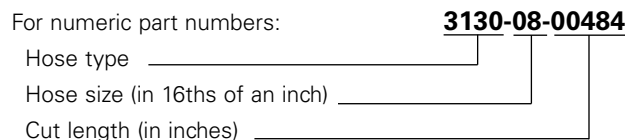
Packaging

Examples of Synflex packaging codes are provided in the chart below along with a description of the hose length and package configurations.

Example P/Ns	Length and Package Options
3130-12-200BX	Exact total footage in one to two pieces packaged in a box with no length less than 20 ft. (200 foot box in -12 and -16 sizes only)
3130-04-250BX	Exact total footage in one to two pieces packaged in a box with no length less than 20 ft.
3130-04-500R	Exact total footage in one to three pieces packaged on a reel with no length less than 50 ft.
37AL-06-500RC	Exact total footage in one continuous piece packaged on a reel. Currently available on select hose styles and sizes.
3130-04	Bulk hose - total order quantity shipped will be $\pm 15\%$ of the original quantity ordered. Balance of open quantity will be canceled as the order will be considered shipped complete. Minimum order quantity is 30 feet.
3130-04-06000	Standard Eaton cut length part number structure. Example: 06000 = 600 inches; last digit is 1/8 of an inch.

Cut Length Hose

Cut lengths of hose should be ordered as shown below by specifying lengths in inches.

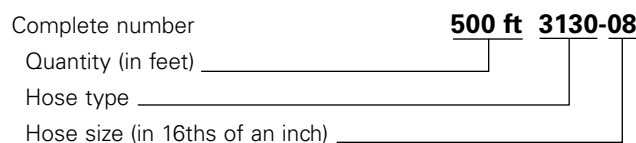


First four digits are in inches and the last digit is in 8ths of an inch: 00484 = 4 ft 1/2 inches

Note: Length tolerance for hose, assemblies and sleeves is:
 Up to and including 12 inches: $\pm 1/8"$
 Above 12 inches to and including 18 inches: $\pm 3/16"$
 Above 18 inches to and including 36 inches: $\pm 1/4"$
 Above 36 inches: $\pm 1\%$ of length

Bulk Hose

Bulk hose should be ordered by specifying length in feet as shown below.



3R30

Low Pressure

Meets or exceeds SAE 100R3



# Part Number	Hose Size	Hose I.D.			Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Length	
		DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
3R30-03	-03	5	4,8	0.19	9,8	0.38	120	1,750	480	7,000	25,0	1.00	0,05	0.04	Bulk	Bulk
3R30-03-250BX	-03	5	4,8	0.19	9,8	0.38	120	1,750	480	7,000	25,0	1.00	0,05	0.04	76,2	250
3R30-04	-04	6	6,4	0.25	12,4	0.49	103	1,500	412	6,000	32,0	1.25	0,08	0.05	Bulk	Bulk
3R30-04-250BX	-04	6	6,4	0.25	12,4	0.49	103	1,500	412	6,000	32,0	1.25	0,08	0.05	76,2	250
3R30-06	-06	10	9,5	0.38	16,2	0.64	86	1,250	344	5,000	51,0	2.00	0,12	0.08	Bulk	Bulk
3R30-06-250BX	-06	10	9,5	0.38	16,2	0.64	86	1,250	344	5,000	51,0	2.00	0,12	0.08	76,2	250
3R30-08	-08	12	12,7	0.50	20,8	0.82	70	1,000	280	4,000	76,0	3.00	0,21	0.14	Bulk	Bulk
3R30-08-250BX	-08	12	12,7	0.50	20,8	0.82	70	1,000	280	4,000	76,0	3.00	0,21	0.14	76,2	250

Construction:

Tube: Nylon-lined

Reinforcement:

Spiral synthetic fiber (-03 through -06)

Braided synthetic fiber reinforcement (-08)

Cover: Black perforated polyurethane

Operating Parameters:

Temperature Range

-40°C to +100°C
(-40°F to +212°F)

or

-40°C to +66°C
(-40°F to +150°F)

with water-based, or fire-resistant, fluids

Change in working length at working PSI ±2%

Applications:

- Low-pressure hydraulics (hospital beds)
- Hand tools: air power tools (impact tools, nail guns, staple guns and tire inflation)
- Lubrication systems
- Pressure wash hose
- Cooling mist systems

Features:

- Meets SAE 100R3 specifications
- Low volumetric expansion

Fitting Reference	Page
903	F7-14
90A Stainless	F27

For hose fittings details, please see the fittings section.

3130

Medium Pressure

Meets or exceeds SAE 100R7



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Min. Burst Pressure		Min. Bend Radius		Weight		Length	
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
3130-02	-02	3	3,2	0.13	8,5	0.34	172	2,500	689	10,000	13,0	0.50	0,04	0.03	Bulk	Bulk
3130-02-250BX	-02	3	3,2	0.13	8,5	0.34	172	2,500	689	10,000	13,0	0.50	0,04	0.03	76,2	250
3130-03	-03	5	4,8	0.19	10,8	0.43	207	3,000	827	12,000	19,0	0.75	0,07	0.05	Bulk	Bulk
3130-03-250BX	-03	5	4,8	0.19	10,8	0.43	207	3,000	827	12,000	19,0	0.75	0,07	0.05	76,2	250
3130-04	-04	6	6,4	0.25	13,0	0.51	207	3,000	759	11,000	32,0	1.25	0,09	0.06	Bulk	Bulk
3130-04-250BX	-04	6	6,4	0.25	13,0	0.51	207	3,000	759	11,000	32,0	1.25	0,09	0.06	76,2	250
3130-04-500R	-04	6	6,4	0.25	13,0	0.51	207	3,000	759	11,000	32,0	1.25	0,09	0.06	152,4	500
3130-05	-05	8	7,9	0.31	15,1	0.59	172	2,500	689	10,000	44,0	1.75	0,12	0.08	Bulk	Bulk
3130-05-250BX	-05	8	7,9	0.31	15,1	0.59	172	2,500	689	10,000	44,0	1.75	0,12	0.08	76,2	250
3130-06	-06	10	9,5	0.38	17,0	0.67	155	2,250	620	9,000	51,0	2.00	0,12	0.08	Bulk	Bulk
3130-06-250BX	-06	10	9,5	0.38	17,0	0.67	155	2,250	620	9,000	51,0	2.00	0,12	0.08	76,2	250
3130-06-500R	-06	10	9,5	0.38	17,0	0.67	155	2,250	620	9,000	51,0	2.00	0,12	0.08	152,4	500
3130-08	-08	12	12,7	0.50	20,7	0.82	138	2,000	620	9,000	76,0	3.00	0,16	0.11	Bulk	Bulk
3130-08-250BX	-08	12	12,7	0.50	20,7	0.82	138	2,000	620	9,000	76,0	3.00	0,16	0.11	76,2	250
3130-08-500R	-08	12	12,7	0.50	20,7	0.82	138	2,000	620	9,000	76,0	3.00	0,16	0.11	152,4	500
3130-12	-12	19	19,1	0.75	27,1	1.07	86	1,250	345	5,000	127,0	5.00	0,27	0.18	Bulk	Bulk
3130-12-200BX	-12	19	19,1	0.75	27,1	1.07	86	1,250	345	5,000	127,0	5.00	0,27	0.18	60,9	200
3130-16	-16	25	25,4	1.00	34,0	1.34	69	1,000	276	4,000	203,0	8.00	0,46	0.31	Bulk	Bulk
3130-16-200BX	-16	25	25,4	1.00	34,0	1.34	69	1,000	276	4,000	203,0	8.00	0,46	0.31	60,9	200

SAE100R7 does not apply to 0.125" size. The Nylon core tube is a single wall and not bonded to the reinforcement.

Construction:

Tube: Nylon-lined

Reinforcement: Spiral or braided synthetic fiber

Cover: Black perforated polyurethane

Operating Parameters:

Temperature Range

-40°C to +100°C
(-40°F to +212°F)

or

-40°C to +66°C
(-40°F to +150°F)
with water-based, or fire-resistant, fluids

Change in working length at working PSI ±2%

Applications:

- General hydraulics
- Material handling
- Forklifts
- Chemical transfer
- Marine steering

Features:

- Meets or exceeds SAE 100R7 specifications
- Low elongation

Fitting Reference	Page
903	F7-14
90A Stainless	F27
9C6 Brass	F24
Polyon	D2-8
TTC w/ sleeve	E3-22
Z Series w/ sleeve	G25-44
U Series	G6-23

For hose fittings details, please see the fittings section.

3740

Medium Pressure Hose, Non-Conductive

Meets or exceeds SAE 100R7



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Length	
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
3740-12	-12	19	19,0	0.75	27,2	1.07	86	1,250	345	5,000	5,0	127.0	0,29	0.19	Bulk	Bulk
3740-12-200BX	-12	19	19,0	0.75	27,2	1.07	86	1,250	345	5,000	5,0	127.0	0,29	0.19	60,9	200
3740-16	-16	25	25,4	1.00	34,1	1.34	69	1,000	276	4,000	8,0	203.0	0,39	0.26	Bulk	Bulk

Construction:**Tube:** Nylon-lined**Reinforcement:** Braided synthetic fiber**Cover:** Orange non-perforated polyurethane**Operating Parameters:**

Temperature Range

-40°C to +100°C
(-40°F to +212°F)

or

-40°C to +60°C
(-40°F to +140°F)
with water-based, or
fire-resistant, fluidsChange in working length at
working PSI $\pm 2\%$ **Applications:**

- General hydraulic systems that may contact high voltage sources
- Aerial equipment
- Mobile hydraulics
- Rescue apparatus and tools

Features:

- SAE J517 non-conductive hose construction
- Less than 50 micro-amperes leakage when subjected to 75,000 volts/ft for five minutes

Fitting Reference	Pages
903 (-12)	F7-14
90A Stainless (-12)	F27
9C6 Brass	F24
Polyon	D2-8
TTC w/ sleeve	E3-22
Z Series w/ sleeve	G25-44
U Series	G6-23

For hose fittings details, please see the fittings section.

37AL

Medium Pressure Hose, Non-Conductive

Meets or exceeds SAE 100R7
Meets ANSI 92.2



# Part Number	Hose Size	Hose I.D.		Hose O.D.		Max. Operating Pressure ANSI A92.2 SAE 100R7				Burst Pressure		Min. Bend Radius		Weight		Length		
		DN	mm	in	mm	in	bar	psi	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
37AL-03	-03	5	4,8	0.19	10,8	0.43	207	3,000	207	3,000	827	12,000	19,0	0.4	0,07	0.05	Bulk	Bulk
37AL-03-250BX	-03	5	4,8	0.19	10,8	0.43	207	3,000	207	3,000	827	12,000	19,0	0.4	0,07	0.05	76,2	250
37AL-04	-04	6	6,4	0.25	12,3	0.49	207	3,000	190	2,750	759	11,000	32,0	1.3	0,09	0.06	Bulk	Bulk
37AL-04-250BX	-04	6	6,4	0.25	12,3	0.49	207	3,000	190	2,750	759	11,000	32,0	1.3	0,09	0.06	76,2	250
37AL-04-500RC	-04	6	6,4	0.25	12,3	0.49	207	3,000	190	2,750	759	11,000	32,0	1.3	0,09	0.06	152,4	500
37AL-05	-05	8	7,9	0.31	14,7	0.58	207	3,000	172	2,500	689	10,000	44,0	1.8	0,11	0.08	Bulk	Bulk
37AL-05-250BX	-05	8	7,9	0.31	14,7	0.58	207	3,000	172	2,500	689	10,000	44,0	1.8	0,11	0.08	76,2	250
37AL-05-500RC	-05	8	7,9	0.31	14,7	0.58	207	3,000	172	2,500	689	10,000	44,0	1.8	0,11	0.08	152,4	500
37AL-06	-06	10	9,5	0.38	16,1	0.64	207	3,000	155	2,250	620	9,000	51,0	2.0	0,14	0.10	Bulk	Bulk
37AL-06-250BX	-06	10	9,5	0.38	16,1	0.64	207	3,000	155	2,250	620	9,000	51,0	2.0	0,14	0.10	76,2	250
37AL-06-500RC	-06	10	9,5	0.38	16,1	0.64	207	3,000	155	2,250	620	9,000	51,0	2.0	0,14	0.10	152,4	500
37AL-08	-08	12	12,7	0.50	20,7	0.82	207	3,000	155	2,250	620	9,000	76,0	3.0	0,21	0.14	Bulk	Bulk
37AL-08-250BX	-08	12	12,7	0.50	20,7	0.82	207	3,000	155	2,250	620	9,000	76,0	3.0	0,21	0.14	76,2	250
37AL-08-500RC	-08	12	12,7	0.50	20,7	0.82	207	3,000	155	2,250	620	9,000	76,0	3.0	0,21	0.14	152,4	500

Construction:

Tube: Polyester
Reinforcement: Braided synthetic fiber
Cover: Orange, non-perforated, non-stick polyurethane

Operating Parameters:

Temperature Range
-54°C to +100°C
(-65°F to +212°F)
or
-40°C to +60°C
(-40°F to +140°F)
with water-based or fire-resistant fluids
Change in working length at working PSI ±2%

Applications:

- Electric utility truck
- Hydraulic systems
- Mobile equipment (pickers, utility vehicles)

Features:

- SAE J517 non-conductive hose construction
- Complies with ANSI A92.2 for vehicle-mounted, aerial devices (i.e., AL)
- Less than 50 micro-amperes leakage when subjected to 75,000 volts/ft for five minutes

Fitting Reference	Pages
903	F7-14
90A Stainless	F27
Polyon	D2-8
Reusable	F30-32
U Series	G6-23

For hose fittings details, please see the fittings section.

3580

Medium Pressure

Meets or exceeds SAE 100R7 performance
Meets or exceeds SAE 100R1 performance



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Lengths	
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
3580-04	-04	6	6,4	0.03	12,3	0.49	240	3,500	960	14,000	44,0	1.75	0,15	0.10	Bulk	Bulk
3580-04-250BX	-04	6	6,4	0.03	12,3	0.49	240	3,500	960	14,000	44,0	1.75	0,15	0.10	76,2	250
3580-06	-06	10	9,5	0.38	16,4	0.65	225	3,250	900	13,000	57,0	2.25	0,27	0.18	Bulk	Bulk
3580-06-250BX	-06	10	9,5	0.38	16,4	0.65	225	3,250	900	13,000	57,0	2.25	0,27	0.18	76,2	250
3580-06-500R	-06	10	9,5	0.38	16,4	0.65	225	3,250	900	13,000	57,0	2.25	0,27	0.18	152,4	500
3580-08	-08	12	12,7	0.50	19,4	0.77	207	3,000	828	12,000	83,0	3.25	0,31	0.21	Bulk	Bulk
3580-12	-12	19	19,1	0.75	27,1	1.07	155	2,250	620	9,000	152,0	6.00	0,50	0.34	Bulk	Bulk

Construction:

Tube: Polyester
Reinforcement: Braided, bronze-coated steel wire
Cover: Black non-perforated, polyurethane

Operating Parameters:

Temperature Range
-40°C to +107°C
(-40°F to +225°F)
or
-40°C to +60°C
(-40°F to +140°F)
with water-based, or fire-resistant, fluids
Change in working length at working PSI ±2%

Applications:

- Lubrication systems
- General mobile hydraulics
- Agriculture equipment

Features:

- Meets or exceeds SAE 100R1 and 100R7 performance specifications
- Steel wire reinforcement
- Cut resistant, heavy-duty design
- Crush resistant

Fitting Reference

Page

903	F7-14
90A Stainless	F27

For hose fittings details, please see the fittings section.

25CT

Constant Pressure

Meets or exceeds SAE 100R7



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Length	
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
25CT-08	-08	12	12,7	0.50	21,1	0.83	172	2,500	689	10,000	76,2	3.00	0,21	0.14	Bulk	Bulk
25CT-08-250BX	-08	12	12,7	0.50	21,1	0.83	172	2,500	689	10,000	76,2	3.00	0,21	0.14	76,2	250

Construction:

Tube: Polyester

Reinforcement: Braided synthetic fiber

Cover: Black perforated, non-stick polyester

Operating Parameters:

Temperature Range

-54°C to +94°C
(-65°F to +200°F)
with water-based, or
fire-resistant, fluids

Change in working length at
working PSI ±2%

Applications:

- Forklifts
- Construction
- General hydraulics
- Chemical and gas transfer
- Agricultural equipment
- Material handling
- Freezer applications
- Machine tools and robotics
- Lubrication equipment
- Portable hydraulic tools

Features:

- Highly flexible, even in cold temperatures

Fitting Reference	Page
903	F7-14
90A	F27

For hose fittings details, please see the fittings section.

30CT

Constant Pressure

Meets or exceeds SAE 100R18



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Length	
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
30CT-03	-03	5	4,8	0.19	10,7	0.42	210	3,050	840	12,200	25,4	1.00	0,08	0.05	Bulk	Bulk
30CT-04	-04	6	6,4	0.25	12,1	0.48	210	3,050	840	12,200	31,8	1.25	0,09	0.06	Bulk	Bulk
30CT-04-250BX	-04	6	6,4	0.25	12,1	0.48	210	3,050	840	12,200	31,8	1.25	0,09	0.06	76,2	250
30CT-05	-05	8	7,9	0.31	15,5	0.61	210	3,050	840	12,200	38,1	1.50	0,15	0.10	Bulk	Bulk
30CT-05-250BX	-05	8	7,9	0.31	15,5	0.61	210	3,050	840	12,200	38,1	1.50	0,15	0.10	76,2	250
30CT-06	-06	10	9,5	0.38	16,8	0.66	210	3,050	840	12,200	50,8	2.00	0,18	0.12	Bulk	Bulk
30CT-06-250BX	-06	10	9,5	0.38	16,8	0.66	210	3,050	840	12,200	50,8	2.00	0,18	0.12	76,2	250
30CT-08	-08	12	12,7	0.50	21,6	0.85	210	3,050	840	12,200	88,9	3.50	0,25	0.17	Bulk	Bulk
30CT-08-250BX	-08	12	12,7	0.50	21,6	0.85	210	3,050	840	12,200	88,9	3.50	0,25	0.17	76,2	250
30CT-10	-10	16	16,0	0.63	27,0	1.06	210	3,050	840	12,200	101,6	4.00	0,41	0.28	Bulk	Bulk
30CT-10-250BX	-10	16	16,0	0.63	27,0	1.06	210	3,050	840	12,200	101,6	4.00	0,41	0.28	76,2	250

Construction:

Tube: Polyester

Reinforcement: Braided synthetic fiber

Cover: Black perforated, non-stick polyester

Operating Parameters:

Temperature Range

-54°C to +94°C
(-65°F to +200°F)

or

-54°C to +66°C
(-65°F to +150°F)
with water-based, or
fire-resistant, fluids

Change in working length at
working PSI \pm 2%

Applications:

- Forklifts
- Construction
- General hydraulics
- Chemical and gas transfer
- Agricultural equipment
- Material handling
- Freezer applications
- Machines tools and robotics
- Lubrication equipment
- Portable hydraulic tools

Features:

- Highly flexible, even in cold temperatures
- Small outside diameter
- Lightweight, yet rugged construction

Fitting Reference	Page
903	F7-14
90A Stainless	F27
90N (-10)	F22

For hose fittings details, please see the fittings section.

3R80

High Pressure

Meets or exceeds SAE 100R8



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Length	
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
3R80-03	-03	5	4,8	0.19	13,1	0.52	350	5,100	1,400	20,400	38,0	1.50	0,11	0.08	Bulk	Bulk
3R80-03-250BX	-03	5	4,8	0.19	13,1	0.52	350	5,100	1,400	20,400	38,0	1.50	0,11	0.08	76,2	250
3R80-04	-04	6	6,4	0.25	15,9	0.63	350	5,100	1,400	20,400	51,0	2.00	0,18	0.12	Bulk	Bulk
3R80-04-250BX	-04	6	6,4	0.25	15,9	0.63	350	5,100	1,400	20,400	51,0	2.00	0,18	0.12	76,2	250
3R80-06	-06	10	9,5	0.38	19,4	0.77	280	4,050	1,120	16,200	64,0	2.50	0,22	0.15	Bulk	Bulk
3R80-06-250BX	-06	10	9,5	0.38	19,4	0.77	280	4,050	1,120	16,200	64,0	2.50	0,22	0.15	76,2	250
3R80-08	-08	12	12,7	0.50	22,7	0.90	245	3,550	980	14,200	102,0	4.00	0,28	0.19	Bulk	Bulk
3R80-08-250BX	-08	12	12,7	0.50	22,7	0.90	245	3,550	980	14,200	102,0	4.00	0,28	0.19	76,2	250
3R80-12	-12	19	19,1	0.75	28,9	1.14	157	2,300	628	9,200	165,0	6.50	0,38	0.26	Bulk	Bulk
3R80-12-200BX	-12	19	19,1	0.75	28,9	1.14	157	2,300	628	9,200	165,0	6.50	0,38	0.26	60,9	200
3R80-16	-16	25	25,4	1.00	37,3	1.47	140	2,050	560	8,200	254,0	10.00	0,57	0.39	Bulk	Bulk
3R80-16-200BX	-16	25	25,4	1.00	37,3	1.47	140	2,050	560	8,200	254,0	10.00	0,57	0.39	60,9	200

Construction:

Tube: Nylon

Reinforcement: Braided, synthetic fiber

Cover: Black perforated polyurethane

Operating Parameters:

Temperature Range
-40°C to +100°C
(-40°F to +212°F)

or
-40°C to +66°C
(-40°F to +150°F)
with water-based, or
fire-resistant, fluids

Change in working length at
working PSI $\pm 2\%$

Applications:

- General hydraulic systems
- Hydraulic tools
- Mobile equipment
- High-pressure chemical transfer

Fitting Reference Page

90H (-03 to -12)	F15-21
336 'E' (-03 to -12)	G2-5
90L Stainless (-03 to -12)	F28
TTC w/sleeve (-06 to -16)	E3-22
Z Series w/sleeve (-06 to -16)	G25-44

For hose fittings details, please see the fittings section.

3E80

High Pressure, Non-Conductive

Meets or exceeds SAE 100R8



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Length	
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
3E80-03	-03	5	4,8	0.19	13,1	0.52	350	5,100	1,400	20,400	38,0	1.50	0,11	0.08	Bulk	Bulk
3E80-04	-04	6	6,4	0.25	15,9	0.63	350	5,100	1,400	20,400	51,0	2.00	0,18	0.12	Bulk	Bulk
3E80-04-250BX	-04	6	6,4	0.25	15,9	0.63	350	5,100	1,400	20,400	51,0	2.00	0,18	0.12	76,2	250
3E80-06	-06	10	9,5	0.38	19,4	0.77	280	4,050	1,120	16,200	64,0	2.50	0,22	0.15	Bulk	Bulk
3E80-06-250BX	-06	10	9,5	0.38	19,4	0.77	280	4,050	1,120	16,200	64,0	2.50	0,22	0.15	76,2	250
3E80-08	-08	12	12,7	0.50	22,7	0.90	245	3,550	980	14,200	102,0	4.00	0,28	0.19	Bulk	Bulk
3E80-08-250BX	-08	12	12,7	0.50	22,7	0.90	245	3,550	980	14,200	102,0	4.00	0,28	0.19	76,2	250
3E80-12‡	-12	19	19,1	0.75	28,9	1.14	157	2,300	628	9,200	165,0	6.50	0,38	0.26	Bulk	Bulk
3E80-16‡	-16	25	25,4	1.00	37,3	1.47	140	2,050	560	8,200	254,0	10.00	0,57	0.39	Bulk	Bulk

‡Run to order (RTO) hose. Contact your Eaton customer service representative for details.

Construction:**Tube:** Nylon**Reinforcement:** Braided synthetic fiber**Cover:** Orange, non-perforated polyurethane**Operating Parameters:**

Temperature Range

-40°C to +100°C
(-40°F to +212°F)

or

-40°C to +66°C
(-40°F to +150°F)
with water-based, or
fire-resistant, fluidsChange in working length at
working PSI ±2%**Applications:**

- General hydraulic systems that may contact high voltage sources
- Aerial equipment
- Mobile machinery
- Rescue tools

Features:

- SAE J517 non-conductive hose construction
- Less than 50 micro-amperes leakage when subjected to 75,000 volts/ft for five minutes

Fitting Reference	Page
90H (-03 to -12)	F15-21
336 'E' (-03 to -12)	G2-5
90L Stainless (-03 to -12)	F28
TTC w/sleeve (-06 to -16)	E3-22
Z Series w/sleeve (-06 to -16)	G25-44

For hose fittings details, please see the fittings section.

3800

High Pressure

Meets SAE 100R8 performance



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Length	
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
3800-02	-02	3	3,2	0.13	8,5	0.34	413	6,000	1,655	24,000	20,0	0.81	0,04	0.03	Bulk	Bulk
3800-02-250BX	-02	3	3,2	0.13	8,5	0.34	413	6,000	1,655	24,000	20,0	0.81	0,04	0.03	76,2	250
3800-03	-03	5	4,8	0.19	11,0	0.43	345	5,000	1,379	20,000	38,0	1.50	0,09	0.06	Bulk	Bulk
3800-03-250BX	-03	5	4,8	0.19	11,0	0.43	345	5,000	1,379	20,000	38,0	1.50	0,09	0.06	76,2	250
3800-04	-04	6	6,4	0.25	13,5	0.53	345	5,000	1,379	20,000	51,0	2.00	0,12	0.08	Bulk	Bulk
3800-04-250BX	-04	6	6,4	0.25	13,5	0.53	345	5,000	1,379	20,000	51,0	2.00	0,12	0.08	76,2	250
3800-06	-06	10	9,5	0.38	16,9	0.67	276	4,000	1,103	16,000	64,0	2.50	0,16	0.11	Bulk	Bulk
3800-06-250BX	-06	10	9,5	0.38	16,9	0.67	276	4,000	1,103	16,000	64,0	2.50	0,16	0.11	76,2	250
3800-08	-08	12	12,7	0.50	21,3	0.84	240	3,500	965	14,000	102,0	4.00	0,22	0.15	Bulk	Bulk
3800-08-250BX	-08	12	12,7	0.50	21,3	0.84	240	3,500	965	14,000	102,0	4.00	0,22	0.15	76,2	250

Construction:

Tube: Nylon

Reinforcement: Braided, high-tensile aramid fiber

Cover: Black, perforated polyurethane

Operating Parameters:

Temperature Range

-40°C to +100°C
(-40°F to +212°F)

or

-40°C to +66°C
(-40°F to +150°F)
with water-based, or
fire-resistant, fluids

Change in working length at
working PSI ±2%

Applications:

- General hydraulics
- Machine tools
- Mobile equipment
- Agricultural equipment
- Marine steering

Features:

- 100R8 performance with 100R7 dimensions for fitting versatility
- Low volumetric expansion

Fitting Reference Page

903 (-03 to -08)	F7-14
90A Stainless (-03 to -08)	F27
98E* (-02)	*

For hose fittings details, please see the fittings section.

* For 98E fitting specifications, please contact your Eaton customer service representative.

3V10

Very High Pressure



# Part Number	Hose Size	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Length		
		DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
3V10-03	-03	5	4,8	0.19	13,2	0.52	689	10,000	2,758	40,000	38,0	1.50	0,11	0.08	Bulk	Bulk
3V10-03-250BX	-03	5	4,8	0.19	13,2	0.52	689	10,000	2,758	40,000	38,0	1.50	0,11	0.08	76,2	250
3V10-04	-04	6	6,4	0.25	15,1	0.60	689	10,000	2,758	40,000	64,0	2.50	0,16	0.11	Bulk	Bulk
3V10-04-250BX	-04	6	6,4	0.25	15,1	0.60	689	10,000	2,758	40,000	64,0	2.50	0,16	0.11	76,2	250
3V10-06	-06	10	9,5	0.38	19,8	0.78	552	8,000	2,205	32,000	76,0	3.00	0,23	0.16	Bulk	Bulk
3V10-06-250BX	-06	10	9,5	0.38	19,8	0.78	552	8,000	2,205	32,000	76,0	3.00	0,23	0.16	76,2	250

Construction:**Tube:** Nylon-lined**Reinforcement:** Spiral, high-tensile aramid fiber**Cover:** Black, perforated polyurethane**Operating Parameters:**

Temperature Range

-40°C to +66°C
(-40°F to +150° F)Change in working length at working PSI \pm 2%**Applications:**

- High-pressure hydraulic tools
- Rescue equipment and tools
- High-pressure test equipment

Features:

- Compact size
- Lightweight
- Low elongation

**3V10 Hose Assembly Includes:**

- 3V10 hose
- 90V permanent steel fitting
- 45J0 hose guard
- Warning tag

Fitting Reference	Page
90V	F23
9CV Stainless	F29

For hose fittings details, please see the fittings section.

3VE0

Very High Pressure, Non-Conductive



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Length	
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
3VE0-03	-03	5	4,8	0.19	13,2	0.52	689	10,000	2,758	40,000	38,0	1.50	0,11	0.08	Bulk	Bulk
3VE0-03-250BX	-03	5	4,8	0.19	13,2	0.52	689	10,000	2,758	40,000	38,0	1.50	0,11	0.08	76,2	250
3VE0-04	-04	6	6,4	0.25	15,1	0.60	689	10,000	2,758	40,000	64,0	2.50	0,16	0.11	Bulk	Bulk
3VE0-04-250BX	-04	6	6,4	0.25	15,1	0.60	689	10,000	2,758	40,000	64,0	2.50	0,16	0.11	76,2	250
3VE0-06	-06	10	9,5	0.38	19,8	0.78	551	8,000	2,206	32,000	76,0	3.00	0,23	0.16	Bulk	Bulk
3VE0-06-250BX	-06	10	9,5	0.38	19,8	0.78	551	8,000	2,206	32,000	76,0	3.00	0,23	0.16	76,2	250

Construction:

Tube: Nylon-lined

Reinforcement: Spiral high-tensile aramid fiber

Cover: Orange, non-perforated polyurethane

Operating Parameters:

Temperature Range
-40°C to +66°C
(-40°F to +150°F)

Change in working length at working PSI ±2%

Applications:

- General hydraulic systems that may contact high voltage sources
- Rescue equipment and tools
- Mobile machinery
- Aerial equipment

Features:

- SAE J517 non-conductive hose construction. Less than 50 micro-amperes leakage when subjected to 75,000 volts/ft for five minutes
- Compact size
- Low elongation



3VE0 Hose Assembly

Includes:

- 3VE0 hose
- 90V permanent steel fitting
- 45J0 hose guard
- Warning tag



Fitting Reference	Page
90V	F23
9CV Stainless	F29

For hose fittings details, please see the fittings section.

3130, 37AL and 30CT

Twin-Line, Tri-Line, Multi-Line

3130 Medium Pressure Hose

Meets or exceeds SAE 100R7 specifications



37AL Medium Pressure Hose (Non-Conductive)

Meets or exceeds SAE 100R7 specifications

Meets with ANSI A92.2 for vehicle-mounted aerial devices



30CT Constant Pressure Hose

Meets or exceeds SAE 100R18 specifications



# Part Number	Hose Series	Number of Hose	Nominal I.D.		Length	
			mm	in	m	ft
3130-04-2-250BX*	3130-04	2	6,3	0.25	76,2	250
3130-05-2-250BX*	3130-05	2	7,9	0.31	76,2	250
3130-06-2-250BX*	3130-06	2	9,7	0.38	76,2	250
3130-08-2-250BX*	3130-08	2	12,7	0.50	76,2	250

* 3130 Twin-Line hose is a stock item. Other 3130 multi-line hoses are built to order. See 3130 series hose on page A5 for specification details. Please contact Eaton customer service for twin-line, tri-line, and multi-line configuration options.

# Part Number	Hose Series	Number of Hose	Nominal I.D.		Length	
			mm	in	m	ft
37AL-04-2-250BX*	37AL-04	2	6,3	0.25	76,2	250
37AL-06-2-250BX*	37AL-06	2	9,7	0.38	76,2	250
37AL-08-2-250BX*	37AL-08	2	12,7	0.50	76,2	250

* 37AL Twin-Line hose is a stock item. Other 37AL multi-line hoses are built to order. See 37AL series hose on page A7 for specification details. Please contact Eaton customer service for twin-line, tri-line, and multi-line configuration options.

# Part Number	Hose Series	Number of Hose	Nominal I.D.		Length	
			mm	in	m	ft
30CT-04-2-250BX*	30CT-04	2	6,3	0.25	76,2	250
30CT-05-2-250BX*	30CT-05	2	7,9	0.31	76,2	250
30CT-06-2-250BX*	30CT-06	2	9,7	0.38	76,2	250
30CT-08-2-250BX*	30CT-08	2	12,7	0.50	76,2	250

* 30CT Twin-Line hose is a stock item. Other 30CT multi-line hoses are built to order. See 30CT series hose on page A10 for specification details. Please contact Eaton customer service for twin-line, tri-line, and multi-line configuration options.

Twin-Line and multi-line hose separating tool and instructions are located on pages H8 and H21-23.

Air & Water Hose

General Purpose Air and Water Hose _____ B2

Pure Water Hose _____ B3

Moisture-Lok Hose _____ B4

Breathing Air Hose _____ B5

Compressed Natural Gas Hose _____ B6

Tubing

Nylon Tubing _____ B7

Sewer Hose

Sewer Hose _____ B8-9



GENERAL
INFORMATION

HYDRAULIC
HOSE

AIR & WATER HOSE
& TUBING

TRUCK
HOSE

AEROQUIP/POLYON
FITTINGS

AEROQUIP/TTC
FITTINGS

SYNFLEX
FITTINGS

WEATHERHEAD
(U & Z SERIES)
FITTINGS

ASSEMBLY
EQUIPMENT &
INFORMATION

TECHNICAL
DATA

3630

General Purpose
Air and Water Hose



# Part Number	Hose Size	Hose I.D.		Hose O.D.		Max. Operating Pressure				Min. Bend Radius		Weight		Color	Length		
		DN				@21°C	@70°F	@66°C	@150°F	mm	in	kg/m	lbs/ft		m	ft	
			mm	in	mm	in	bar	psi	bar	psi							
3630-03GY-500RC	-03	5	4,8	0.19	10,1	0.40	20	300	17	250	11.0	0.43	0,06	0.04	Gray	152,4	500
3630-04GY-500RC	-04	6	6,4	0.25	12,4	0.49	20	300	17	250	16.0	0.63	0,09	0.06	Gray	152,4	500
3630-04RD-500RC	-04	6	6,4	0.25	12,4	0.49	20	300	17	250	16.0	0.63	0,09	0.06	Red	152,4	500
3630-04YW-500RC	-04	6	6,4	0.25	12,4	0.49	20	300	17	250	16.0	0.63	0,09	0.06	Yellow	152,4	500
3630-04BU-500RC	-04	6	6,4	0.25	12,4	0.49	20	300	17	250	16.0	0.63	0,09	0.06	Blue	152,4	500
3630-04BK-500RC	-04	6	6,4	0.25	12,4	0.49	20	300	17	250	16.0	0.63	0,09	0.06	Black	152,4	500
3630-06GY-500RC	-06	10	9,5	0.37	16,2	0.64	20	300	17	250	22.0	0.87	0,14	0.09	Gray	152,4	500
3630-06RD-500RC	-06	10	9,5	0.37	16,2	0.64	20	300	17	250	22.0	0.87	0,14	0.09	Red	152,4	500
3630-06YW-500RC	-06	10	9,5	0.37	16,2	0.64	20	300	17	250	22.0	0.87	0,14	0.09	Yellow	152,4	500
3630-06BU-500RC	-06	10	9,5	0.37	16,2	0.64	20	300	17	250	22.0	0.87	0,14	0.09	Blue	152,4	500
3630-08‡	-08	12	12,7	0.50	20,1	0.79	20	300	17	250	32.0	1.25	0,20	0.13	--	--	--

*Reel packaged part numbers listed.

‡ Run-to-order hose. Contact your Eaton representative for details.

Construction:

Tube: Polyvinylchloride (PVC)

Reinforcement: Spiral synthetic fiber

Cover: Perforated polyvinylchloride (PVC)

Operating Parameters:

Temperature Range

-23°C to +66°C
(-10°F to +150°F)

or

-23°C to 54°C
(-10°F to 130°F)

with 390C brass fittings

Applications:

- Air power tools (impact tools, nail guns, stapler guns, tire inflation)
- Pneumatic motion control
- Industrial water supply line

Features:

- Standard colors: gray, red, blue, yellow or black
- Excellent abrasion and impact resistance
- Lightweight
- 4:1 burst to working pressure safety factor
- Long life over rubber hose

Fitting Reference	Pages
903	F7-14
90A Stainless	F27
90H (-16)	F15-21
390C**	F25-26
90L Stainless (-16)	F28

For hose fittings details, please see the fittings section.

**For brass fitting availability, swage and die information see hose fitting selection chart on pages F2-6.

34PW

Pure Water Hose



# Part Number	Hose Size	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Length		
		DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
34PW-04-250BX	-04	6	6,4	0.25	13,2	0.52	190	2,750	758	11,000	32,0	1.25	0,09	0.06	76,2	250
34PW-06-250BX	-06	10	9,5	0.38	16,6	0.66	155	2,250	620	9,000	51,0	2.00	0,13	0.09	76,2	250
34PW-08-250BX	-08	12	12,7	0.50	20,6	0.81	138	2,000	552	8,000	76,0	3.00	0,24	0.16	76,2	250
34PW-12-250BX	-12	19	19,0	0.75	29,0	1.14	103	1,500	414	6,000	127,0	5.00	0,36	0.24	76,2	250
34PW-16-250BX	-16	25	25,4	1.00	37,0	1.46	103	1,500	414	6,000	203,0	8.00	0,55	0.37	76,2	250

Note: Always use accepted cleaning practices to clean finished hose assembly before use.

Construction:

Tube: Polyolefin

Reinforcement: Synthetic fiber

Cover: Blue, non-perforated polyurethane

Operating Parameters:

Temperature Range

-23°C to +66°C
(-10°F to +150°F)

Applications:

- Pure water transfer
- Deionized water
- Distilled water
- Potable water
- Food products

Features:

- Made with NSF approved materials
- Core tube is free of plasticizers
- Prevents moisture transmission, extraction of contaminants
- Long lengths available

Agency Listings:

U.S. Navy
(MIL-STD-767A Ships)
NSF-51 and NSF-61 Certified

Fitting Reference	Pages
90A Stainless	F27
90L Stainless (-12 & -16)	F28

For hose fittings details, please see the fittings section.

3440

Moisture-Lok Hose



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Length	
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
3440-04-250BX	-04	6	6,4	0.25	13,2	0.52	190	2,750	758	11,000	32,0	1.25	0,09	0.06	76,2	250
3440-06-250BX	-06	10	9,5	0.38	16,6	0.66	155	2,250	620	9,000	51,0	2.00	0,13	0.09	76,2	250
3440-08-250BX	-08	12	12,7	0.50	20,6	0.81	138	2,000	552	8,000	76,0	3.00	0,18	0.12	76,2	250
3440-12-250BX	-12	19	19,0	0.75	29,0	1.14	103	1,500	414	6,000	127,0	5.00	0,36	0.24	76,2	250
3440-16-250BX	-16	25	25,4	1.00	37,0	1.46	103	1,500	414	6,000	203,0	8.00	0,55	0.37	76,2	250

Note: Always use accepted cleaning practices to clean finished hose assembly before use.

Construction:

Tube: Polyolefin

Reinforcement: Synthetic fiber

Cover: Perforated polyurethane

Operating Parameters:

Temperature Range

-23°C to +66°C

(-10°F to +150°F)

Applications:

- Conveying urethane foam components
- Moisture sensitive chemicals

Features:

- High moisture barrier core tube
- No plasticizers in the core tube
- UV resistant cover
- Custom colors available

Fitting Reference	Pages
903	F7-14
90A Stainless	F27
90H (-12 & -16)	F15-21
90L Stainless (-12 & -16)	F28

For hose fittings details, please see the fittings section.

34BA

Breathing Air Hose



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Length	
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
34BA-06-300BX	-06	10	9,5	0.38	17,7	0.70	17	250	69	1000	38,0	1.50	0.20	0.13	91,4	300

Construction:

Tube: Polyester lined

Reinforcement: Synthetic fiber

Cover: Yellow perforated polyvinylchloride (PVC)

Agency Listings:

Meets MIL-H-2815 off-gassing requirements

Operating Parameters:

Temperature Range

-26°C to +66°C
(-15°F to +150°F)

Applications:

- Self-contained rescue air tanks
- Breathing air lines for asbestos removal
- Sand blasting breathing apparatus

Features:

- Bright, safety-yellow cover
- Light weight, kink-resistance design
- Clean, non-contaminating thermoplastic core tube
- Abrasion resistant cover

Fitting Reference	Pages
90L Stainless	F28

For hose fittings details, please see the fittings section.

35NG

Compressed Natural Gas (CNG) Hose



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Lengths	
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	m	ft
35NG-03-250BX	-03	5	5,2	0.19	13,0	0.51	345	5,000	1,379	20,000	38,0	1.50	0,12	0.08	76,2	250
35NG-04-250BX	-04	6	6,4	0.25	16,0	0.63	345	5,000	1,379	20,000	51,0	2.00	0,16	0.11	76,2	250
3GNG-06-250BX	-06	10	9,7	0.38	19,5	0.77	345	5,000	1,379	20,000	102,0	4.00	0,22	0.15	76,2	250
35NG-08-250BX	-08	12	12,8	0.50	22,5	0.89	345	5,000	1,379	20,000	140,0	5.50	0,31	0.21	76,2	250

Construction:

Tube: Nylon

Reinforcement: Synthetic fiber

Cover: Black perforated polyurethane

Agency Listings:

AGA approved and listed
ANSI/IAS NGV 4.2 and CSA
12.52 compliant for dispensing systems

Conforms to appropriate sections of NFPA 52

Operating Parameters:

Temperature Range

-40C to +66°C
(-40F to +150°F)

Applications:

- CNG refueling dispensers
- CNG transfer lines
- High-pressure CNG lines

Features:

- Dissipates static electricity
- Low volumetric expansion
- UV resistant cover
- Twin-line designs available with vent hose
- Designed for electrically conductive fittings

Fitting Reference	Pages
90H	F15-21

For hose fittings details, please see the fittings section.

4212/4225

N2 Nylon Tubing



#		Tube Size	DN	Tube I.D.		Tube O.D.		Wall Thickness		Burst Pressure		Min. Bend Radius		Weight		Lengths*	
Part Number				mm	in	mm	in	mm	in	@23.9°C	@75°F	mm	in	kg/m	lbs/ft	m	ft
black	natural																
4212-21603	4225-21603	-02	3	2,4	0.09	3,2	0.13	0,4	0.02	69	1,000	12,7	0.50	0,4	0.25	304,8	1,000
4212-23103	4225-23103	-02	3	1,6	0.06	3,2	0.13	0,8	0.03	138	2,000	6,4	0.25	0,6	0.41	304,8	1,000
4212-32503	4225-32503	-03	5	3,5	0.14	4,8	0.19	0,6	0.03	69	1,000	16,0	0.63	0,9	0.57	304,8	1,000
4212-34603	4224-34603	-03	5	2,4	0.10	4,8	0.19	1,2	0.05	138	2,000	11,0	0.44	1,4	0.92	304,8	1,000
4212-43503	4225-43503	-04	6	4,6	0.18	6,4	0.25	0,9	0.04	69	1,000	22,0	0.89	1,6	1.06	228,6	750
4212-44003	4225-44003	-04	6	4,3	0.17	6,4	0.25	1,0	0.04	78	1,135	10,3	0.81	1,8	1.19	228,6	750
4212-46203	4225-46203	-04	6	3,2	0.13	6,4	0.25	1,6	0.06	138	2,000	12,7	0.50	2,5	1.65	228,6	750
4212-54003	4225-54003	-05	8	5,9	0.23	7,9	0.31	1,0	0.04	69	1,000	28,0	1.13	2,3	1.54	228,6	750
4212-65003	4225-65003	-06	10	7,0	0.28	9,5	0.38	1,3	0.05	69	1,000	28,0	1.13	3,4	2.30	228,6	750
4212-69303	4225-69303	-06	10	4,8	0.19	9,5	0.38	2,4	0.09	138	2,000	19,0	0.75	5,5	3.71	228,6	750
4212-81243	4225-81243	-08	12	6,4	0.25	12,7	0.50	3,1	0.12	138	2,000	25,4	1.00	9,8	6.59	152,4	500
4212-86203	4225-86203	-08	12	9,5	0.38	12,7	0.50	1,6	0.06	69	1,000	32,0	1.25	5,7	3.84	152,4	500

*Available lengths consist of 76,2 m (250 ft) continuous reels. Example: 4212-21603 consists of four 76,2 m (250 ft) reels equating to (1000 ft).

Construction:

Tube: Heat and light stabilized Nylon 11 or Nylon 12 resin

Operating Parameters:

Temperature Range
-40°C to +93°C
(-40°F to +200°F)

Applications:

- Low-pressure hydraulic
- Chemical transfer service
- Pneumatic systems

Features:

- Premium quality flexible tubing
- High dimensional stability
- Low moisture absorption
- Chemical resistant
- UV and ozone resistant
- Light weight

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AEROQUIP/TTC
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FC701 Eaton Gator™ Hose

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AERODUPLICATION FITTINGS

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ASSEMBLY EQUIPMENT & INFORMATION

TECHNICAL DATA



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Color	Length
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft		
FC701-12XXX*	-12	19	19,1	0.75	29,2	1.15	172	2,500	430,9	6,250	241,3	9.50	0.40	0.27	Orange	Bulk
FC701-16XXX*	-16	25	25,7	1.01	35,8	1.41	172	2,500	430,9	6,250	304,8	12.00	0.54	0.36	Orange	Bulk
FC701-20XXX*	-20	31	32,0	1.26	45,5	1.79	172	2,500	430,9	6,250	304,8	12.00	0.86	0.58	Orange	Bulk

*Sold as assemblies only. Reference assembly part numbers below.

Construction:

Tube: Blue elastomer tube
Reinforcement: Single braid, high strength textile
Cover: Orange ether-based polyurethane

Operating Parameters:

Temperature Range
 -40°C to +66°C
 (-40°F to +150°F)

Applications:

High-pressure sewer cleaning

Agency Listing:

Meets WEMI specifications

FC701-12 Gator Hose with FJ9372-1212S Fittings

Part Number	Reel Length ft
FB7186-0046	100
FB7186-0051	200
FB7186-0021	300
FB7186-0028	400
FB7186-0007	500
FB7186-0020	600
FB7186-0052	800
FB7186-0038	1000

FC701-16 Gator Hose with FJ9372-1616S Fittings

Part Number	Reel Length ft
FB7186-0008	100
FB7186-0026	150
FB7186-0009	200
FB7186-0016	250
FB7186-0013	300
FB7186-0004	400
FB7186-0001	500
FB7186-0002	600
FB7186-0005	700
FB7186-0006	800
FB7186-0019	900
FB7186-0018	1000
FB7186-0049	1200

FC701-20 Gator Hose with FJ9372-2020S Fittings

Part Number	Reel Length ft
FB7186-0039	100
FB7186-0040	150
FB7186-0015	200
FB7186-0022	250
FB7186-0045	300
FB7186-0011	400
FB7186-0010	500
FB7186-0012	600
FB7186-0027	700
FB7186-0044	800
FB7186-0024	1000
FB7186-0042	1200

Fitting Reference	Page
FJ5020 [±]	D9
FJ5021 [±]	D9
FJ7938 (-16)	D9
FJ9372	D9
FJ9373	D9

For hose fittings details, please see the fittings section.

[±]For FC702-12 hose only.



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight		Color	Length
			mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft		
FC702-12XXX*	-12	19	19,1	0.75	30,2	1.19	207	3,000	517,1	7,500	241,3	9.50	0,43	0.29	Blue	Bulk
FC702-16XXX*	-16	25	25,7	1.01	35,8	1.41	207	3,000	517,1	7,500	304,8	12.00	0,54	0.36	Blue	Bulk

*Sold as assemblies only. Reference assembly part numbers below

Construction:

Tube: Blue elastomer tube
Reinforcement: Single braid, high strength textile
Cover: Blue ether-based polyurethane

Operating Parameters:

Temperature Range
 -40°C to +66°C
 (-40°F to +150°F)

Applications:

High-pressure sewer cleaning

Agency Listing:

Meets WEMI specifications

FC702-12 Gator Hose with FJ5020-1212S Fittings

Part Number	Reel Length Feet
FB7187-0020	100
FB7187-0019	150
FB7187-0013	200
FB7187-0010	300
FB7187-0004	400
FB7187-0005	500
FB7187-0006	600
FB7187-0029	700
FB7187-0016	800
FB7187-0011	900
FB7187-0014	1000

FC702-16 Gator Hose with FJ9372-1616S Fittings

Part Number	Reel Length Feet
FB7187-0012	50
FB7187-0008	100
FB7187-0028	150
FB7187-0009	200
FB7187-0022	250
FB7187-0007	300
FB7187-0002	400
FB7187-0001	500
FB7187-0003	600
FB7187-0015	700
FB7187-0017	800
FB7187-0018	1000

Fitting Reference	Page
FJ5020 [‡]	D9
FJ5021 [‡]	D9
FJ7938 (-16)	D9
FJ9372	D9
FJ9373	D9

For hose fittings details, please see the fittings section.

[‡]For FC702-12 hose only.

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Diesel Fuel Tubing	C5-6
Diesel Fuel Kits	C7



15CA Eclipse®

Coil Air Product



# Part Number	Description	Valve Pigtail Length		Male Ends				Working Length	
		mm	in	Valve		Gladhand		m	ft
15CA12-12	15' WL abt coil set w/ 12" pigtails	304,8	12.00	12,7	0.50	12,7	0.50	4,6	15.00
15CA48-12	15' WL abt coil set w/ 48" pigtails	1.219,2	48.00	12,7	0.50	12,7	0.50	4,6	15.00
15CAR12-12	15' WL single, red abt coil w/ 12" pigtails	304,8	12.00	12,7	0.50	12,7	0.50	4,6	15.00
15CAB12-12	15' WL single, blue abt coil w/ 12" pigtails	304,8	12.00	12,7	0.50	12,7	0.50	4,6	15.00
15CAR48-12	15' WL single, red abt coil w/ 48" pigtails	1.219,2	48.00	12,7	0.50	12,7	0.50	4,6	15.00
15CAB48-12	15' WL single, blue abt coil w/ 48" pigtails	1.219,2	48.00	12,7	0.50	12,7	0.50	4,6	15.00
12CA12-12	12' WL abt coils set w/ 12" pigtails	304,8	12.00	12,7	0.50	12,7	0.50	3,7	17.00
12CAR12-12	12' WL single, red abt coil w/ 12" pigtails	304,8	12.00	12,7	0.50	12,7	0.50	3,7	17.00
12CAB12-12	12' WL single, blue abt coil w/ 12" pigtails	304,8	12.00	12,7	0.50	12,7	0.50	3,7	17.00
20CA12-12	20' WL abt coil set w/ 12" pigtails	304,8	12.00	12,7	0.50	12,7	0.50	6,1	20.00

3SCE Eclipse®

Fifth-Wheel Slider Coils

# Part Number	Valve Pigtail Length		End Fitting	Working Length		Retracted Length	
	mm	in		mm	in	mm	in
3SCE-0303304-033	88,9	3.50	None	1.371,6	54.00	254,0	10.00
3SCE-0303304-166	88,9	3.50	1/4" male pipe	1.371,6	54.00	254,0	10.00

Agency Listings:

DOT-FMVSS 106
(49 CFR571.106)
SAE J844

Operating Parameters:

Temperature Range
-54°C to +93°C
(-65°F to +200°F)

Applications:

- Articulating connections for air brake line systems (connections between towed and towing motor vehicle)
- Tractor-to-trailer air connections used in extremely low temperatures

Features:

- Superior abrasion resistance
- Excellent return and coil memory
- Enhanced flexibility and extension
- Brass end fittings with corrosion resistant spring guards

4245 Eclipse® & 4247 Solstice®

Type A Truck Tubing
Air Brake Tubing



# Part Number	Tube Size	Tube O.D.		Tube I.D.		Wall Thickness		Min. Burst Pressure		Min. Bend Radius		Weight		Color	Lengths*	
		mm	in	mm	in	mm	in	bar	psi	mm	in	kg/100 m	lbs/100 ft		m	ft
4245-02207	-02	3,2	.125	2,0	0.08	0,6	0.02	69,0	1,000	6,4	0.25	0,5	0.33	Black	3.657,6	12,000
4245-02227	-02	3,2	.125	2,0	0.08	0,6	0.02	69,0	1,000	6,4	0.25	0,5	0.33	Red	3.657,6	12,000
4245-02257	-02	3,2	.125	2,0	0.08	0,6	0.02	69,0	1,000	6,4	0.25	0,5	0.33	Green	3.657,6	12,000
4245-02267	-02	3,2	.125	2,0	0.08	0,6	0.02	69,0	1,000	6,4	0.25	0,5	0.33	Blue	3.657,6	12,000
4245-02506	-02	4,0	.125	2,3	0.09	0,8	0.03	83,0	1,200	12,7	0.50	0,8	0.56	Black	1.828,8	6,000
4245-02526	-02	4,0	.125	2,3	0.09	0,8	0.03	83,0	1,200	12,7	0.50	0,8	0.56	Red	1.828,8	6,000
4245-02546	-02	4,0	.125	2,3	0.09	0,8	0.03	83,0	1,200	12,7	0.50	0,8	0.56	Yellow	1.828,8	6,000
4245-02556	-02	4,0	.125	2,3	0.09	0,8	0.03	83,0	1,200	12,7	0.50	0,8	0.56	Green	1.828,8	6,000
4245-02566	-02	4,0	.125	2,3	0.09	0,8	0.03	83,0	1,200	12,7	0.50	0,8	0.56	Blue	1.828,8	6,000
4245-03306	-03	4,8	.188	3,0	0.12	0,9	0.04	83,0	1,200	19,1	0.75	1,1	0.71	Black	1.828,8	6,000
4245-03326	-03	4,8	.188	3,0	0.12	0,9	0.04	83,0	1,200	19,1	0.75	1,1	0.71	Red	1.828,8	6,000
4245-03356	-03	4,8	.188	3,0	0.12	0,9	0.04	83,0	1,200	19,1	0.75	1,1	0.71	Green	1.828,8	6,000
4247-04106	-04	6,4	.25	4,3	0.17	1,0	0.04	83,0	1,200	25,4	1.00	2,2	1.50	Black	1.828,8	6,000
4247-04126	-04	6,4	.25	4,3	0.17	1,0	0.04	83,0	1,200	25,4	1.00	2,2	1.50	Red	1.828,8	6,000
4247-04136	-04	6,4	.25	4,3	0.17	1,0	0.04	83,0	1,200	25,4	1.00	2,2	1.50	Orange	1.828,8	6,000
4247-04146	-04	6,4	.25	4,3	0.17	1,0	0.04	83,0	1,200	25,4	1.00	2,2	1.50	Yellow	1.828,8	6,000
4247-04156	-04	6,4	.25	4,3	0.17	1,0	0.04	83,0	1,200	25,4	1.00	2,2	1.50	Green	1.828,8	6,000
4247-04166	-04	6,4	.25	4,3	0.17	1,0	0.04	83,0	1,200	25,4	1.00	2,2	1.50	Blue	1.828,8	6,000
4245-05204	-05	8,0	.312	5,9	0.23	1,0	0.04	69,0	1,000	28,6	1.13	2,3	1.54	Black	914,4	3,000
4245-05224	-05	8,0	.312	5,9	0.23	1,0	0.04	69,0	1,000	28,6	1.13	2,3	1.54	Red	914,4	3,000
4245-05244	-05	8,0	.312	5,9	0.23	1,0	0.04	69,0	1,000	28,6	1.13	2,3	1.54	Yellow	914,4	3,000
4245-05254	-05	8,0	.312	5,9	0.23	1,0	0.04	69,0	1,000	28,6	1.13	2,3	1.54	Green	914,4	3,000
4245-05264	-05	8,0	.312	5,9	0.23	1,0	0.04	69,0	1,000	28,6	1.13	2,3	1.54	Blue	914,4	3,000

*Master pack quantity part numbers listed. For master pack configuration information refer to chart below.

Construction:

UV stabilized,
thermoformable

Agency Listings:

Meets the performance of
SAE J844, J1131, J2494-3
DOT-FMVSS 106

Operating Parameters:

Temperature Range
-54°C to +93°C
(-65°F to +200°F)

Applications:

- Truck air brake systems
- Trailer air brake systems
- Auxiliary air systems
- Formed tubes
- Formed and straight air brake harness assemblies

Features:

- Superior abrasion resistance
- Ease of cutting
- Enhanced flexibility and extension
- Flow performance
- Standard and custom colors
- Available in all standard sizes

Master Pack Configuration

Part No.	Hose I.D.		Pkg. Type	Pkg. Count	Length	
	mm	in			m	ft
4245-02	2,0	0.08	Reel	6	609,6	2,000
4245-02	2,3	0.09	Reel	6	304,8	1,000
4245-03	3,0	0.12	Reel	6	304,8	1,000
4247-04	4,3	0.17	Reel	6	304,8	1,000
4245-05	5,9	0.23	Reel	6	152,4	500

Eaton offers 100, 500, and 1,000 ft short roll packages for the 4245 and 4247 tubing. Please see Eaton literature # E-PNOV-MS004-E for details or contact your sales or customer service representative.

3270 Eclipse®

Type B Truck Tubing
Air Brake Tubing



# Part Number	Tube Size	Tubing O.D.		Tubing I.D.		Wall Thickness		Min. Burst Pressure		Min. Bend Radius		Weight		Color	Lengths*	
		mm	in	mm	in	mm	in	bar	psi	mm	in	kg/100 m	lbs/100 ft		m	ft
3270-06104	-06	9,5	.375	6,4	0.25	1,6	0.06	96,5	1,400	38,1	1.50	4,2	2.80	Black	914,4	3,000
3270-06124	-06	9,5	.375	6,4	0.25	1,6	0.06	96,5	1,400	38,1	1.50	4,2	2.80	Red	914,4	3,000
3270-06134	-06	9,5	.375	6,4	0.25	1,6	0.06	96,5	1,400	38,1	1.50	4,2	2.80	Orange	914,4	3,000
3270-06144	-06	9,5	.375	6,4	0.25	1,6	0.06	96,5	1,400	38,1	1.50	4,2	2.80	Yellow	914,4	3,000
3270-06154	-06	9,5	.375	6,4	0.25	1,6	0.06	96,5	1,400	38,1	1.50	4,2	2.80	Green	914,4	3,000
3270-06164	-06	9,5	.375	6,4	0.25	1,6	0.06	96,5	1,400	38,1	1.50	4,2	2.80	Blue	914,4	3,000
3270-08104	-08	12,7	.50	9,6	0.38	1,6	0.06	65,5	950	50,8	2.00	5,8	3.80	Black	457,2	1,500
3270-08124	-08	12,7	.50	9,6	0.38	1,6	0.06	65,5	950	50,8	2.00	5,8	3.80	Red	457,2	1,500
3270-08134	-08	12,7	.50	9,6	0.38	1,6	0.06	65,5	950	50,8	2.00	5,8	3.80	Orange	457,2	1,500
3270-08144	-08	12,7	.50	9,6	0.38	1,6	0.06	65,5	950	50,8	2.00	5,8	3.80	Yellow	457,2	1,500
3270-08154	-08	12,7	.50	9,6	0.38	1,6	0.06	65,5	950	50,8	2.00	5,8	3.80	Green	457,2	1,500
3270-08164	-08	12,7	.50	9,6	0.38	1,6	0.06	65,5	950	50,8	2.00	5,8	3.80	Blue	457,2	1,500
3270-10103	-10	15,9	.625	11,2	0.44	2,3	0.09	62,1	900	63,5	2.50	10,4	7.00	Black	228,6	750
3270-10123	-10	15,9	.625	11,2	0.44	2,3	0.09	62,1	900	63,5	2.50	10,4	7.00	Red	228,6	750
3270-10133	-10	15,9	.625	11,2	0.44	2,3	0.09	62,1	900	63,5	2.50	10,4	7.00	Orange	228,6	750
3270-10143	-10	15,9	.625	11,2	0.44	2,3	0.09	62,1	900	63,5	2.50	10,4	7.00	Yellow	228,6	750
3270-10153	-10	15,9	.625	11,2	0.44	2,3	0.09	62,1	900	63,5	2.50	10,4	7.00	Green	228,6	750
3270-10163	-10	15,9	.625	11,2	0.44	2,3	0.09	62,1	900	63,5	2.50	10,4	7.00	Blue	228,6	750
3270-12103	-12	19,1	.75	14,4	0.57	2,3	0.09	55,2	800	76,2	3.00	12,8	8.60	Black	228,6	750
3270-12123	-12	19,1	.75	14,4	0.57	2,3	0.09	55,2	800	76,2	3.00	12,8	8.60	Red	228,6	750
3270-12133	-12	19,1	.75	14,4	0.57	2,3	0.09	55,2	800	76,2	3.00	12,8	8.60	Orange	228,6	750
3270-12153	-12	19,1	.75	14,4	0.57	2,3	0.09	55,2	800	76,2	3.00	12,8	8.60	Green	228,6	750
3270-12163	-12	19,1	.75	14,4	0.57	2,3	0.09	55,2	800	76,2	3.00	12,8	8.60	Blue	228,6	750

*Master pack quantity part numbers listed. For master pack configuration information refer to chart below.

Construction:

UV stabilized, thermoformable, polyamide construction with polyester yarn

Operating Parameters:

Temperature Range
-54°C to +93°C
(-65°F to +200°F)

Applications:

- Truck air brake systems
- Trailer air brake systems
- Auxiliary air systems
- Formed tubes
- Formed and straight air brake harness assemblies

Features:

- Superior abrasion resistance
- Ease of cutting
- Enhanced flexibility and extension
- Flow performance
- Standard and custom colors
- Available in all standard sizes

Agency Listings:

SAE J844, J1131, J2494-3
DOT-FMVSS 106

Master Pack Configuration

Part No.	Hose I.D.		Pkg. Type	Pkg. Count	Length	
	mm	in			m	ft
3270-06	6,4	0.25	Reel	6	152,4	500
3270-08	9,6	0.38	Reel	3	152,4	500
3270-10	11,2	0.44	Reel	3	76,2	250
3270-12	14,4	0.57	Reel	3	76,2	250

Eaton offers 100, 500, and 1,000 ft short roll packages for the 3270 tube. Please see Eaton literature # E-PNOV-MS004-E for details or contact your sales or customer service representative.

4294

Low-Flex Diesel Fuel Tubing



# Part Number	Tube Size	DN	Tube I.D.		Tube O.D.		Wall Thickness		Max Operating Pressure		Min. Burst Pressure		Minimum Bend Radius		Weight		Color	Package Lengths*	
			mm	in	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/100m	lbs/100ft		m	ft
4294-06	-06	10	6,4	0.25	9,9	0.40	1,8	0.07	5	75	34,5	500	28,7	1.13	1,4	3.00	Black Aluminum	30,5	100
4294-07	-07	11	7,6	0.30	11,1	0.44	1,8	0.07	5	75	34,5	500	31,8	1.25	1,5	3.40	Black Aluminum	30,5	100
4294-08	-08	12	9,5	0.38	13,3	0.53	1,9	0.08	5	75	34,5	500	76,3	3.00	2,0	4.50	Black Aluminum Purple	30,5	100
4294-10	-10	16	12,1	0.48	17,2	0.68	2,5	0.10	5	75	34,5	500	88,9	3.50	3,3	7.30	Black Aluminum	30,5	100

*Random length box packaged part numbers listed. Other packaging options available. See Customer Connect or contact your Eaton customer service representative.

Construction:

Tube: Nylon 12

Cover: Thermoplastic

Operating Parameters:

Temperature Range
-40°C to +93°C
(-40°F to +200°F)

Applications:

- Designed specifically for diesel fuel applications
- Transportation – trucks, buses and off-highway vehicles, construction machinery and equipment
- Agriculture machinery and equipment
- Marine, boats and yachts
- Diesel engines and generators

Features:

- Lightweight fuel tube assemblies can weigh up to 66% less
- Well suited for formed fuel harness applications
- Multiple color options
- Bulk, pre-cut with or without barbed fitting
- Excellent cost/value

Qualified Fittings:

Contact your Eaton account sales manager for composite and metal fitting options.

GENERAL INFORMATION

HYDRAULIC HOSE

AIR & WATER HOSE & TUBING

TRUCK HOSE

AEROQUIP/POLYON FITTINGS

AEROQUIP/TTC FITTINGS

SYNFLEX FITTINGS

WEATHERHEAD (U & Z SERIES) FITTINGS

ASSEMBLY EQUIPMENT & INFORMATION

TECHNICAL DATA



# Part Number	Hose Size	DN	Hose I.D.		Hose O.D.		Wall Thickness		Max. Operating Pressure		Min. Burst Pressure		Min. Bend Radius		Weight		Color	Package Lengths*	
			mm	in	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/100m	lbs/100ft		m	ft
4297-M10	M10	10	6,0	0.24	9,6	0.39	1,9	0.08	4	50	34,0	500	28,7	1.13	1,4	3.10	Black	30,5	100
4297-06	-06	10	6,4	0.25	9,9	0.39	1,9	0.07	4	50	34,0	500	28,7	1.13	1,4	3.10	Black Aluminum	30,5	100
4297-07	-07	11	7,6	0.30	11,1	0.44	1,9	0.07	4	50	34,0	500	31,8	1.25	1,6	3.50	Black Aluminum	30,5	100
4297-M12	M12	12	8,0	0.31	11,8	0.48	1,9	0.08	4	50	34,0	500	44,5	1.75	1,7	3.70	Black	30,5	100
4297-08	-08	12	9,5	0.38	13,3	0.53	1,9	0.07	4	50	34,0	500	76,3	3.00	2,2	4.90	Black Aluminum	30,5	100
4297-10	-10	16	12,1	0.48	17,2	0.68	2,5	0.10	4	50	34,0	500	88,9	3.50	3,4	7.40	Black Aluminum	30,5	100

*Random length box packaged part numbers listed. Other packaging options available. See Customer Connect or contact your Eaton customer service representative.

Construction:

Tube: Nylon 11

Cover: Thermoplastic elastomer

Operating Parameters:

Temperature Range

-45°C to +122°C
(-50°F to +250°F)

Applications:

- Formed or unformed harnesses
- Transportation – trucks, buses and off-highway vehicles
- Construction machinery and equipment
- Agriculture machinery and equipment
- Marine, boats and yachts
- Diesel engines and generators

Features:

- Excellent flexibility
- Well suited for individual line installation
- Multiple colors
- Designed specifically for diesel fuel applications
- Pre-cut with or without barbed fitting
- Lightweight fuel tube assemblies can weigh up to 66% less
- Excellent cost/value

Qualified Fittings:

Contact your Eaton account sales manager for composite and metal fitting options

4KGEN

Diesel Fuel Kits



GENERAL INFORMATION

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AIR & WATER HOSE & TUBING

TRUCK HOSE

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AEROQUIP/TTC FITTINGS

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ASSEMBLY EQUIPMENT & INFORMATION

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4KGEN-08-001 Fuel Tubing Extension Kit

Part Number	Hose Size	DN	Description	Qty	Unit of Measure
4408-08710	-08	12	Plastic female fitting	4	Pieces
4408-08610	-08	12	Plastic 90° fitting	2	Pieces
4408-08310	-08	12	Plastic straight fitting	2	Pieces
4294-0810K	-08	12	Black fuel tubing	25	Feet
4294-081FK	-08	12	Silver fuel tubing	25	Feet

4KGEN-10-001 Fuel Tubing Extension Kit

Part Number	Hose Size	DN	Description	Qty	Unit of Measure
4408-10710	-10	16	Brass female fitting	4	Pieces
4408-10610	-10	16	Plastic 90° fitting	2	Pieces
4408-10310	-10	16	Plastic straight fitting	2	Pieces
4297-1010X001	-10	16	Black fuel tubing	25	Feet
4297-101FX-001	-10	16	Silver fuel tubing	25	Feet

Kit Contents:

- OEM male, female, straight and 90 degree VOSS barbed fittings
- Synflex 4294 or 4297 series tubing

Applications:

- Transportation – trucks, buses, off-highway
- Construction machinery and equipment
- Agriculture machinery and equipment
- Diesel engines and parts

Features:

- Synflex 4KGEN kits can be used to modify tank locations, routings, and repair fuel systems in these and many other applications where diesel fuel is used
- Specifically designed for modification or repair of OEM fuel systems that use Synflex 4294 or 4297 series fuel tubing
- Utilize VOSS OEM barbed end fittings to maintain o-ring sealing end connection of the original OEM fuel system
- OEM colors available to maintain the same OEM color code integrity

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Aeroquip Polyon Fittings

Polyon fittings for Aeroquip customers only.



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FITTINGS

SYNFLEX
FITTINGS

WEATHERHEAD
(U & Z SERIES)
FITTINGS

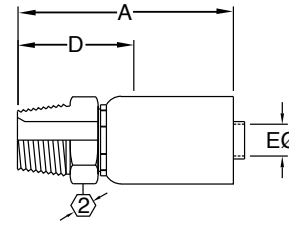
ASSEMBLY
EQUIPMENT &
INFORMATION

TECHNICAL
DATA

Polyon Permanent Fittings

Male Pipe

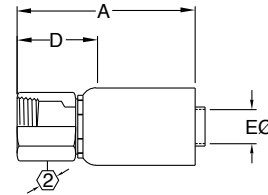
Fittings for use with hose: 3130, 37AL, 3740



# Part Number	Terminal End Dash Size	Thread	Hose Size		A		D Cut Off Factor		E Ø		in
			DN	Dash Size	mm	in	mm	in	mm	in	
FC5805-0202S	-02	1/8 - 27	3	-02	3,8	1.48	23,4	0.92	1,8	0.07	0.56
FC5805-0203S	-02	1/8 - 27	5	-03	4,8	1.87	27,4	1.08	2,5	0.10	0.56
FC5805-0403S	-04	1/4 - 18	5	-03	5,2	2.06	32,0	1.26	2,5	0.10	0.69
FC5805-0603S	-06	3/8 - 18	5	-03	5,5	2.16	34,5	1.36	2,5	0.10	0.75
FC5805-0204S	-02	1/8 - 27	6	-04	5,0	1.98	27,4	1.08	3,8	0.15	0.62
FC5805-0404S	-04	1/4 - 18	6	-04	5,5	2.16	32,0	1.26	3,8	0.15	0.69
FC5805-0604S	-06	3/8 - 18	6	-04	5,8	2.26	34,5	1.36	3,8	0.15	0.75
FC5805-0405S	-04	1/4 - 18	8	-05	5,9	2.34	26,9	1.06	5,6	0.22	0.69
FC5805-0605S	-06	3/8 - 18	8	-05	5,9	2.34	26,9	1.06	5,6	0.22	0.75
FC5805-0406S	-04	1/4 - 18	10	-06	6,4	2.51	26,9	1.06	7,1	0.28	0.75
FC5805-0606S	-06	3/8 - 18	10	-06	6,4	2.51	26,9	1.06	7,1	0.28	0.75
FC5805-0806S	-08	1/2 - 14	10	-06	7,1	2.80	34,3	1.35	7,1	0.28	0.94
FC5805-0608S	-06	3/8 - 18	12	-08	6,9	2.71	26,9	1.06	9,7	0.38	0.88
FC5805-0808S	-08	1/2 - 14	12	-08	7,6	3.00	34,3	1.35	9,7	0.38	0.94
FC5805-1212S	-12	3/4 - 14	19	-12	8,1	3.20	34,3	1.35	15,0	0.59	1.12
FC5805-1616S	-16	1 - 11 1/2	25	-16	10,1	3.97	40,1	1.58	20,6	0.81	1.38

Female Pipe

Fittings for use with hose: 3130, 37AL, 3740



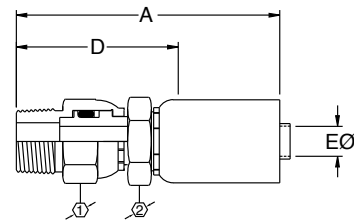
# Part Number	Terminal End Dash Size	Thread	Hose Size		A		D Cut Off Factor		E Ø		in
			DN	Dash Size	mm	in	mm	in	mm	in	
FC5806-0403S	-04	1/4 - 18	5	-03	54,1	2.13	33,8	1.33	2,5	0.10	0.75
FC5806-0404S	-04	1/4 - 18	6	-04	56,6	2.23	33,8	1.33	3,8	0.15	0.75
FC5806-0808S	-08	1/2 - 14	12	-08	75,7	2.98	33,8	1.33	9,7	0.38	1.06





Polyon Fittings for Aeroquip customers only.
See pages H12-15 for die, pusher, and cage information.

Polyon Permanent Fittings

Male Pipe Swivel

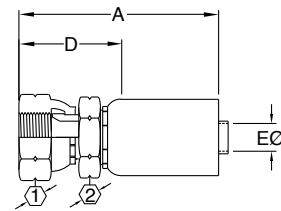
Fittings for use with hose: 3130, 37AL, 3740







# Part Number	Terminal End	 Thread	 Hose Size		A		D Cut Off Factor		E Ø			
			Dash Size	DN	Dash Size	mm	in	mm	in	mm	in	in
FC5812-0404S	-04	1/4 - 18	6	-04	69,6	2.74	46,7	1.84	3,8	0.15	0.69	0.62
FC5812-0606S	-06	3/8 - 18	10	-06	80,8	3.18	43,9	1.73	7,1	0.28	0.75	0.75
FC5812-0808S	-08	1/2 - 14	12	-08	93,0	3.66	49,8	1.96	9,7	0.38	0.94	0.88
FC5812-1212S	-12	3/4 - 14	19	-12	98,6	3.88	51,6	2.03	14,7	0.58	1.12	1.12

Female JIC/SAE 37° Swivel

Fittings for use with hose: 3130, 37AL, 3740



# Part Number	Terminal End	 Thread	 Hose Size		A		D Cut Off Factor		E Ø			
			Dash Size	DN	Dash Size	mm	in	mm	in	mm	in	in
FC5810-0402S	-04	1/16 - 20	3	-02	46,0	1.81	28,4	1.12	1,8	0.07	0.62	0.56
FC5810-0303S	-03	3/8 - 24	5	-03	53,8	2.12	33,5	1.32	2,5	0.10	0.56	0.56
FC5810-0403S	-04	7/16 - 20	5	-03	55,9	2.20	35,6	1.40	2,5	0.10	0.62	0.56
FC5810-0503S	-05	1/2 - 20	5	-03	56,4	2.22	36,1	1.42	2,5	0.10	0.75	0.56
FC5810-0404S	-04	7/16 - 20	6	-04	60,2	2.37	37,3	1.47	3,8	0.15	0.62	0.62
FC5810-0504S	-05	1/2 - 20	6	-04	61,0	2.40	38,1	1.50	3,8	0.15	0.75	0.62
FC5810-0604S	-06	9/16 - 18	6	-04	61,0	2.40	38,1	1.50	3,8	0.15	0.75	0.62
FC5810-0505S	-05	1/2 - 20	8	-05	63,0	2.48	30,5	1.20	5,6	0.22	0.75	0.62
FC5810-0605S	-06	9/16 - 18	8	-05	64,5	2.54	32,0	1.26	5,6	0.22	0.75	0.62
FC5810-0606S	-06	9/16 - 18	10	-06	70,1	2.76	33,5	1.32	7,1	0.28	0.75	0.75
FC5810-0806S	-08	3/4 - 16	10	-06	71,4	2.81	34,5	1.36	7,1	0.28	0.94	0.75
FC5810-1006S	-10	7/8 - 14	10	-06	73,7	2.90	37,1	1.46	7,1	0.28	1.00	0.88
FC5810-0808S	-08	3/4 - 16	12	-08	79,0	3.11	37,1	1.46	9,7	0.38	0.94	0.88
FC5810-1008S	-10	7/8 - 14	12	-08	78,7	3.10	37,1	1.46	9,7	0.38	1.00	0.88
FC5810-1208S	-12	1 1/16 - 12	12	-08	99,3	3.19	39,1	1.54	9,7	0.38	1.25	1.00
FC5810-1212S	-12	1 1/16 - 12	19	-12	86,1	3.39	39,1	1.54	14,9	0.59	1.25	1.12
FC5810-1616S	-16	1 1/16 - 12	19	-12	105,2	4.14	44,2	1.74	19,8	0.78	1.50	1.38

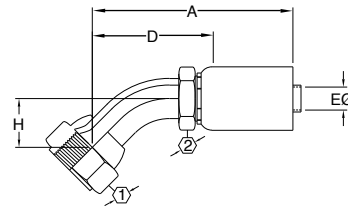
Polyon Fittings for Aeroquip customers only.
See pages H12-15 for die, pusher, and cage information.

GENERAL INFORMATION
HYDRAULIC HOSE
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TRUCK HOSE
AEROQUIP/POLYON FITTINGS
AEROQUIP/TTC FITTINGS
SYNPLEX FITTINGS
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ASSEMBLY EQUIPMENT & INFORMATION
TECHNICAL DATA

Polyon Permanent Fittings

Female JIC/SAE 37° Swivel 45° Elbow

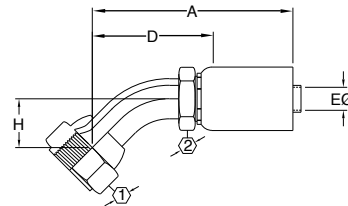
Fittings for use with hose: 3130, 37AL, 3740



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		H		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
FC5813-0605S	-06	9/16 - 18	8	-05	63,2	2.49	30,7	1.21	5,6	0.22	9,9	0.39	0.69	0.62
FC5813-0606S	-06	9/16 - 18	10	-06	67,6	2.66	30,7	1.21	6,1	0.24	9,9	0.39	0.69	0.75
FC5813-1212S	-12	1 1/16 - 12	19	-12	95,3	3.75	48,5	1.91	14,7	0.58	19,6	0.77	1.25	1.12
FC5813-1616S	-16	1 1/16 - 12	25	-16	116,1	4.57	59,2	2.33	20,6	0.81	27,2	1.07	1.50	1.38

Female Universal Swivel 45° Elbow

Fittings for use with hose: 3130, 37AL, 3740



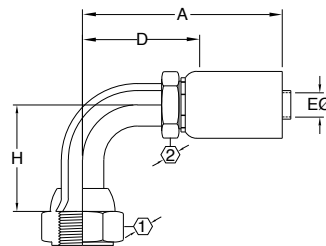
# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		H		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
FC5936-0403S	-04	7/16 - 20	5	-03	53,1	2.09	32,8	1.29	2,5	0.10	8,4	0.33	0.56	0.56
FC5936-0404S	-04	7/16 - 20	6	-04	55,6	2.19	32,8	1.29	3,8	0.15	8,4	0.33	0.56	0.62
FC5936-0504S	-05	1/2 - 20	6	-04	57,4	2.26	34,5	1.36	3,8	0.15	9,1	0.36	0.62	0.62
FC5936-0806S	-08	3/4 - 16	10	-06	76,5	3.01	39,6	1.56	7,1	0.28	14,0	0.55	0.88	0.88
FC5936-0808S	-08	3/4 - 16	12	-08	81,5	3.21	39,6	1.56	9,4	0.37	14,0	0.55	0.88	0.88
FC5936-1008S	-10	7/8 - 14	12	-08	84,1	3.31	42,2	1.66	9,7	0.38	16,3	0.64	1.00	0.88

Polyon Fittings for Aeroquip customers only.
See pages H12-15 for die, pusher, and cage information.

Polyon Permanent Fittings

Female JIC/SAE 37° Swivel 90° Elbow

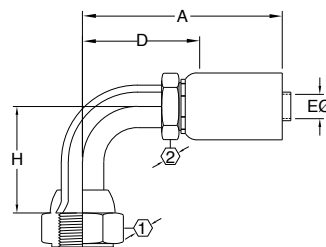
Fittings for use with hose: 3130, 37AL, 3740 (-12 to -16)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		H		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
FC5814-0604S	-06	9/16 - 18	6	-04	56,1	2.21	33,3	1.31	3,8	0.15	21,6	0.85	0.69	0.62
FC5814-0605S	-06	9/16 - 18	8	-05	60,5	2.38	28,2	1.11	5,6	0.22	21,6	0.85	0.69	0.62
FC5814-0606S	-06	9/16 - 18	10	-06	65,0	2.56	28,2	1.11	7,1	0.28	21,6	0.85	0.69	0.75
FC5814-1212S	-12	1 1/18 - 12	19	-12	94,2	3.71	47,2	1.86	15,0	0.59	46,2	1.82	1.25	1.12
FC5814-1616S	-16	1 1/18 - 12	25	-16	115,1	4.53	54,4	2.14	20,6	0.81	60,7	2.39	1.50	1.38

Female Universal Swivel 90° Elbow

Fittings for use with hose: 3130, 37AL, 3740 (-12 to -16)



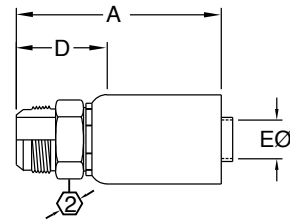
# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		H		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
FC5937-0403S	-04	7/16 - 20	5	-03	50,5	1.99	30,2	1.19	2,5	0.10	17,3	0.68	0.56	0.56
FC5937-0404S	-04	7/16 - 20	6	-04	52,8	2.08	30,2	1.19	3,8	0.15	17,3	0.68	0.56	0.62
FC5937-0504S	-05	1/2 - 20	6	-04	54,6	2.15	31,8	1.25	3,8	0.15	19,3	0.76	0.62	0.62
FC5937-0806S	-08	3/4 - 16	10	-06	70,6	2.78	33,8	1.33	7,1	0.28	27,7	1.09	0.88	0.75
FC5937-0808S	-08	3/4 - 16	12	-08	75,7	2.98	33,8	1.33	9,7	0.38	27,7	1.09	0.88	0.88
FC5937-1008S	-10	7/8 - 14	12	-08	76,5	3.01	34,5	1.36	9,7	0.38	31,2	1.23	1.00	0.88

Polyon Fittings for Aeroquip customers only.
See pages H12-15 for die, pusher, and cage information.

Polyon Permanent Fittings

Male JIC/SAE 37°

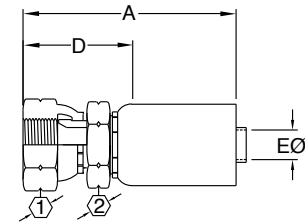
Fittings for use with hose: 3130, 37AL, 3740



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		in
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	
FC5807-0403S	-04	7/16 - 20	5	-03	5,3	2.10	3,3	1.30	0,3	0.10	0.56
FC5807-0404S	-04	7/16 - 20	6	-04	5,5	2.18	3,3	1.28	0,4	0.15	0.62
FC5807-0504S	-05	1/2 - 20	6	-04	5,5	2.18	3,3	1.28	0,4	0.15	0.62
FC5807-0604S	-06	9/16 - 18	6	-04	5,5	2.16	3,2	1.26	0,4	0.15	0.69
FC5807-0505S	-05	1/2 - 20	8	-05	5,9	2.32	2,7	1.05	0,6	0.22	0.62
FC5807-0605S	-06	9/16 - 18	8	-05	5,9	2.33	2,7	1.06	0,6	0.22	0.69
FC5807-0606S	-06	9/16 - 18	10	-06	6,5	2.54	2,8	1.09	0,7	0.28	0.75
FC5807-0806S	-08	3/4 - 16	10	-06	6,7	2.64	3,0	1.19	0,7	0.28	0.81
FC5807-0808S	-08	3/4 - 16	12	-08	7,1	2.81	3,0	1.16	1,0	0.38	0.88
FC5807-1008S	-10	7/8 - 14	12	-08	7,7	3.04	3,5	1.39	1,0	0.38	0.94
FC5807-1212S	-12	1 1/16 - 12	19	-12	8,3	3.26	3,6	1.42	1,5	0.59	1.12

Female SAE 45° Swivel

Fittings for use with hose: 3130, 37AL, 3740



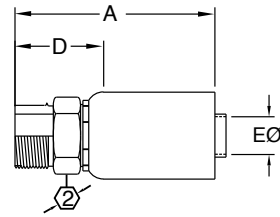
# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		in	in
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
FC5811-0403S	-04	7/16 - 20	5	-03	55,9	2.20	35,6	1.40	2,5	0.10	0.62	0.56
FC5811-0404S	-04	7/16 - 20	6	-04	60,2	2.37	37,3	1.47	3,8	0.15	0.62	0.62
FC5811-0604S	-06	5/8 - 18	6	-04	61,0	2.40	38,4	1.51	3,8	0.15	0.81	0.62
FC5811-0605S	-06	5/8 - 18	8	-05	65,3	2.57	33,0	1.30	5,6	0.22	0.81	0.62
FC5811-0606S	-06	5/8 - 18	10	-06	70,1	2.76	33,5	1.32	7,1	0.28	0.81	0.75
FC5811-0808S	-08	3/4 - 16	12	-08	71,4	2.81	34,5	1.36	7,1	0.28	0.94	0.75
FC5811-0808S	-08	3/4 - 16	12	-08	79,0	3.11	37,1	1.46	9,7	0.38	0.94	0.88
FC5811-1008S	-10	7/8 - 14	12	-08	78,7	3.10	37,1	1.46	9,7	0.38	1.00	0.88

Polyon Fittings for Aeroquip customers only.
See pages H12-15 for die, pusher, and cage information.

Polyon Permanent Fittings

Male Boss O-Ring

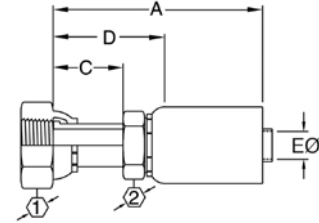
Fittings for use with hose: 3130, 37AL, 3740



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		2
			DN	Dash Size	mm	in	mm	in	mm	in	
FC5809-0403S	-04	7/16 - 20	5	-03	48,5	1.91	28,2	1.11	2,5	0.10	0.56
FC5809-0604S	-06	9/16 - 18	6	-04	51,3	2.02	28,4	1.12	3,8	0.15	0.69
FC5809-0606S	-06	9/16 - 18	10	-06	60,2	2.37	23,4	0.92	7,1	0.28	0.75
FC5809-0806S	-08	3/4 - 16	10	-06	61,5	2.42	24,6	0.97	7,1	0.28	0.88
FC5809-0808S	-08	3/4 - 16	12	-08	69,1	2.72	27,2	1.07	9,7	0.38	0.94
FC5809-1008S	-10	7/8 - 14	12	-08	70,6	2.78	28,7	1.13	9,7	0.38	1.06

Female ORS Swivel

Fittings for use with hose: 3130, 37AL, 3740



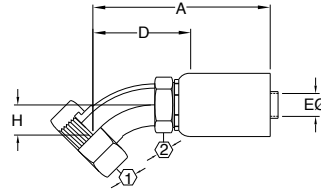
# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in		
FJ9480-0404S	-04	9/16 - 18	6	-04	61,7	2.43	39,1	1.54	3,8	0.15	0.69	0.62
FJ9480-0406S	-04	9/16 - 18	10	-06	65,5	2.58	28,7	1.13	4,3	0.17	0.69	0.75
FJ9480-0606S	-06	11/16 - 16	10	-06	72,6	2.86	36,1	1.42	6,6	0.26	0.81	0.75
FJ9480-0608S	-06	11/16 - 16	12	-08	74,2	2.92	32,5	1.28	6,6	0.26	0.81	0.88
FJ9480-0808S	-08	13/16 - 16	12	-08	85,1	3.35	43,4	1.71	9,7	0.38	0.94	0.88
FJ9480-1008S	-10	1 - 14	12	-08	80,8	3.18	38,9	1.53	9,7	0.38	1.12	0.88
FJ9480-1212S	-12	1 3/16 - 12	19	-12	92,7	3.65	45,7	1.80	14,7	0.58	1.38	1.12
FJ9480-1616S	-16	1 7/16 - 12	25	-16	112,0	4.41	51,3	2.02	19,8	0.78	1.62	1.38




Polyon Fittings for Aeroquip customers only.
See pages H12-15 for die, pusher, and cage information.

Polyon Permanent Fittings

Female ORS Swivel 45° Elbow

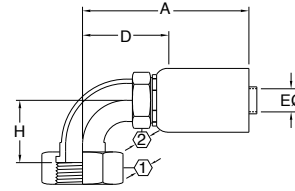
Fittings for use with hose: 3130, 37AL, 3740






Part Number	Terminal End		Hose Size		A		D Cut Off Factor		E Ø		H			
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
FJ9481-0404S	-04	9/16 - 18	6	-04	58,4	2.30	35,6	1.40	3,8	0.15	10,4	0.41	0.69	0.62
FJ9481-0606S	-06	11/16 - 16	10	-06	68,6	2.70	32,0	1.26	6,1	0.24	10,9	0.43	0.81	0.75
FJ9481-0808S	-08	13/16 - 16	12	-08	82,6	3.25	40,9	1.61	9,4	0.37	15,0	0.59	0.94	0.88
FJ9481-1212S	-12	1 3/16 - 12	19	-12	96,8	3.81	49,8	1.96	14,7	0.58	21,1	0.83	1.38	1.12

Female ORS Swivel 90° Short Drop Elbow

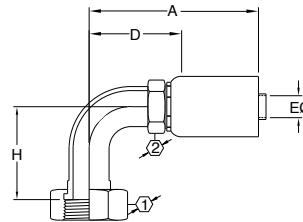
Fittings for use with hose: 3130, 37AL, 3740






# Part Number	Terminal End		Hose Size		A		D Cut Off Factor		E Ø		H			
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
FJ9482-0404S	-04	9/16 - 18	6	-04	54,6	2.15	31,8	1.25	3,8	0.15	20,8	0.82	0.69	0.62
FJ9482-0606S	-06	11/16 - 16	10	-06	68,1	2.68	31,5	1.24	6,1	0.24	22,9	0.90	0.81	0.75
FJ9482-0808S	-08	13/16 - 16	12	-08	78,7	3.10	37,1	1.46	9,4	0.37	29,2	1.15	0.94	0.88

Female ORS Swivel 90° Long Drop Elbow

Fittings for use with hose: 3130, 37AL, 3740



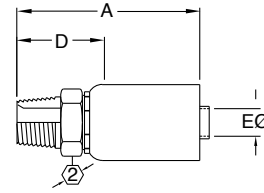
# Part Number	Terminal End		Hose Size		A		D Cut Off Factor		E Ø		H			
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
FJ9483-0404S	-04	9/16 - 18	6	-04	54,6	2.15	31,8	1.25	3,8	0.15	45,7	1.80	0.69	0.62
FJ9483-0606S	-06	11/16 - 16	10	-06	68,1	2.68	31,5	1.24	6,1	0.24	54,1	2.13	0.81	0.81
FJ9483-0808S	-08	13/16 - 16	12	-08	78,7	3.10	37,1	1.46	9,4	0.37	63,8	2.51	0.94	0.94




Polyon Fittings for Aeroquip customers only.
See pages H12-15 for die, pusher, and cage information.

Eaton Gator Hose Permanent Fittings

Male Pipe (Swage Only)

Fittings for use with hose: FC701, FC702

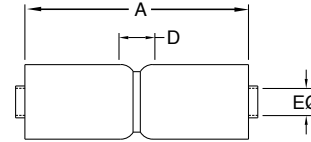





# Part Number	Terminal End	 Thread	Hose Size		A		D Cut Off Factor		E Ø			
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
FJ9372-1212S	-12	3/4- 14	19	-12	81,3	3.20	34,3	1.35	14,7	0.58	--	1.12
FJ5020-1212S*	-12	3/4 - 14	19	-12	81,3	3.20	34,3	1.35	14,7	0.58	--	1.37
FJ9372-1616S	-16	1 - 11 1/2	25	-16	94,5	3.72	40,1	1.58	19,8	0.78	--	1.37
FJ9372-2020S	-20	1 1/4 - 11 1/2	31	-20	110,5	4.35	50,5	1.99	25,9	1.02	--	1.87

*For FC702-12 hose only.

Hose Mender Fitting (Swage Only)

Fittings for use with hose: FC701, FC702



# Part Number	Terminal End	 Thread	Hose Size		A		D Cut Off Factor		E Ø			
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
FJ9373-1212S	-12	--	19	-12	85,9	3.38	9,7	0.38	14,7	0.58	--	--
FJ5021-1212S*	-12	--	19	-12	85,9	3.38	9,7	0.38	14,7	0.58	--	--
FJ7938-1616S	-16	--	25	-16	101,6	4.00	11,7	0.46	20,6	0.81	--	--
FJ9373-2020S	-20	--	31	-20	124,7	4.91	13,2	0.52	25,9	1.02	--	--

*For FC702-12 hose only.

See pages H12-15 for die, pusher, and cage information.

Aeroquip / TTC Fittings

Aeroquip TTC fittings for Aeroquip customers only.



GENERAL
INFORMATION

HYDRAULIC
HOSE

AIR & WATER HOSE
& TUBING

TRUCK
HOSE

AEROQUIP/POLYON
FITTINGS

AEROQUIP/TTC
FITTINGS

SYNFLEX
FITTINGS

WEATHERHEAD
(U & Z SERIES)
FITTINGS

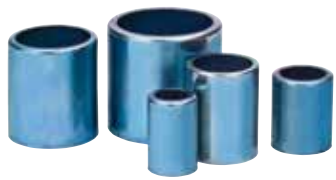
ASSEMBLY
EQUIPMENT &
INFORMATION

TECHNICAL
DATA

Thermoplastic Hose Crimp Sleeves

GENERAL INFORMATION

HYDRAULIC HOSE



Synflex Crimp Sleeves

AIR & WATER HOSE & TUBING

Sleeve Part No.	Hose ID		
	Dash size	DN (mm)	in
FF91064-04S	-4	6	0.25
FF91064-06S	-6	10	0.38
FF91064-08S	-8	12	0.50
FF91064-12S	-12	19	0.75
FF91064-16S	-16	25	1.00

TRUCK HOSE

Synflex Qualified Hoses

AEROQUIP/POLYON FITTINGS

SAE Standard	Hose	Sizes	Hose Type
100R7	3130	-04 thru -16	Conductive
	3740	-12 thru -16	Non-Conductive
100R8	3R80	-06 thru -16	Conductive
	3E80	-06 thru -16	Non-Conductive

AEROQUIP/TTC FITTINGS

Steel crimp sleeve enables use of Aeroquip TTC and Weatherhead Z Series hose fittings with select conductive and non-conductive Synflex 100R7 and 100R8 hoses.

Markets:

- Material Handling
- Oil & Gas
- Construction
- Agriculture
- Manufacturing

Features:

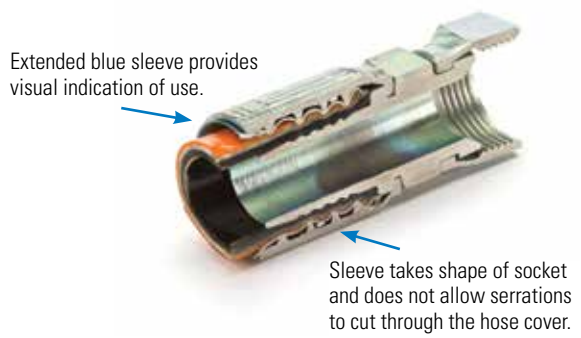
- Custom blue plating provides corrosion protection and visual indication of use once crimped with hose fitting.
- Sleeve design provides ease of hose and fitting assembly and is qualified for use with Eaton crimp equipment.

Benefits:

- There are over 500 fitting configuration options to choose from with additional jump sizes and terminal ends. Additional options enable the customer to reduce their inventory carrying costs.
- Performance meets or exceeds SAE 100R7 and 100R8 industry standards.

SYNFLEX FITTINGS

WEATHERHEAD (U & Z SERIES) FITTINGS



ASSEMBLY EQUIPMENT & INFORMATION

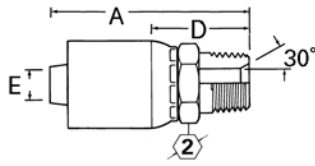


TECHNICAL DATA

TTC Permanent Crimp Fittings (With Sleeve)

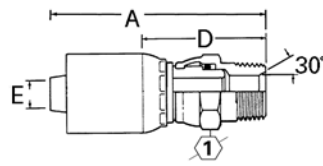
Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

Male Pipe (MP)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②
			mm	in	mm	in	mm	in	
1AA2MP4	1/8-27	-04	46,7	1.84	23,4	0.92	4,3	0.17	9/16
1AA4MP4	1/4-18	-04	52,3	2.06	29,0	1.14	4,3	0.17	9/16
1AA6MP4	3/8-18	-04	48,3	1.90	24,9	0.98	4,3	0.17	11/16
1AA8MP4	1/2-14	-04	51,3	2.02	31,2	1.23	4,3	0.17	7/8
1AA4MP6	1/4-18	-06	55,4	2.18	30,0	1.18	6,6	0.26	11/16
1AA6MP6	3/8-18	-06	57,7	2.27	32,5	1.28	6,6	0.26	11/16
1AA8MP6	1/2-14	-06	57,7	2.27	32,5	1.28	4,1	0.16	7/8
1AA4MP8	1/4-18	-08	61,0	2.40	31,2	1.23	7,6	0.30	13/16
1AA6MP8	3/8-18	-08	63,2	2.49	33,5	1.32	9,7	0.38	13/16
1AA8MP8	1/2-14	-08	69,6	2.74	39,6	1.56	9,7	0.38	7/8
1AA12MP8	3/4-14	-08	65,0	2.56	35,3	1.39	9,7	0.38	11/16
1AA8MP12	1/2-14	-12	70,6	2.78	40,6	1.60	14,2	0.56	11/8
1AA12MP12	3/4-14	-12	72,1	2.84	41,9	1.65	15,5	0.61	11/8
1AA16MP12	1-11 1/2	-12	71,1	2.80	40,9	1.61	15,5	0.61	13/8
1AA12MP16	3/4-14	-16	76,7	3.02	42,4	1.67	19,3	0.76	13/8
1AA16MP16	1-11 1/2	-16	81,8	3.22	47,2	1.86	20,8	0.82	13/8
1AA20MP16	1 1/4-11 1/2	-16	78,2	3.08	43,7	1.72	20,8	0.82	11 1/16

Male Pipe Swivel



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①
			mm	in	mm	in	mm	in	
1AA4PS4	1/4-18	-04	64,5	2.54	41,4	1.62	4,3	0.17	3/4
1AA4PS6	1/4-18	-06	63,5	2.54	42,4	1.67	6,6	0.26	3/4
1AA6PS6	3/8-18	-06	67,6	2.66	42,4	1.67	6,6	0.26	7/8
1AA8PS6	1/2-14	-06	72,4	2.85	47,0	1.85	6,6	0.26	7/8
1AA6PS8	3/8-18	-08	73,2	2.88	43,4	1.71	9,7	0.38	7/8
1AA8PS8	1/2-14	-08	79,5	3.13	49,8	1.96	9,7	0.38	15/16
1AA12PS12	3/4-14	-12	82,3	3.24	52,1	2.05	15,5	0.61	13/8
1AA16PS16	1-11 1/2	-16	98,6	3.88	64,3	2.53	20,6	0.81	1 1/2

TTC Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page E2 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

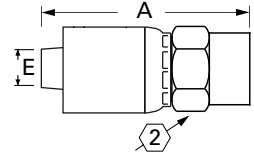
TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

Female Pipe Rigid (FP)

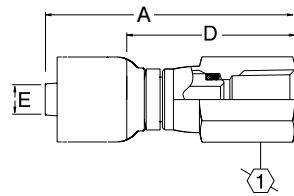
Dryseal NPTF



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor		EØ		2
			mm	in	mm	in	mm	in	
1AA2FP4	1/8-27	-04	52,6	2.07	32,5	1.28	4,3	0.17	9/16
1AA4FP4	1/4-18	-04	58,4	2.30	38,4	1.51	4,3	0.17	3/4
1AA4FP6	1/4-18	-04	58,4	2.30	37,1	1.46	6,6	0.26	3/4
1AA6FP6	3/8-18	-06	61,2	2.41	39,9	1.57	6,6	0.26	7/8
1AA8FP8	1/2-14	-08	66,5	2.62	42,0	1.65	9,7	0.38	1 1/16
1AA12FP12	3/4-14	-12	90,9	3.58	64,0	2.52	15,5	0.61	1 5/16

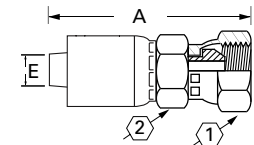
* G as part of thread size is ISO Designation for parallel thread.

Female Pipe Swivel (PF)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		1
			mm	in	mm	in	mm	in	
1AA4PF4	1/4-18	-04	72,9	2.87	49,5	1.95	4,3	0.17	3/4
1AA6PF6	3/8-18	-06	75,4	2.97	50,0	1.97	6,6	0.26	7/8
1AA8PF8	1/2-14	-08	90,9	3.58	61,2	2.41	9,7	0.38	1 1/16
1AA12PF12	3/4-14	-12	92,2	3.63	62,0	2.44	15,5	0.61	1 3/8
1AA16PF16	1-11 1/2	-16	111,0	4.37	77,5	3.05	20,6	0.81	1 5/8

Female Straight Pipe Swivel (SP) NPSM



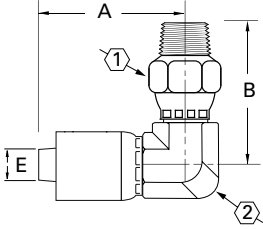
TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		2	1
			mm	in	mm	in	mm	in		
1AA4SP4	1/4-18	-04	47,8	1.88	27,7	1.09	4,3	0.17	9/16	1 1/16
1AA6SP6	3/8-18	-06	51,8	2.04	30,5	1.20	6,6	0.26	1 1/16	7/8
1AA8SP8	1/2-14	-08	61,0	2.40	35,8	1.41	9,7	0.38	7/8	1
1AA12SP12	3/4-14	-12	66,5	2.62	39,6	1.56	15,5	0.61	1 1/8	1 1/4
1AA16SP16	1-11 1/2	-16	79,0	3.11	29,9	1.18	20,8	0.81	1 3/8	1 1/2

See pages H12-15 for die, pusher, and cage information.
TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

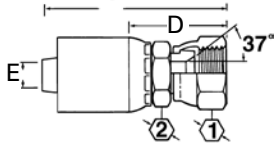
Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

Male Pipe Swivel 90° Elbow (PSB)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②	①	B
			mm	in	mm	in	mm	in			
1AA4PSB4	1/4-18	-04	54,6	2.15	31,2	1.23	4,3	0.17	3/4	3/4	1.81
1AA4PSB6	1/4-18	-06	54,9	2.16	33,7	1.33	6,6	0.26	3/4	7/8	1.96
1AA6PSB6	3/8-18	-06	59,2	2.33	33,7	1.33	6,6	0.26	3/4	7/8	1.80
1AA8PSB8	1/2-14	-08	68,1	2.68	38,3	1.51	9,6	0.38	3/4	15/16	2.05
1AA12PSB12	3/4-14	-12	94,5	3.72	64,2	2.53	15,4	0.61	1 1/4	1 3/8	2.72

JIC/37° Female Swivel (FJ)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①	②
			mm	in	mm	in	mm	in		
1AA3FJ4	3/8-24	-04	49,3	1.94	25,9	1.02	3,3	0.13	1/2	9/16
1AA4FJ4	7/16-20	-04	50,8	2.00	27,2	1.07	4,3	0.17	9/16	9/16
1AA5FJ4	1/2-20	-04	50,3	1.98	26,9	1.06	4,3	0.17	5/8	9/16
1AA6FJ4	9/16-18	-04	51,6	2.03	28,2	1.11	4,3	0.17	11/16	9/16
1AA4FJ6	7/16-20	-06	55,6	2.19	30,2	1.19	4,3	0.17	9/16	11/16
1AA5FJ6	1/2-20	-06	56,9	2.24	31,5	1.24	5,8	0.23	5/8	11/16
1AA6FJ6	9/16-18	-06	57,9	2.28	32,5	1.28	6,6	0.26	11/16	11/16
1AA8FJ6	3/4-16	-06	58,7	2.31	33,3	1.31	6,6	0.26	7/8	11/16
1AA10FJ6	7/8-14	-06	57,4	2.26	13,2	0.52	6,6	0.26	1	13/16
1AA6FJ8	9/16-18	-08	59,9	2.36	34,5	1.36	9,6	0.33	11/16	13/16
1AA8FJ8	3/4-16	-08	66,8	2.63	37,1	1.46	9,7	0.38	7/8	13/16
1AA10FJ8	7/8-14	-08	67,1	2.64	37,3	1.47	9,7	0.38	1	13/16
1AA12FJ8	1 1/16-12	-08	69,3	2.73	39,6	1.56	9,7	0.38	1 1/4	1
1AA16FJ8	1 5/16-12	-08	77,7	3.06	48,0	1.89	9,7	0.38	1 1/2	1 1/4
1AA10FJ12	7/8-14	-12	71,4	2.81	41,4	1.63	12,2	0.48	1	1 1/8
1AA12FJ12	1 1/16-12	-12	72,1	2.84	41,9	1.65	15,5	0.61	1 1/4	1 1/8
1AA14FJ12	1 3/16-12	-12	72,1	2.84	41,9	1.65	15,5	0.61	1 3/8	1 1/8
1AA16FJ12	1 5/16-12	-12	73,9	2.91	43,7	1.72	15,5	0.61	1 1/2	1 1/4
1AA12FJ16	1 1/16-12	-16	80,0	3.15	45,7	1.80	15,5	0.61	1 1/4	1 3/8
1AA14FJ16	1 3/16-12	-16	80,0	3.15	46,5	1.83	20,6	0.81	1 3/8	1 3/8
1AA16FJ16	1 5/16-12	-16	83,6	3.29	49,0	1.93	20,6	0.81	1 1/2	1 3/8
1AA20FJ16	1 5/8-12	-16	80,5	3.17	46,0	1.81	20,6	0.81	2	

* Uses 1-wire braid socket
** Uses 2-wire braid socket

New MatchMate Part

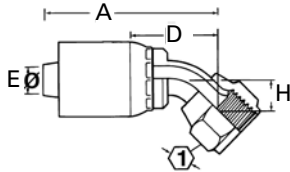
See pages H12-15 for die, pusher, and cage information.
TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

JIC/37° Female Swivel 45° Tube Elbow (FJA)

(Exceptions noted, refer to footnotes)

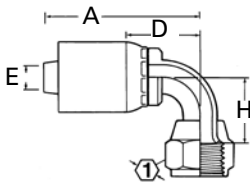


TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		①
			mm	in	mm	in	mm	in	mm	in	
1AA4FJA4 ^a	7/16-20	-04	49,8	1.96	26,4	1.04	3,8	0.15	8,4	0.33	9/16
1AA5FJA4 ^a	1/2-20	-04	51,8	2.04	28,4	1.12	4,3	0.17	9,4	0.37	5/8
1AA6FJA4	9/16-18	-04	53,1	2.09	29,7	1.17	4,3	0.17	9,9	0.39	11/16
1AA4FJA6	7/16-20	-06	44,5	1.75	23,4	0.92	4,1	0.16	8,4	0.33	9/16
1AA6FJA6	9/16-18	-06	58,7	2.31	33,3	1.31	6,1	0.24	9,9	0.39	11/16
1AA8FJA6 ^a	3/4-16	-06	67,3	2.65	42,2	1.66	6,6	0.26	14,0	0.55	7/8
1AA8FJA8	3/4-16	-08	71,6	2.82	41,9	1.65	9,4	0.37	14,0	0.55	7/8
1AA10FJA8 ^a	7/8-14	-08	77,0	3.03	47,2	1.86	9,7	0.38	15,0	0.59	1
1AA16FJA12	1 ⁵ / ₁₆ -12	-12	87,1	3.43	60,2	2.37	15,5	0.61	26,9	1.06	1 ¹ / ₂
1AA12FJA12	1 ¹ / ₁₆ -12	-12	87,1	3.43	56,9	2.24	14,7	0.58	19,8	0.78	1 ¹ / ₄
1AA16FJA16	1 ⁵ / ₁₆ -12	-16	95,0	3.74	60,7	2.39	19,3	0.76	27,2	1.07	1 ¹ / ₂

^a Swivel nuts are universal, both 37° and 45° connections.

JIC/37° Female Swivel 90° Elbow (FJB)

(Exceptions noted, refer to footnotes)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		①
			mm	in	mm	in	mm	in	mm	in	
1AA4FJB4 ^a	7/16-20	-04	46,7	1.84	23,4	0.92	3,8	0.15	17,3	0.68	9/16
1AA5FJB4 ^a	1/2-20	-04	48,8	1.92	25,4	1.00	4,3	0.17	19,3	0.76	5/8
1AA6FJB4	9/16-18	-04	50,8	2.00	27,4	1.08	4,3	0.17	21,3	0.84	11/16
1AA4FJB6	7/16-20	-06	46,0	1.81	24,9	0.98	4,1	0.16	17,3	0.68	9/16
1AA6FJB6	9/16-18	-06	56,1	2.21	31,0	1.22	6,1	0.24	21,3	0.84	11/16
1AA8FJB6 ^a	3/4-16	-06	61,5	2.42	36,1	1.42	6,6	0.26	27,7	1.09	7/8
1AA6FJB8	9/16-18	-08	61,7	2.43	32,0	1.26	6,1	0.24	21,3	0.84	11/16
1AA8FJB8 ^a	3/4-16	-08	65,8	2.59	36,1	1.42	9,4	0.37	27,7	1.09	7/8
1AA10FJB8 ^a	7/8-14	-08	70,6	2.78	41,0	1.61	9,7	0.38	30,2	1.19	1
1AA10FJB12	7/8-14	-12	65,3	2.57	39,6	1.56	11,7	0.46	30,2	1.19	1
1AA12FJB12	1 ¹ / ₁₆ -12	-12	85,4	3.36	55,1	2.17	17,4	0.58	45,7	1.80	1 ¹ / ₄
1AA16FJB12	1 ⁵ / ₁₆ -12	-12	85,6	3.37	55,4	2.18	15,5	0.61	60,7	2.39	1 ¹ / ₂
1AA16FJB16	1 ⁵ / ₁₆ -12	-16	90,4	3.56	55,9	2.20	19,3	0.76	60,7	2.39	1 ¹ / ₂
1AA20FJB16	1 ⁵ / ₈ -12	-16	95,8	3.77	62,2	2.45	20,8	0.82	69,9	2.75	2

^a Swivel nuts are universal, both 37° and 45° connections.

TTC Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page E2 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

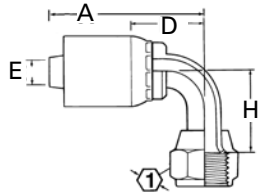
TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

JIC/37° Female Swivel 90° Long Drop Tube Elbow (FJC)

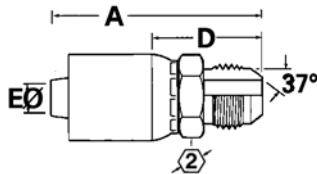
(Exceptions noted, refer to footnotes)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		①
			mm	in	mm	in	mm	in	mm	in	
1AA4FJC4 ^a	7/16-20	-04	46,7	1.84	23,4	0.92	3,8	0.15	45,7	1.80	9/16
1AA5FJC4 ^a	1/2-20	-04	48,8	1.92	25,4	1.00	4,3	0.17	45,7	1.80	5/8
1AA4FJC6	7/16-20	-06	46,0	1.81	24,9	0.98	4,3	0.17	45,7	1.80	9/16
1AA6FJC6	9/16-18	-06	56,4	2.22	31,2	1.23	6,1	0.24	55,4	2.18	11/16
1AA8FJC6 ^a	3/4-16	-06	64,5	2.54	39,1	1.54	6,6	0.26	62,2	2.45	7/8
1AA8FJC8 ^a	3/4-16	-08	68,8	2.71	39,1	1.54	9,4	0.37	62,2	2.45	7/8
1AA10FJC8 ^a	7/8-14	-08	70,6	2.78	40,9	1.61	9,7	0.38	65,3	2.57	1
1AA12FJC12	1 1/16-12	-12	85,3	3.36	55,1	2.17	14,7	0.58	94,0	3.70	1 1/4
1AA16FJC16	1 5/16-12	-16	90,4	3.56	55,9	2.20	19,3	0.76	116,3	4.58	1 1/2

^a Swivel nuts are universal - both SAE 37° and 45° connections.

JIC/37° Male Rigid (MJ)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②
			mm	in	mm	in	mm	in	
1AA4MJ4	7/16-20	-04	50,8	2.00	27,2	1.07	4,3	0.17	9/16
1AA5MJ4	1/2-20	-04	46,7	1.84	23,4	0.92	4,3	0.17	9/16
1AA6MJ4	9/16-18	-04	47,0	1.85	23,6	0.93	4,3	0.17	5/8
1AA6MJ6	9/16-18	-06	54,9	2.16	29,7	1.17	6,6	0.26	11/16
1AA8MJ6	3/4-16	-06	53,3	2.10	28,2	1.11	6,6	0.26	13/16
1AA10MJ6	7/8-14	-06	53,3	2.10	30,7	1.21	6,6	0.26	15/16
1AA8MJ8	3/4-16	-08	65,3	2.57	35,8	1.41	9,7	0.38	13/16
1AA10MJ8	7/8-14	-08	61,5	2.42	32,0	1.26	9,7	0.38	15/16
1AA12MJ8	1 1/16-12	-08	65,8	2.59	36,1	1.42	9,7	0.38	1 1/8
1AA10MJ12	7/8-14	-12	70,6	2.78	40,4	1.59	12,2	0.48	1 1/8
1AA12MJ12	1 1/16-12	-12	74,7	2.94	44,5	1.75	15,5	0.61	1 1/8
1AA14MJ12	1 3/16-12	-12	69,3	2.73	39,1	1.54	15,5	0.61	1 1/4
1AA16MJ12	1 5/16-12	-12	69,9	2.75	39,6	1.56	15,5	0.61	1 3/8
1AA14MJ16	1 3/16-12	-16	79,0	3.11	45,7	1.80	18,3	0.72	1 3/8
1AA16MJ16	1 5/16-12	-16	82,6	3.25	48,3	1.90	20,8	0.82	1 3/8
1AA20MJ16	1 5/8-12	-16	77,0	3.03	43,4	1.71	20,6	0.81	1 11/16

TTC Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page E2 for sleeve information.

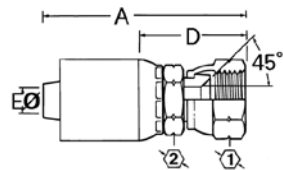
See pages H12-15 for die, pusher, and cage information.

TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

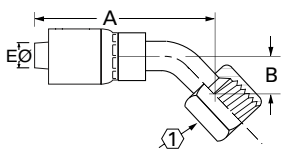
Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

SAE 45° Female Swivel (FS)



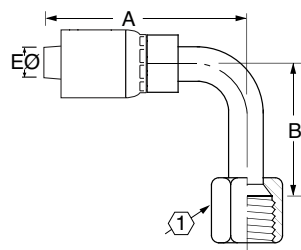
TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		1	2
			mm	in	mm	in	mm	in	in	in
1AA4FS4	7/16-20	-04	50,8	2.00	27,2	1.07	4,3	0.17	9/16	9/16
1AA5FS4	1/2-20	-04	50,3	1.98	26,9	1.06	4,3	0.17	5/8	9/16
1AA4FS6	7/16-20	-06	55,6	2.19	30,2	1.19	4,8	0.19	9/16	11/16
1AA6FS6	5/8-18	-06	58,7	2.31	33,3	1.31	6,6	0.26	3/4	11/16
1AA8FS6	3/4-16	-06	58,7	2.31	33,3	1.31	6,6	0.26	7/8	11/16
1AA8FS8	3/4-16	-08	66,8	2.63	37,1	1.46	9,7	0.38	7/8	13/16
1AA10FS8	7/8-14	-08	67,1	2.64	37,3	1.47	9,7	0.38	1	13/16
1AA12FS12	1 1/16-14	-12	72,1	2.84	41,9	1.65	15,5	0.61	1 1/4	1 1/8

SAE 45° Female Swivel 45° Tube Elbow (FSA)



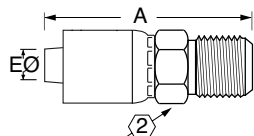
TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		1	B
			mm	in	mm	in	mm	in		
1AA6FSA6	5/8-18	-06	58,2	2.29	36,8	1.45	6,1	0.24	3/4	0.73

SAE 45° Female Swivel Long Drop 90° Tube Elbow (FSC)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		1	B
			mm	in	mm	in	mm	in		
1AA6FSC6	5/8-18	-06	47,5	1.87	26,2	1.03	6.1	0.24	3/4	2.18

SAE 45° Flare Male Rigid (MS)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		2
			mm	in	mm	in	mm	in	
1AA6MS6	5/8-18	-06	52,3	2.06	31,2	1.23	6,6	0.26	1 1/16
1AA12MS12	1 1/16-14	-12	74,7	2.94	47,8	1.88	15,5	0.61	1 1/8

TTC Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page E2 for sleeve information.

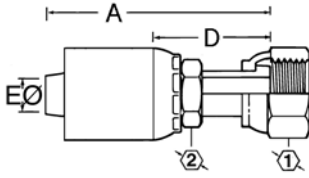
See pages H12-15 for die, pusher, and cage information.

TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

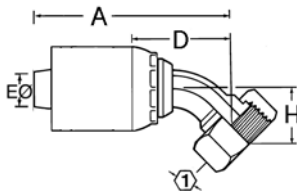
Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

Female ORS Swivel (FR)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		1	2
			mm	in	mm	in	mm	in		
1AA4FR4	9/16-18	-04	49,5	1.95	26,2	1.03	4,3	0.17	11/16	9/16
1AA6FR4	11/16-16	-04	51,8	2.04	28,4	1.12	4,3	0.17	13/16	5/8
1AA8FR4	13/16-16	-04	52,3	2.06	32,5	1.28	4,1	0.16	13/16	15/16
1AA4FR6	9/16-18	-06	54,4	2.14	29,2	1.15	4,3	0.17	11/16	11/16
1AA6FR6	11/16-16	-06	56,6	2.23	31,5	1.24	6,6	0.26	13/16	11/16
1AA8FR6	13/16-16	-06	58,9	2.32	33,5	1.32	6,6	0.26	15/16	13/16
1AA6FR8	11/16-16	-08	63,8	2.51	34,0	1.34	6,6	0.26	13/16	7/8
1AA8FR8	13/16-16	-08	67,8	2.67	38,1	1.50	9,7	0.38	15/16	7/8
1AA10FR8	1-14	-08	67,1	2.64	37,3	1.47	9,7	0.38	11/8	15/16
1AA12FR8	13/16-12	-08	71,1	2.80	41,4	1.63	9,7	0.38	13/8	11/8
1AA10FR12	1-14	-12	71,4	2.81	41,4	1.62	12,2	0.48	11/8	11/8
1AA12FR12	13/16-12	-12	73,9	2.91	43,7	1.72	15,5	0.61	13/8	11/8
1AA16FR12	17/16-12	-12	75,7	2.98	45,5	1.79	15,5	0.61	15/8	13/8
1AA12FR16	13/16-12	-16	81,8	3.22	47,2	1.86	15,5	0.61	13/8	13/8
1AA16FR16	17/16-12	-16	83,6	3.29	49,3	1.94	20,6	0.81	15/8	13/8
1AA20FR16	111/16-12	-16	82,6	3.25	48,3	1.90	20,6	0.81	17/8	15/8

Female ORS Swivel 45° Tube Elbow (FRA)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		1
			mm	in	mm	in	mm	in	mm	in	
1AA4FRA4	9/16-18	-04	53,8	2.12	30,5	1.20	4,3	0.17	10,2	0.40	11/16
1AA6FRA4	11/16-16	-04	58,4	2.30	35,1	1.38	4,3	0.17	10,9	0.43	13/16
1AA4FRA6	9/16-18	-06	58,4	2.30	33,0	1.30	4,3	0.17	10,4	0.41	11/16
1AA6FRA6	11/16-16	-06	61,7	2.43	36,3	1.43	6,6	0.26	10,9	0.43	13/16
1AA8FRA6	13/16-16	-06	69,6	2.74	44,2	1.74	6,6	0.26	15,0	0.59	15/16
1AA6FRA8	11/16-16	-08	67,3	2.65	37,6	1.48	6,6	0.26	10,9	0.43	13/16
1AA8FRA8	13/16-16	-08	75,2	2.96	45,5	1.79	9,1	0.36	15,0	0.59	15/16
1AA10FRA8	1-14	-08	80,8	3.18	51,1	2.01	9,7	0.38	16,5	0.65	11/8
1AA12FRA8	13/16-12	-08	89,2	3.51	59,4	2.34	9,7	0.38	21,1	0.83	13/8
1AA10FRA12	1-14	-12	78,5	3.09	51,8	2.04	11,4	0.45	16,5	0.65	11/8
1AA12FRA12	13/16-12	-12	90,7	3.57	60,5	2.38	14,0	0.55	21,1	0.83	13/8
1AA16FRA12	17/16-12	-12	102,6	4.04	72,4	2.85	15,5	0.61	23,9	0.94	15/8
1AA12FRA16	13/16-12	-16	94,5	3.72	60,9	2.40	14,0	0.55	21,1	0.83	13/8
1AA16FRA16	17/16-12	-16	107,4	4.23	73,2	2.88	19,8	0.78	23,9	0.94	15/8
1AA20FRA16	111/16-12	-16	117,3	4.62	83,8	3.30	20,7	0.81	25,4	1.00	17/8

TTC Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page E2 for sleeve information.

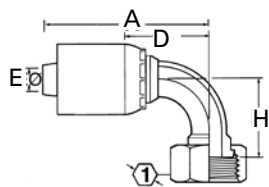
See pages H12-15 for die, pusher, and cage information.

TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

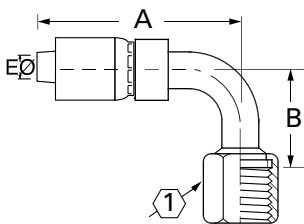
Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

Female ORS Swivel Short Drop 90° Tube Elbow (FRB)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		1
			mm	in	mm	in	mm	in	mm	in	
1AA4FRB4	9/16-18	-04	53,1	2.09	29,7	1.17	4,3	0.17	20,8	0.82	11/16
1AA6FRB4	11/16-16	-04	56,4	2.22	33,0	1.30	4,3	0.17	22,9	0.90	13/16
1AA4FRB6	9/16-18	-06	56,1	2.21	30,7	1.21	4,3	0.17	20,8	0.82	11/16
1AA6FRB6	11/16-16	-06	59,4	2.34	34,0	1.34	6,6	0.26	22,9	0.90	13/16
1AA8FRB6	13/16-16	-06	66,5	2.62	41,4	1.62	6,6	0.26	29,2	1.15	15/16
1AA6FRB8	11/16-16	-08	65,0	2.56	35,3	1.39	6,6	0.26	22,9	0.90	13/16
1AA8FRB8	13/16-16	-08	72,1	2.84	42,4	1.67	9,1	0.36	29,2	1.15	15/16
1AA10FRB8	1-14	-08	78,0	3.07	48,5	1.91	9,7	0.38	32,3	1.27	1 1/8
1AA12FRB8	1 3/16-12	-08	87,6	3.45	57,9	2.28	9,7	0.38	47,8	1.88	1 3/8
1AA10FRB12	1-14	-12	79,0	3.11	49,0	1.93	11,4	0.45	32,3	1.27	1 1/8
1AA12FRB12	1 3/16-12	-12	88,6	3.49	58,4	2.30	14,0	0.55	47,8	1.88	1 3/8
1AA16FRB12	1 7/16-12	-12	102,6	4.04	72,4	2.85	15,5	0.61	56,1	2.21	1 5/8
1AA16FRB16	1 7/16-12	-16	107,2	4.22	72,9	2.87	20,6	0.81	56,1	2.21	1 5/8
1AA20FRB16	1 11/16-12	-16	123,2	4.85	89,0	3.50	20,6	0.81	63,8	2.51	1 7/8

Female ORS Swivel Medium Drop 90° Tube Elbow (FRB)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		1	B
			mm	in	mm	in	mm	in		
1AA4FRB4.032	9/16-18	-04	49,5	1.95	29,7	1.17	4,3	0.17	11/16	1.26
1AA6FRB4.038	11/16-16	-04	55,1	2.17	32,8	1.29	4,3	0.17	13/16	1.51
1AA8FRB4.042	13/16-16	-04	55,9	2.20	35,8	1.41	4,3	0.17	15/16	1.67
1AA6FRB6.038	11/16-16	-06	55,1	2.17	34,0	1.34	6,6	0.26	13/16	1.51
1AA8FRB6.042	13/16-16	-06	57,4	2.26	36,1	1.42	6,6	0.26	15/16	1.67
1AA6FRB8.038	11/16-16	-08	63,0	2.48	37,6	1.48	6,1	0.24	13/16	1.51
1AA8FRB8.041	13/16-16	-08	67,6	2.66	42,4	1.67	9,1	0.36	15/16	1.62
1AA12FRB8.054	1 3/16-12	-08	98,3	3.87	72,9	2.87	9,7	0.38	1 3/8	2.13
1AA10FRB12.045	1-14	-12	67,6	2.66	40,6	1.60	11,4	0.45	1 1/8	1.78
1AA12FRB12.058	1 3/16-12	-12	85,3	3.36	58,4	2.30	13,9	0.55	1 3/8	2.28
1AA16FRB16.071	1 7/16-12	-16	106,2	4.18	72,6	2.86	19,8	0.78	1 5/8	2.78
1AA20FRB16.078	1 11/16-12	-16	141,2	5.56	107,7	4.24	20,6	0.81	1 7/8	3.06

TTC Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page E2 for sleeve information.

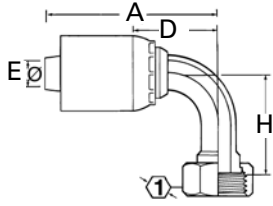
See pages H12-15 for die, pusher, and cage information.

TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

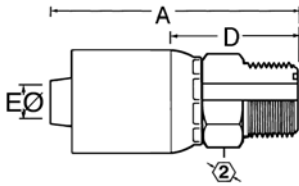
Female ORS Swivel Long Drop 90° Tube Elbow (FRC)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		①
			mm	in	mm	in	mm	in	mm	in	
1AA4FRC4	9/16-18	-04	53,1	2.09	29,7	1.17	4,3	0.17	45,7	1.80	11/16
1AA6FRC4	11/16-16	-04	56,4	2.22	33,0	1.30	4,3	0.17	54,1	2.13	13/16
1AA8FRC4	13/16-16	-04	65,8	2.59	42,4	1.67	4,3	0.17	64,8	2.55	15/16
1AA6FRC6	11/16-16	-06	59,4	2.34	34,0	1.34	6,1	0.24	54,1	2.13	13/16
1AA8FRC6	13/16-16	-06	68,8	2.71	43,4	1.71	6,6	0.26	64,8	2.55	15/16
1AA8FRC8	13/16-16	-08	72,9	2.87	43,2	1.70	9,4	0.37	64,8	2.55	15/16
1AA10FRC8	1-14	-08	78,0	3.07	48,5	1.91	9,7	0.38	70,1	2.76	1 1/8
1AA12FRC12	1 3/16-12	-12	88,4	3.48	58,2	2.29	14,2	0.56	96,0	3.78	1 3/8
1AA16FRC12	1 7/16-12	-12	102,6	4.04	72,4	2.85	15,5	0.61	114,3	4.50	1 5/8
1AA16FRC16	1 7/16-12	-16	107,2	4.22	72,6	2.86	19,8	0.78	114,3	4.50	1 5/8

ORS Male Rigid (MR)

Does not include O-ring. See catalog A-HOOV-MC001-E1 for O-rings.



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②
			mm	in	mm	in	mm	in	
1AA4MR4	9/16-18	-04	45,2	1.78	21,8	0.86	4,3	0.17	5/8
1AA6MR6	11/16-16	-06	50,5	1.99	25,1	0.99	6,6	0.26	3/4
1AA8MR6	13/16-16	-06	49,5	1.95	24,1	0.95	6,6	0.26	7/8
1AA8MR8	13/16-16	-08	58,4	2.30	28,7	1.13	9,7	0.38	7/8
1AA10MR8	1-14	-08	55,1	2.17	29,7	1.17	9,7	0.38	1 1/16
1AA12MR8	1 3/16-12	-08	57,7	2.27	32,3	1.27	9,7	0.38	1 1/4
1AA12MR12	1 3/16-12	-12	66,8	2.63	36,6	1.44	15,5	0.61	1 1/4
1AA16MR12	1 7/16-12	-12	64,3	2.53	34,0	1.34	15,5	0.61	1 1/2
1AA16MR16	1 7/16-12	-16	75,2	2.96	41,7	1.64	20,7	0.81	1 1/2

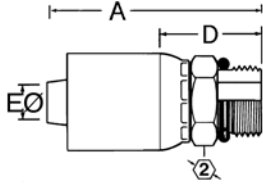
TTC Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page E2 for sleeve information.

See pages H12-15 for die, pusher, and cage information.
TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

Male Straight Thread O-ring Rigid (MB)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		Ø
			mm	in	mm	in	mm	in	
1AA4MB4	7/16-20	-04	46,7	1.84	23,4	0.92	4,3	0.17	9/16
1AA5MB4	1/2-20	-04	46,7	1.84	23,4	0.92	4,3	0.17	5/8
1AA6MB4	9/16-18	-04	45,2	1.78	21,8	0.86	4,3	0.17	11/16
1AA6MB6	9/16-18	-06	50,8	2.00	25,4	1.00	6,6	0.26	11/16
1AA8MB6	3/4-16	-06	50,0	1.97	24,9	0.98	6,6	0.26	7/8
1AA10MB6	7/8-14	-06	47,8	1.88	26,7	1.05	6,6	0.26	1
1AA8MB8	3/4-16	-08	59,9	2.36	30,2	1.19	9,7	0.38	7/8
1AA10MB8	7/8-14	-08	57,4	2.26	27,7	1.09	9,7	0.38	1
1AA12MB8	1 1/16-12	-08	60,7	2.39	31,0	1.22	9,7	0.38	1 1/4
1AA10MB12	7/8-14	-12	64,3	2.53	37,1	1.46	12,2	0.48	1 1/8
1AA12MB12	1 1/16-12	-12	62,0	2.44	31,8	1.25	15,5	0.61	1 1/4
1AA16MB12	1 5/16-12	-12	65,0	2.56	34,8	1.37	15,5	0.61	1 1/2
1AA16MB16	1 5/16-12	-16	69,6	2.74	35,3	1.39	20,8	0.82	1 1/2

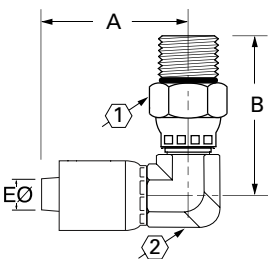
(Includes O-ring.)

Male Straight Thread O-ring Swivel (SB)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		Ø
			mm	in	mm	in	mm	in	
1AA4SB4	7/16-20	-04	64,0	2.52	40,3	1.59	4,3	0.17	3/4
1AA6SB6	9/16-18	-06	69,1	2.72	43,9	1.73	6,6	0.26	7/8
1AA8SB6	3/4-16	-08	67,6	2.66	42,4	1.67	6,6	0.26	7/8
1AA8SB8	3/4-16	-08	76,5	3.01	46,7	1.84	9,6	0.38	1
1AA10SB8	7/8-14	-08	77,0	3.03	47,2	1.86	9,6	0.38	1
1AA12SB8	1 1/16-12	-08	88,6	3.49	58,9	2.32	9,6	0.38	1 7/16
1AA10SB12	7/8-14	-12	87,1	3.43	56,9	2.24	15,5	0.61	1 7/16

Male Straight Thread O-ring Swivel 90° Elbow (BB)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		Ø	B	
			mm	in	mm	in	mm	in			
1AA6SBB4	9/16-18	-04	55,4	2.18	32,0	1.26	4,3	0.17	3/4	7/8	1,87
1AA6SBB6	9/16-18	-06	59,2	2.33	33,7	1.33	6,6	0.26	3/4	7/8	1,87
1AA8SBB6	3/4-16	-06	59,2	2.33	33,7	1.33	6,6	0.26	3/4	1	1,93
1AA10SBB6	7/8-14	-06	59,2	2.33	33,7	1.33	6,6	0.26	3/4	1	1,95
1AA8SBB8	3/4-16	-08	68,1	2.68	38,3	1.51	9,7	0.38	3/4	1	1,93
1AA10SBB8	7/8-14	-08	68,1	2.68	38,3	1.51	9,7	0.38	3/4	1	1,97
1AA12SBB8	1 1/16-12	-08	79,2	3.12	49,5	1.95	9,7	0.38	1 1/16	1 7/16	2,43
1AA12SBB12	1 1/16-12	-12	94,5	3.72	64,2	2.53	15,5	0.61	32	1 7/16	2,65

TTC Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page E2 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

TTC fittings for Aeroquip customers only.

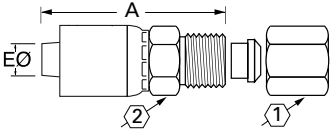
GENERAL INFORMATION
HYDRAULIC HOSE
AIR & WATER HOSE & TUBING
TRUCK HOSE
AEROQUIP/POLYON FITTINGS
AEROQUIP/TTC FITTINGS
SYNFLEX FITTINGS
WEATHERHEAD (U & Z SERIES) FITTINGS
ASSEMBLY EQUIPMENT & INFORMATION
TECHNICAL DATA

TTC Permanent Crimp Fittings (With Sleeve)

Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

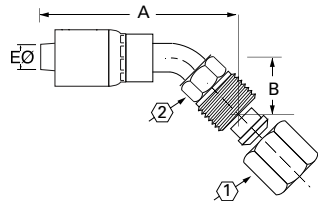
Flareless Tube Rigid (MT) Ermeto 7000 Series

(With Nut and Sleeve)



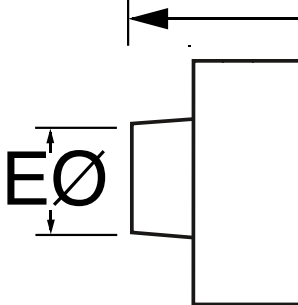
TTC Part #	Thd.	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②	①
				mm	in	mm	in	mm	in		
1AA4MT4	7/16-20	1/4	-04	41,9	1.65	21,8	0.86	4,3	0.17	9/16	9/16
1AA5MT4	1/2-20	5/16	-04	40,1	1.58	20,3	0.80	4,3	0.17	9/16	5/8
1AA4MT6	7/16-20	1/4	-06	46,0	1.81	24,6	0.97	6,6	0.26	11/16	9/16
1AA5MT6	1/2-20	5/16	-06	46,0	1.81	24,6	0.97	5,8	0.23	11/16	5/8
1AA6MT6	9/16-18	3/8	-06	46,2	1.82	25,2	0.99	6,6	0.26	11/16	11/16
1AA8MT8	3/4-16	1/2	-08	54,6	2.15	29,5	1.16	9,7	0.38	13/16	7/8
1AA10MT8	7/8-14	5/8	-08	53,8	2.12	28,5	1.12	9,7	0.38	15/16	1
1AA12MT12	1 1/16-12	3/4	-12	61,0	2.40	34,0	1.34	15,5	0.61	1 1/8	1 1/4
1AA16MT16	1 5/16-12	1	-16	96,5	3.80	37,6	1.48	20,6	0.81	1 3/8	1 1/2

Flareless 45° Tube Elbow 7000 (MTA) Ermeto Series



TTC Part #	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①	②	B
				mm	in	mm	in	mm	in			
1AA6MTA6	9/16-18	3/8	-06	62,0	2.44	39,6	1.56	6,6	.26	11/16	5/8	0.83

Flareless 90° Tube Elbow 7000 (MTB) Ermeto Series



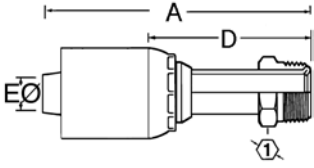
TTC Part #	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②	①	B
				mm	in	mm	in	mm	in			
1AA6MTB6	9/16-18	3/8	-06	52,1	2.05	30,9	1.22	6,6	0.26	5/8	11/16	1.46

See pages H12-15 for die, pusher, and cage information.
TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

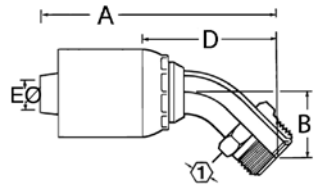
Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

Inverted Male Swivel Straight (MF)



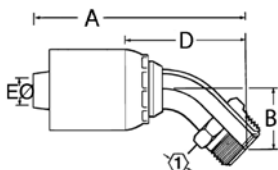
TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		Ø
			mm	in	mm	in	mm	in	
1AA3MF4	3/8-24	-04	76,2	3.00	55,9	2.20	2,5	0.10	3/8
1AA4MF4	7/16-24	-04	60,7	2.39	37,1	1.46	4,3	0.17	7/16
1AA5MF4	1/2-20	-04	60,7	2.39	37,1	1.46	4,3	0.17	1/2
1AA4MF6	7/16-24	-06	64,3	2.53	38,9	1.53	4,3	0.17	7/16
1AA5MF6	1/2-20	-06	66,0	2.60	40,9	1.61	6,1	0.24	1/2
1AA6MF6	5/8-18	-06	66,0	2.60	40,9	1.61	6,6	0.26	5/8
1AA7MF6	11/16-18	-06	62,2	2.45	40,6	1.60	6,6	0.26	11/16
1AA8MF8	3/4-18	-08	70,9	2.79	41,4	1.62	9,7	0.38	3/4
1AA10MF8	7/8-18	-08	74,7	2.94	49,0	1.93	9,7	0.38	7/8

Inverted Male Swivel 45° Tube Elbow (MFA)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		Ø
			mm	in	mm	in	mm	in	mm	in	
1AA3MFA4	3/8-24	-04	69,9	2.75	49,8	1.96	2,5	0.10	17,5	0.69	3/8
1AA4MFA4	7/16-24	-04	67,8	2.67	44,5	1.75	4,3	0.17	24,4	0.96	7/16
1AA5MFA4	1/2-20	-04	64,5	2.54	44,5	1.75	4,3	0.17	24,4	0.96	1/2
1AA4MFA6	7/16-24	-06	71,4	2.81	46,0	1.81	4,3	0.17	24,4	0.96	7/16
1AA5MFA6	1/2-20	-06	69,1	2.72	48,0	1.89	6,1	0.24	24,4	0.96	1/2
1AA6MFA6	5/8-18	-06	73,2	2.88	48,0	1.89	6,6	0.26	24,4	0.96	5/8
1AA7MFA6	11/16-18	-06	69,3	2.73	48,0	1.89	6,6	0.26	24,4	0.96	11/16
1AA8MFA8	3/4-18	-08	78,0	3.07	48,3	1.90	9,7	0.38	23,6	0.93	3/4

Inverted Male Swivel 90° Tube Elbow (MFB)



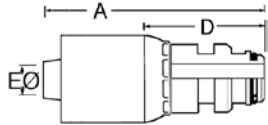
TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		Ø
			mm	in	mm	in	mm	in	mm	in	
1AA3MFB4	3/8-24	-04	53,8	2.12	33,5	1.32	2,5	0.10	27,9	1.06	3/8
1AA4MFB4	7/16-24	-04	58,2	2.29	34,8	1.37	4,3	0.17	42,3	1.69	7/16
1AA5MFB4	1/2-20	-04	55,1	2.17	34,8	1.37	4,3	0.17	43,9	1.73	1/2
1AA4MFB6	7/16-24	-06	57,9	2.28	36,6	1.44	4,3	0.17	42,3	1.69	7/16
1AA5MFB6	1/2-20	-06	63,8	2.51	38,4	1.51	6,1	0.24	43,9	1.73	1/2
1AA6MFB6	5/8-18	-06	63,8	2.51	38,4	1.51	6,6	0.26	43,9	1.73	5/8
1AA7MFB6	11/16-18	-06	62,0	2.44	40,9	1.61	6,6	0.26	43,9	1.73	11/16
1AA8MFB8	3/4-18	-08	69,3	2.73	39,6	1.56	9,7	0.38	44,5	1.75	3/4

See pages H12-15 for die, pusher, and cage information.
TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

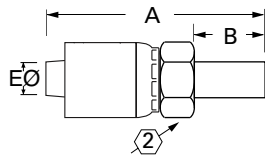
Staple Male Connector (SL)



TTC Part #	Connect. Size	Hose Size	A		Hose Cut-Off Factor (D)		EØ	
			mm	in	mm	in	mm	in
1A4SL4	1/4	-04	55,4	2.18	32,0	1.26	4,3	0.17
1A6SL6	3/8	-06	58,4	2.30	33,0	1.30	6,6	0.26
1A8SL6	3/8	-06	58,4	2.30	33,0	1.30	6,6	0.26
1A8SL8	1/2	-08	64,0	2.52	34,3	1.35	9,7	0.38
1A12SL12	3/4	-12	65,0	2.56	34,8	1.37	15,5	0.61
1A16SL16	1	-16	74,9	2.95	40,6	1.60	20,6	0.81

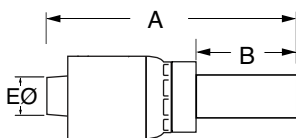
(O-ring and backup ring included.)

Standpipe Straight Tube (TE)



TTC Part #	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		(2)	B	
			mm	in	mm	in	mm	in		mm	in
1A4TE4	1/4	-04	55,6	2.19	35,56	1.40	4,3	0.17	9/16	25,4	1.00
1A6TE6	3/8	-06	59,7	2.35	38,61	1.52	6,6	0.26	11/16	25,4	1.00
1A8TE8	1/2	-08	68,3	2.69	43,18	1.70	9,7	0.38	13/16	27,9	1.10
1A12TE12	3/4	-12	73,7	2.90	46,74	1.84	15,5	0.61	1 1/8	30,2	1.19
1A16TE16	1	-16	87,1	3.43	53,59	2.11	20,6	0.81	1 3/8	33,5	1.32

Metric Standpipe Straight Tube (LM)



TTC Part #	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		B	
			mm	in	mm	in	mm	in	mm	in
1A8LM4	8	-04	56,4	2.22	33,0	1.30	4,1	0.16	23	0.91
1A10LM4	10	-04	56,4	2.22	33,0	1.30	4,3	0.17	23	0.91
1A10LM6	10	-06	59,4	2.34	34,3	1.35	6,6	0.26	23	0.91
1A12LM6	12	-06	60,5	2.38	35,0	1.38	6,6	0.26	24	0.95
1A14LM6	14	-06	61,5	2.42	36,1	1.42	6,6	0.26	25	0.98
1A15LM8	15	-08	66,8	2.63	37,1	1.46	9,7	0.38	25	0.98
1A16LM8	16	-08	68,1	2.68	38,4	1.51	9,7	0.38	26	1.02
1A22LM12	22	-12	71,1	2.80	40,9	1.61	15,5	0.61	28	1.10
1A25LM12	25	-12	70,1	2.76	39,9	1.57	15,5	0.61	27	1.06
1A28LM16	28	-16	75,7	2.98	41,4	1.63	20,6	0.81	28	1.10
1A30LM16	30	-16	75,9	2.99	41,7	1.64	20,6	0.81	28	1.10

TTC Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page E2 for sleeve information.

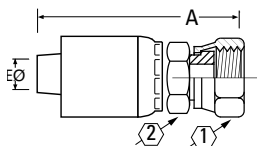
See pages H12-15 for die, pusher, and cage information.

TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

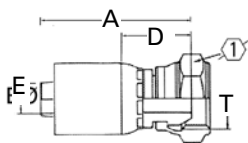
BSPP Flat Face Female Swivel (BW)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		2	1
			mm	in	mm	in	mm	in	in	in
1AA6BW6	G 3/8-19	-06	57,2	2.25	36,7	1.42	6,6	0.26	11/16	3/4
1AA8BW6	G 1/2-14	-06	58,7	2.31	37,6	1.48	6,6	0.26	3/4	11/16
1AA8BW8	G 1/2-14	-08	66,8	2.63	41,7	1.64	9,2	0.36	13/16	11/16
1AA12BW8	G 3/4-14	-08	67,1	2.64	41,9	1.65	9,7	0.38	1	11/4
1AA12BW12	G 3/4-14	-12	71,1	2.80	44,2	1.74	15,5	0.61	11/8	11/4

* G as part of thread size is ISO Designation for parallel thread.

British Standard (BSPP) 60° Cone Female Swivel Straight (BF)



TTC Part #	Thd. T	Hose Size	A		Hose Cut-Off Factor (D)		EØ		1	
			mm	in	mm	in	mm	in	mm	in
1A4BF4	G 1/4-19*	-04	42,3	1.66	18,9	0.74	4,2	0.16	19,0	0.75
1A6BF4	G 3/8-19*	-04	45,5	1.79	22,1	0.87	4,3	0.17	22,0	0.87
1A6BF6	G 3/8-19*	-06	46,4	1.83	21,1	0.83	6,7	0.26	22,0	0.87
1A8BF6	G 1/2-14*	-06	47,9	1.88	22,6	0.89	6,7	0.26	27,0	1.06
1A8BF8	G 1/2-14*	-08	53,5	2.11	23,8	0.94	9,6	0.38	27,0	1.06
1A10BF8	G 5/8-14*	-08	56,4	2.22	26,7	1.05	9,6	0.38	30,0	1.18
1A12BF12	G 3/4-14*	-12	55,5	2.18	25,3	1.00	15,5	0.61	32,0	1.26
1A16BF16	G 1-11*	-16	62,0	2.44	27,6	1.09	20,7	0.81	41,0	1.61

* G as part of thread size is ISO Designation for parallel thread.

TTC Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page E2 for sleeve information.

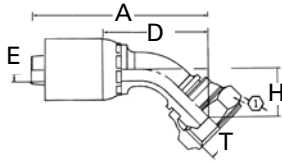
See pages H12-15 for die, pusher, and cage information.

TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

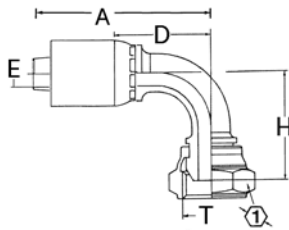
British Standard (BSPP) 60° Cone Female 45° Tube Elbow (BFA)



TTC Part #	Thd. T	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		①	
			mm	in	mm	in	mm	in	mm	in	mm	in
1A4BFA4	G 1/4-19*	-04	65,3	2.57	41,9	1.65	4,2	0.16	16,5	0.65	19,0	0.75
1A6BFA6	G 3/8-19*	-06	73,8	2.90	48,5	1.91	6,7	0.26	19,0	0.75	22,0	0.87
1A8BFA8	G 1/2-14*	-08	91,5	3.60	61,8	2.43	9,6	0.38	24,8	0.98	27,0	1.06
1A12BFA12	G 3/4-14*	-12	108,8	4.28	78,6	3.09	15,5	0.61	29,4	1.16	32,0	1.26
1A16BFA16	G 1-11*	-16	126,8	4.99	92,4	3.09	20,7	0.81	33,2	1.31	41,0	1.61

* G as part of thread size is ISO Designation for parallel thread.

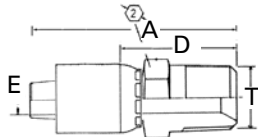
British Standard (BSPP) 60° Cone Female 90° Tube Elbow (BFB)



TTC Part #	Thd. T	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		①	
			mm	in	mm	in	mm	in	mm	in	mm	in
1A4BFB4	G 1/4-19*	-04	45,8	1.80	22,4	0.88	4,2	0.16	24,8	0.98	17,0	0.67
1A6BFB6	G 3/8-19*	-06	58,9	2.32	33,6	1.32	6,7	0.26	35,0	1.38	22,0	0.87
1A8BFB6	G 1/2-14*	-06	75,7	2.98	50,4	1.98	6,7	0.26	47,8	1.88	27,0	1.06
1A8BFB8	G 1/2-14*	-08	64,0	2.52	34,3	1.35	9,6	0.38	37,6	1.48	27,0	1.06
1A10BFB8	G 5/8-14*	-08	90,7	3.57	61,0	2.40	9,6	0.38	56,3	2.22	27,0	1.06
1A12BFB12	G 3/4-14*	-12	82,2	3.24	52,0	2.05	15,5	0.61	47,5	1.87	32,0	1.26
1A16BFB16	G 1-11*	-16	118,2	4.65	83,8	3.30	20,7	0.81	71,5	2.81	41,0	1.61

* G as part of thread size is ISO Designation for parallel thread.

British Standard (BSPT) Tapered Male Rigid (BT)



TTC Part #	Thd. T	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②	
			mm	in	mm	in	mm	in	mm	in
1A4BT4	R 1/4-19*	-04	50,6	1.99	27,2	1.07	4,2	0.16	14,0	0.55
1A6BT6	R 3/8-19*	-06	54,9	2.16	29,6	1.16	6,7	0.26	19,0	0.75
1A8BT8	R 1/2-14*	-08	66,2	2.61	36,5	1.44	9,6	0.38	22,0	0.87
1A12BT12	R 3/4-14*	-12	71,1	2.80	40,9	1.61	15,5	0.61	30,0	1.18
1A16BT16	R 1-11*	-16	81,2	3.20	46,8	1.84	20,7	0.81	36,0	1.42

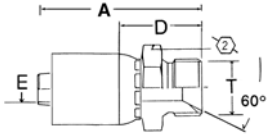
* R as part of thread size is ISO Designation for tapered thread.

See pages H12-15 for die, pusher, and cage information.
TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

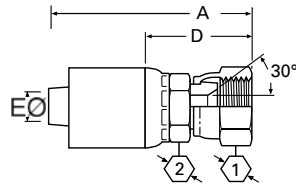
British Standard (BSSP) 60° Cone Male Rigid (BP)



TTC Part #	Thd. T	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②	
			mm	in	mm	in	mm	in	mm	in
1A4BP4	G 1/4-19*	-04	44,3	1.74	20,9	0.82	4,2	0.16	19,0	0.75
1A6BP6	G 3/8-19*	-06	48,4	1.90	23,1	0.91	6,7	0.26	22,0	0.87
1A6BP8	G 3/8-19*	-08	55,9	2.20	26,4	1.04	9,6	0.38	22,0	0.87
1A8BP6	G 1/2-14*	-06	52,4	2.06	27,1	1.07	6,7	0.26	27,0	1.06
1A8BP8	G 1/2-14*	-08	58,0	2.28	28,3	1.11	9,6	0.38	27,0	1.06
1A12BP12	G 3/4-14*	-12	63,1	2.48	32,9	1.29	15,5	0.61	32,0	1.26
1A16BP16	G 1-11*	-16	70,9	2.79	36,5	1.44	20,7	0.81	41,0	1.61

* G as part of thread size is ISO Designation for parallel thread.

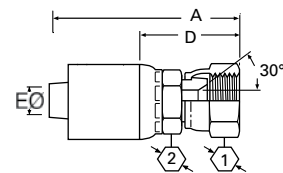
Female JIS 30° Flare Swivel Straight (JF)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①		②	
			mm	in	mm	in	mm	in	mm	in	mm	in
1A4JF4	G 1/4-19*	-04	53,2	2.09	29,8	1.17	4,2	0.16	19,0	0.75	19,0	0.75
1A6JF6	G 3/8-19*	-06	59,2	2.33	33,9	1.33	6,7	0.26	22,0	0.87	22,0	0.87
1A8JF8	G 1/2-14*	-08	66,3	2.61	36,6	1.44	9,6	0.38	27,0	1.06	27,0	1.06
1A12JF12	G 3/4-14*	-12	73,3	2.88	43,1	1.70	15,5	0.61	32,0	1.26	36,0	1.42
1A16JF16	G 1-11*	-16	83,6	3.29	49,2	1.94	20,7	0.81	41,0	1.61	41,0	1.61

* G as part of thread size is ISO Designation for parallel thread.

Female Swivel 30° Flare (KF) (Komatsu, Linkbelt)



TTC Part #	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①		②	
			mm	in	mm	in	mm	in	mm	in	mm	in
1A4KF4	M14 x 1.5	-04	56,1	2.21	32,7	1.29	42,2	1.66	19,0	0.75	19,0	0.75
1A6KF6	M18 x 1.5	-06	60,4	2.38	35,1	1.38	6,7	0.26	24,0	0.94	22,0	0.87
1A8KF8	M22 x 1.5	-08	69,5	2.74	39,8	1.57	9,6	0.38	27,0	1.06	27,0	1.06
1A12KF12	M30 x 1.5	-12	81,5	3.21	51,3	2.02	15,5	0.61	36,0	1.42	36,0	1.42
1A16KF16	M33 x 1.5	-16	91,4	3.60	57,0	2.24	20,7	0.81	41,0	1.61	41,0	1.61

See pages H12-15 for die, pusher, and cage information.

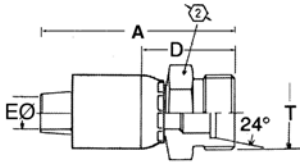
TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

Male DIN 24° Seat (DK)

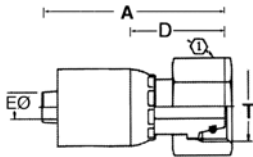
I.Rh (Light)



TTC Part #	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②	
				mm	in	mm	in	mm	in	mm	in
1A5DK4	M12 x 1.5	6	-04	44,7	1.76	21,3	0.84	4,2	0.16	12,0	0.47
1A6DK4	M14 x 1.5	8	-04	44,5	1.75	21,1	0.83	4,2	0.16	14,0	0.55
1A8DK4	M16 X 1.5	10	-04	46,0	1.81	22,6	0.89	4,3	0.17	17,0	0.67
1A8DK6	M16 x 1.5	10	-06	52,0	2.05	26,7	1.05	6,7	0.26	17,0	0.67
1A10DK6	M18 x 1.5	12	-06	49,0	1.93	23,7	0.93	6,7	0.26	19,0	0.75
1A12DK8	M22 x 1.5	15	-08	56,0	2.20	26,3	1.03	9,6	0.38	24,0	0.94
1A20DK12	M30 x 2.0	22	-12	62,0	2.44	31,8	1.25	15,5	0.61	32,0	1.26
1A25DK16	M36 x 2.0	28	-16	66,0	2.60	31,6	1.24	20,7	0.81	41,0	1.61

Female Swivel DIN 24° Seat (DS)

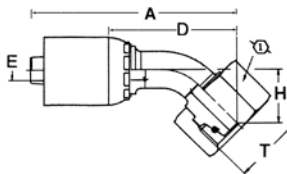
s.Rh DKO (Heavy)



TTC Part #	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①	
				mm	in	mm	in	mm	in	mm	in
1A5DS4	M16 x 1.5	8	-04	49,6	1.95	26,2	1.03	4,2	0.16	19,0	0.75
1A6DS4	M18 x 1.5	10	-04	50,8	2.00	27,4	1.08	4,2	0.16	22,0	0.87
1A8DS4	M20 X 1.5	12	-04	50,8	2.00	27,4	1.08	4,3	0.17	24,0	0.94
1A6DS6	M18 X 1.5	10	-06	52,8	2.08	27,7	1.09	6,6	0.26	27,0	1.06
1A8DS6	M20 x 1.5	12	-06	53,8	2.12	28,5	1.12	6,7	0.26	24,0	0.94
1A10DS6	M22 x 1.5	14	-06	56,9	2.24	31,6	1.24	6,7	0.26	27,0	1.06
1A10DS8	M22x1.5	14	-08	55,2	2.17	25,5	1.00	9,6	0.38	27,0	1.06
1A12DS8	M24 x 1.5	16	-08	62,4	2.46	32,7	1.29	9,6	0.38	30,0	1.18
1A20DS12	M36 x 2.0	25	-12	72,0	2.83	41,8	1.64	15,5	0.61	46,0	1.81
1A16DS12	M30 X 2.0	20	-12	60,2	2.37	30,2	1.19	14,0	0.55	36,0	1.42
1A25DS16	M42 x 2.0	30	-16	78,5	3.09	44,1	1.44	20,7	0.81	50,0	1.97

Female Swivel DIN 24° Seat 45° Tube Elbow (DSA)

s.Rh (Heavy)



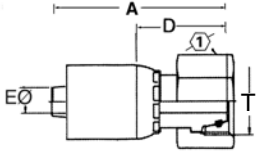
TTC Part #	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		①	
				mm	in	mm	in	mm	in	mm	in	mm	in
1A6DSA4	M18 x 1.5	10	-04	61,4	2.42	38,0	1.50	4,2	0.16	17,0	0.67	22,0	0.87
1A8DSA6	M20 x 1.5	12	-06	68,3	2.69	43,0	1.69	6,7	0.26	19,0	0.75	24,0	0.94
1A10DSA6	M22 x 1.5	14	-06	68,8	2.71	43,5	1.71	6,7	0.26	20,0	0.79	27,0	1.06
1A12DSA8	M24 x 1.5	16	-08	79,7	3.14	50,0	1.97	9,6	0.38	23,0	0.90	30,0	1.18
1A20DSA12	M36 x 2.0	25	-12	107,4	4.23	77,2	3.04	15,5	0.61	32,5	1.28	46,0	1.81
1A25DSA16	M42 x 2.0	30	-16	121,4	4.78	87,0	3.42	20,7	0.81	37,5	1.48	55,0	2.16

See pages H12-15 for die, pusher, and cage information.
TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

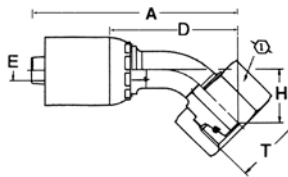
Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

Female Swivel DIN 24° Seat (DL) I.Rh DKO (Light)



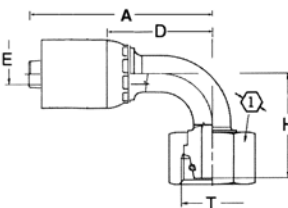
TTC Part #	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		1	
				mm	in	mm	in	mm	in	mm	in
1A5DL4	M12 x 1.5	6	-04	48,0	1.89	24,6	0.97	4,2	0.16	17,0	0.67
1A6DL4	M14 x 1.5	8	-04	46,0	1.81	22,6	0.89	4,2	0.16	17,0	0.67
1A8DL4	M16 x 1.5	10	-04	48,3	1.90	24,9	0.98	4,3	0.17	19,0	0.75
1A8DL6	M16 x 1.5	10	-06	56,9	2.24	31,6	1.24	6,7	0.26	19,0	0.75
1A10DL6	M18 x 1.5	12	-06	51,2	2.01	25,9	1.02	6,7	0.26	22,0	0.87
1A12DL8	M22 x 1.5	15	-08	58,3	2.29	28,6	1.12	9,6	0.38	27,0	1.06
1A20DL12	M30 x 2.0	22	-12	62,5	2.46	32,3	1.27	15,5	0.61	36,0	1.42
1A25DL16	M36 x 2.0	28	-16	68,2	2.68	33,8	1.33	20,7	0.81	41,0	1.61

Female Swivel DIN Universal Seat 45° Tube Elbow (DLA) I. Rh. (Light)



TTC Part #	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		1	
				mm	in	mm	in	mm	in	mm	in	mm	in
1A6DLA4	M14 X 1.5	8	-04	6,2	2.46	3,9	1.54	0,4	0.17	17,5	0.69	17,0	0.67
1A8DLA4	M16 X 1.5	10	-04	6,5	2.55	4,1	1.63	0,4	0.17	18,4	0.72	19,0	0.75
1A8DLA6	M16 X 1.5	10	-06	6,7	2.63	4,1	1.63	0,7	0.26	19,0	0.75	19,0	0.75
1A10DLA6	M18 X 1.5	12	-06	7,0	2.76	4,5	1.76	0,7	0.26	17,6	0.69	22,0	0.87
1A12DLA8	M22 X 1.5	15	-08	8,3	3.27	5,3	2.10	1,0	0.38	20,5	0.81	27,0	1.06
1A20DLA12	M30 X 2.0	22	-12	10,1	3.97	7,1	2.78	1,5	0.61	24,3	0.96	36,0	1.42
1A25DLA16	M36 X 2.0	28	-16	10,3	4.06	6,9	2.70	2,1	0.81	26,6	1.05	41,0	1.61

Female Swivel DIN Universal Seat 90° Tube Elbow (DLB) I. Rh. (Light)



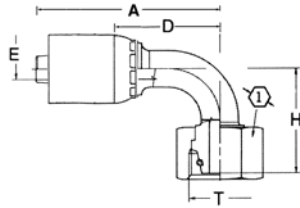
TTC Part #	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		1	
				mm	in	mm	in	mm	in	mm	in	mm	in
1A6DLB4	M14 x 1.5	8	-04	51,1	2.01	27,7	1.09	4,3	0.17	31,5	1.24	17,0	0.67
1A8DLB4	M16 x 1.5	10	-04	55,4	2.18	32,0	1.26	4,3	0.17	35,5	1.40	19,0	0.75
1A8DLB6	M16 x 1.5	10	-06	58,4	2.30	33,5	1.32	6,6	0.26	33,5	1.32	19,0	0.75
1A10DLB6	M18 x 1.5	12	-06	59,7	2.35	34,5	1.36	6,6	0.26	34,2	1.35	22,0	0.87
1A12DLB8	M22 x 1.5	15	-08	75,2	2.96	45,7	1.80	9,7	0.38	40,0	1.57	27,0	1.06
1A20DLB12	M30 x 2.0	22	-12	92,5	3.64	62,2	2.45	15,5	0.61	50,7	2.00	36,0	1.42
1A25DLB16	M36 x 2.0	28	-16	100,1	3.94	65,5	2.58	20,6	0.81	61,0	2.40	41,0	1.61

See pages H12-15 for die, pusher, and cage information.
TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

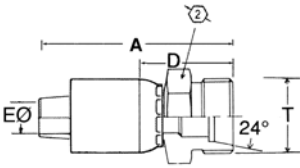
Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

Female Swivel DIN 24° Seat 90° Tube Elbow (DSB) s.Rh DKO (Heavy)



TTC Part #	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		①	
				mm	in	mm	in	mm	in	mm	in	mm	in
1A6DSB4	M18 x 1.5	10	-04	54,5	2.14	31,0	1.22	4,2	0.16	33,5	1.32	22,0	0.87
1A8DSB6	M20 x 1.5	12	-06	60,3	2.37	35,0	1.38	6,7	0.26	35,0	1.38	24,0	0.94
1A10DSB6	M22 x 1.5	14	-06	63,8	2.51	38,5	1.51	6,7	0.26	42,0	1.65	27,0	1.06
1A12DSB8	M24 x 1.5	16	-08	73,7	2.90	44,0	1.73	9,6	0.38	49,0	1.93	30,0	1.18
1A20DSB12	M36 x 2.0	25	-12	93,0	3.66	62,8	2.47	15,5	0.61	64,5	2.54	46,0	1.81
1A25DSB16	M42 x 2.0	30	-16	104,0	4.09	69,6	2.74	20,7	0.81	74,0	2.91	50,0	1.97

Male DIN 24° Seat (EK) s.Rh (Heavy)



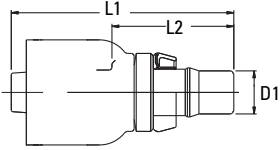
TTC Part #	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②	
				mm	in	mm	in	mm	in	mm	in
1A4EK4	M12 x 1.5	6	-04	44,7	1.76	21,3	0.84	4,2	0.16	12,0	0.47
1A5EK4	M16 x 1.5	8	-04	47,5	1.87	24,1	0.95	4,2	0.16	17,0	0.67
1A6EK4	M18 x 1.5	10	-04	40,7	1.60	23,6	0.93	4,2	0.16	19,0	0.75
1A6EK6	M18 X 1.5	10	-06	49,5	1.95	24,1	0.95	6,7	0.26	19,0	0.75
1A8EK6	M20 x 1.5	12	-06	50,3	1.98	25,0	0.98	6,7	0.26	22,0	0.87
1A10EK6	M22 x 1.5	14	-06	52,6	2.07	27,3	1.07	6,7	0.26	24,0	0.94
1A12EK8	M24 x 1.5	16	-08	58,0	2.28	28,3	1.11	9,6	0.38	27,0	1.06
1A16EK12	M30 X 2.0	20	-12	57,7	2.27	30,7	1.21	15,5	0.61	32,0	1.26
1A20EK12	M36 x 2.0	25	-12	65,5	2.58	35,3	1.39	15,5	0.61	41,0	1.61
1A25EK16	M42 x 2.0	30	-16	72,3	2.85	37,9	1.49	20,7	0.81	46,0	1.81

See pages H12-15 for die, pusher, and cage information.
TTC fittings for Aeroquip customers only.

TTC Permanent Crimp Fittings (With Sleeve)

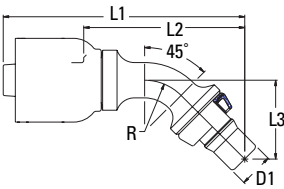
Fittings with sleeve for use with hose: 3130 (-04 to -16), 3740 (-12 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16)

Straight Male STC Hose End (MC)



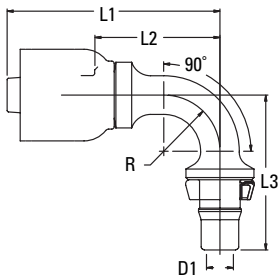
TTC Part #	D1		L1		L2	
	mm	in	mm	in	mm	in
1A6MC4	4,2	0.17	52,4	2.06	29,0	1.14
1A6MC6	6,7	0.26	55,5	2.19	30,2	1.19
1A8MC6	6,7	0.26	60,6	2.39	35,4	1.39
1A8MC8	9,6	0.38	66,3	2.61	36,6	1.44
1A12MC12	15,5	0.61	74,6	2.94	44,4	1.75
1A16MC16	0,7	0.82	83,7	3.30	49,3	1.94

45° Male STC Hose End (MCA)



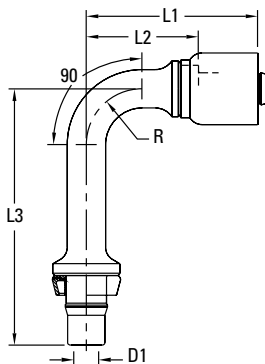
TTC Part #	D1		L1		L2		L3		R	
	mm	in	mm	in	mm	in	mm	in	mm	in
1A6MCA4	4,2	0.17	69,8	2.75	46,4	1.83	22,2	0.86	14,0	0.55
1A6MCA6	6,7	0.26	72,9	2.87	47,6	1.87	22,2	0.87	14,0	0.55
1A8MCA8	8,8	0.35	89,9	3.54	60,2	2.37	29,6	1.17	19,0	0.75
1A12MCA12	13,9	0.55	110,2	4.34	80,0	3.15	40,7	1.60	31,0	1.22

90° Male STC Hose End (MCB)



TTC Part #	D1		L1		L2		L3		R	
	mm	in	mm	in	mm	in	mm	in	mm	in
1A6MCB6	6,7	0.26	59,3	2.33	34,0	1.34	39,6	1.56	14,0	0.55
1A8MCB6	6,7	0.26	66,4	2.61	41,1	1.62	53,0	2.09	19,0	0.75
1A8MCB8	8,8	0.35	72,0	2.83	42,3	1.67	53,0	2.09	19,0	0.75
1A12MCB12	13,9	0.55	88,7	3.49	58,5	2.30	75,7	2.98	31,0	1.22
1A16MCB16	19,9	0.78	107,3	4.22	72,9	2.87	90,0	3.54	38,0	1.50

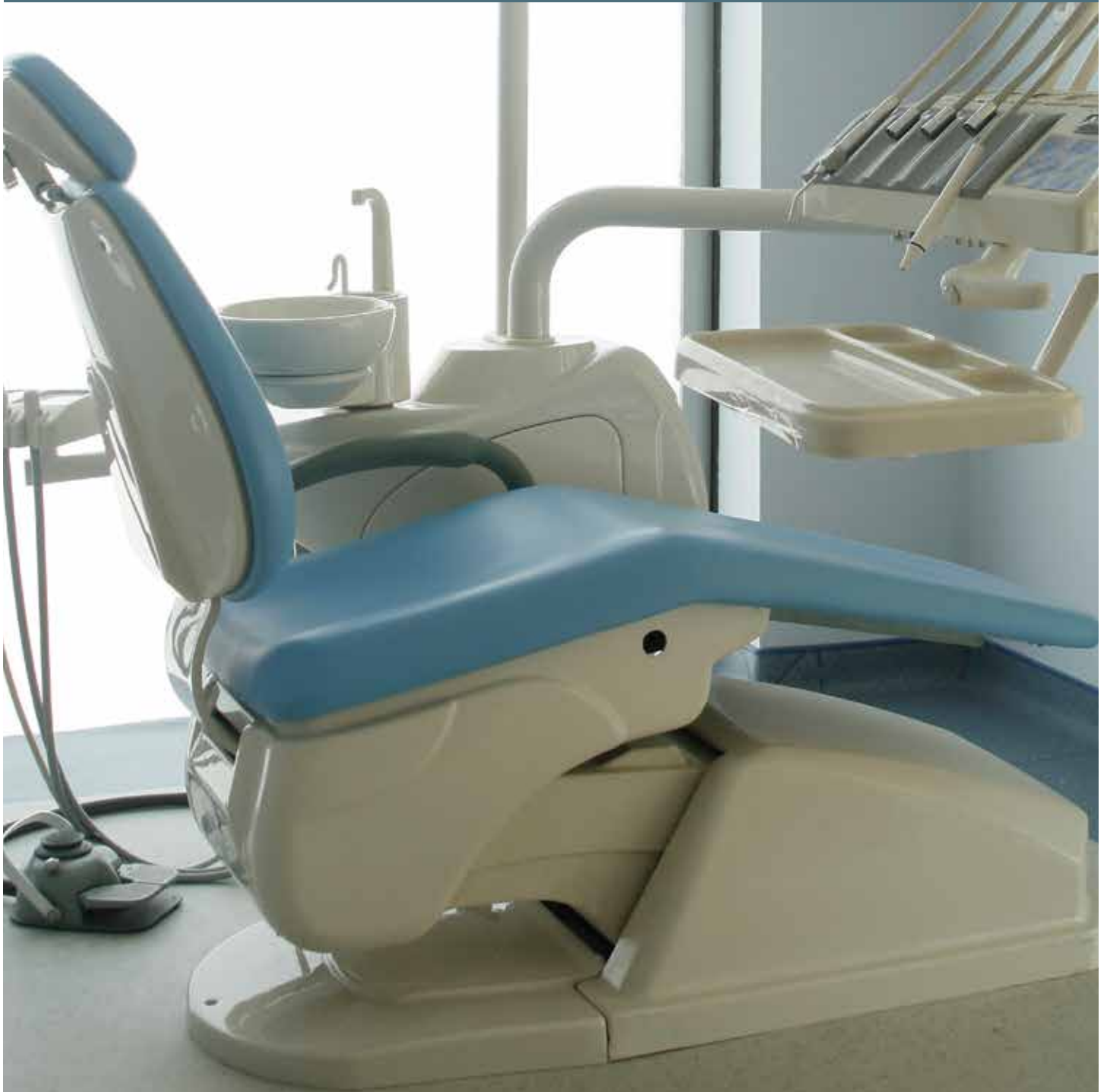
Long Drop 90° Male STC Hose End (MCC)



TTC Part #	D1		L1		L2		L3		R	
	mm	in	mm	in	mm	in	mm	in	mm	in
1A6MCC6	6,4	0.25	59,3	2.33	34,0	1.34	70,6	2.78	14,0	0.55
1A8MCC8	9,1	0.36	72,0	2.84	42,3	1.67	88,1	3.46	19,0	0.75
1A12MCC12	13,9	0.55	88,7	3.49	58,5	2.30	123,7	4.87	31,0	1.22

See pages H12-15 for die, pusher, and cage information.
TTC fittings for Aeroquip customers only.

Synflex Fittings



GENERAL
INFORMATION

HYDRAULIC
HOSE

AIR & WATER HOSE
& TUBING

TRUCK
HOSE

AEROQUIP/POLYON
FITTINGS

AEROQUIP/TTC
FITTINGS

**SYNFLEX
FITTINGS**

WEATHERHEAD
(U & Z SERIES)
FITTINGS

ASSEMBLY
EQUIPMENT &
INFORMATION

TECHNICAL
DATA

Hose Fitting Selection

GENERAL INFORMATION

HYDRAULIC HOSE

AIR & WATER HOSE & TUBING

TRUCK HOSE

AEROCOUP/POLYON FITTINGS

AEROCOUP/TTC FITTINGS

SYNFLEX FITTINGS

WEATHERHEAD (U & Z SERIES) FITTINGS

ASSEMBLY EQUIPMENT & INFORMATION

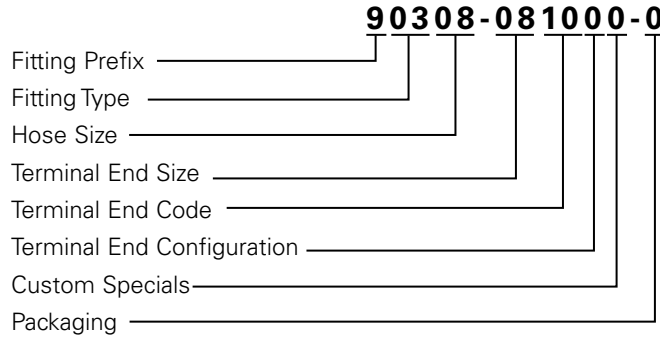
TECHNICAL DATA

Fitting Series	Permanent	Reusable	Hose Series and Dash Size Range*
Zinc Plated Carbon Steel			
903	•		3R30, 3130, 3740 (-12 to -16), 37AL, 3580, 25CT, 30CT (-04 to -08), 3630 (-03 to -12), 3440 (-04 to -08), 3800 (-03 to -08)
90H	•		3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)
90N	•		30CT (-10), 3360
90V	•		3V10, 3VE0
902		•	37AL
Stainless Steel			
90A	•		3R30, 3130, 3740, 37AL, 3580, 30CT (-03 to -08), 3750, 3800, 3630 (-03 to -12), 34PW (-04 to -08), 3800, 25CT, 3440 (-04 to -08)
90L	•		3R80 (-03 to -16), 3E80 (-03 to -16), 3630 (-16), 34PW (-12 to -16), 3440 (-12 & -16, 34BA (-06)
90V (-C05)	•		3V10, 3VE0
908		•	37AL
9CV	•		3V10, 3VE0
Monel			
90P**	•		3R30, 3130, 3580, 37B0, 37AL, 3800, 30CT (-04 to -06), 3630 (-03 to -12)
90S**	•		3630 (-16), 3R80, 3E80
Brass			
390C	•		3630 (-03 to -12)
904		•	37AL
9C6	•		3130, 3740

* Dash Size = Hose I.D. in 16th of one inch. Example: -03 = 3/16 inch I.D.

** Contact Eaton customer service for availability and fitting configurations.

A fitting part number is composed of several different elements, all combined to make the final number. The following is a diagram of a fitting part number and the elements that go into creating that number:



The fitting prefix plus the fitting type becomes the fitting series. This is followed by the hose size. Then a dash separates the hose size from the end connection size. The terminal end code (may use first two digits of old terminal end code) is followed by a configuration code, which defines the orientation of the fitting. A digit for customer specials follows that. Another dash separates the packaging code from the number.

Fitting Prefix

The fitting prefix is the easiest part of the fitting part number to determine. It is always 9. If a part number begins with “9” you know it is a fitting number.

Fitting Type

There are many different fitting types. They are represented by the second and third digit in the fitting part number.

Chart 1 on page F4 shows the part number character code that corresponds to the fitting type.

Hose Size

These are the fourth and fifth digits in the fitting part number. The hose size code is the diameter of the hose in sixteenths of an inch. In this example, the **code 08** indicates a 1/2” hose diameter, since 8/16” is equal to 1/2 inch. All existing fitting series have fractional hose sizes.

If metric hose sizes become available the two digit diameter code would represent the diameter of the hose in millimeters. 16 = 16mm.

Customer Specials Suffix

Alpha-numeric consecutive suffix. Zero (0) denotes a standard part. M denotes marking with old part number for military purposes.

Packaging

Alpha or numeric code to denote shipping or pack quantity.

Terminal End Configuration

In order to determine the terminal end orientation the terminal end configuration code is assigned. It is the tenth digit in the fitting part number. The configuration code is new to the part numbering system. It reduces the number of end connection codes needed.

Chart 2 below shows the terminal end configuration code.

Chart 2

Code	Configuration
0	Straight
2	22.5° Bend
3	30° Bend
4	45° Bend
5	135° Bend
6	60° Bend
7	67.5° Bend
9	90° Bent tube (no short or long reference)
A	Angle to be specified on print (special)
B	90° Block
E	Long Neck (machined bar or tube)
H	Bulkhead
L	90° Bend, long drop
M	Multiple bends
S	90° Bend, short drop

Terminal End Code

The end connection code defines the style of the terminal end on the fitting. Along with the configuration code it may replace some previous end connection codes.

Chart 3 on pages F5-6 lists the end connection codes. It also shows the terminal end configuration code, and the resultant code. The former code is shown for reference.

Example:

To find the last six digits using the connection type code, end connection configuration code, and the end connector size, simply arrange the codes in the correct order.

Chart 1

Code	Description	Code	Description
01	Reusable, plated steel, medium pressure	0P	Permanently attached, all Monel, medium pressure, 03 style
02	Reusable, plated steel, medium pressure, for 37NC nonconductive hose	0R	Permanently attached, 303/304 stainless, medium pressure 03 style
03	Permanently attached, plated steel, medium pressure	0S	Permanently attached, all Monel, 3R80; OH style
04	Reusable, brass, medium pressure	0T	Permanently attached, Brass, low pressure, trepanned, 3600 hose
05	Permanently attached, brass, high pressure, for breathing gas hose	0V	Permanently attached, plated steel, very high pressure hose
06	Permanently attached, brass, medium pressure, purchased	0W	Permanently attached, plated steel, tube o-ring, refrigerant hose
07	Reusable, 303/304 stainless steel insert, steel shell, 01 style	2V	Permanently attached 316 stainless steel, high pressure, 3390 hose
08	Reusable, 303/304 stainless steel, medium pressure, 01 style	7H	Permanently attached, plated steel, high pressure - metric, BSP, JIS, (non-domestic ends)
09	Reusable, brass, 34MS-05 hose	7N	P/A plated steel, 3350/3360 hose - metric, BSP, JIS, (non-domestic ends)
10	Barbed brass, low pressure	8E	P/A, 316 plated steel, Monel or mild steel, 38LV hose
11	Barbed brass, low pressure	A3	Permanently attached, plated steel, medium pressure
12	P/A, plated steel, medium pressure, 1000 series hose	A4	Permanently attached, Monel, 33CP hose, 904 style
13	P/A, brass, medium pressure, trepanned, swaged	A5	Permanently attached, Monel, 3410 hose, very high pressure, 925 style
53	P/A, plated steel, medium pressure, crimped	A6	Permanently attached, Monel, 3700, 3131, 3000 medium pressure, 926 style
54	P/A, plated steel, Monel, or stainless, 33CP hose	B3	Permanently attached, Monel, 3LVE, 38LV hose, 924 style
55	P/A, plated steel, medium pressure eyeletless crimped, 3420 & 3421 hose	B4	Permanently attached, Monel, 100R8, high pressure, 923 style
56	P/A, 316 plated steel, Monel, or mild steel, 38HW hose	C2	Reusable, 316 stainless, medium pressure, 37AL nonconductive hose, 902 style
73	P/A, plated steel, medium pressure - metric, BSP, JIS, (non-domestic ends)	C4	Permanently attached, stainless steel, 33CP hose, 904 style
0A	Permanently attached, 316 stainless, 903 style	C6	Permanently attached, brass, medium pressure crimp only
0B	Permanently attached, zinc phosphated, 903 style	E2	Reusable, 303/304 stainless, medium pressure, 37AL nonconductive hose, 902 style
0C	Permanently attached, with ferrule, all brass, 3600 & 3630 hose	G3	Permanently attached, plated steel, medium pressure
0D	Permanently attached, Chrome plated brass, low press. Breathing gas hose 3270	AE	Permanently attached, Monel, very high pressure, 902 style
0E	Permanently attached, plated steel, monel or stainless steel, 3LVE hose	AV	Permanently attached, very high pressure, 902 style
0G	Permanently attached, plated steel, medium pressure	CE	Permanently attached, 316 stainless steel, 3LVE hose, 90E style
0H	Permanently attached, plated steel, high pressure	CN	Permanently attached, 316 stainless steel, 3350/3360 hose, 90N style
0J	Reusable, plated steel, high pressure	CV	Permanently attached, 316 stainless steel, very high pressure, 90V style
0K	Reusable, 303/304 stainless steel, high pressure, 0J style	DE	Permanently attached, 316 stainless steel, 38LV hose, 98E style
0L	Permanently attached, 316 stainless steel, high pressure, OH style		
0M	Permanently attached, plated steel, medium pressure, 3500 hose		
0N	Permanently attached, plated steel, 3350 & 3360 hose		

Chart 3 - End Connection Codes

Terminal End Code	Terminal End Configuration	Terminal End & Configuration	Former Code	Description
G0	0	G00	G00	Tube O-ring, Female Swivel, Straight Tube
G0	4	G04	G40	Tube O-ring, Female Swivel, 45° Bent Tube
G0	9	G09	G70	Tube O-ring, Female Swivel, 90° Bent Tube
H0	0	H00	H00	Flange Seal, 34F1 & 34F2 Hose
H4	0	H40	H40	Triple 30° Flare Cone
J0	0	J00	J00	Tube Shank End or Straight Tube, Fractional size
JL	0	JL0	J-XX0	Female Swivel, O-ring, metric thread, light duty (DK0)
JL	4	JL4	J-XX3	Female Swivel, O-ring, metric thread, light duty, 45° tube
JL	9	JL9	J-XX1	Female Swivel, O-ring, metric thread, light duty, 90° tube
JS	0	JS0	J-XX0	Female Swivel, O-ring, metric thread, heavy duty (DK0)
JS	4	JS4	J-XX3	Female Swivel, O-ring, metric thread, heavy duty, 45° tube
JS	9	JS9	J-XX1	Female Swivel, O-ring, metric thread, heavy duty, 90° tube
K4	0	K40	K40	SAE Male Flareless, Rigid
L0	0	L00	L00	Globe Seal -DIN 3902
L1	0	L10	L00	SAE Flareless Female Swivel
L4	0	L40	L40	Flange Head, Straight Tube
L4	2	L42	M00	Flange Head, 22-1/2° Bent Tube
L4	3	L43	N70	Flange Head, 30° Bent Tube
L4	4	L44	M40	Flange Head, 45° Bent Tube
L4	6	L46	P00	Flange Head, 60° Bent Tube
L4	9	L49	N40	Flange Head, 90° Bent Tube
MA	0	MA0	MFS-400	Male O-ring face seal, SAE J1453, style A (straight groove)
MB	0	MB0	MFS-XXX	Male O-ring face seal, SAE J1453, style B (dovetail groove)
N0	0	N00	N00	Metric Standpipe N Series
N0	4	N04	N-300	Metric Standpipe, N Series, 45° Bent Tube
N0	9	N09	N-100	Metric Standpipe, N Series, 90° Bent Tube
R0	0	R00	R00	SAE 45° Inverted Flare Female Rigid
R1	0	R10	Q	BSP Male Rigid, 60° female seat
SL	0	SL0	S	Male Rigid, metric, low pressure (DK0 male)
S0	0	S00	-	SAE J512 Tube Connection
SS	0	SS0	S	Male Rigid, metric, high pressure (DK0 male)
S7	0	S70	S70	Female Swivel Nut, Spool with O-ring-Air Breathing Apparatus
T4	0	T40	T40	JIC 37° Female Swivel, Straight tube
T7	0	T70	T70	JIC 37° Female Swivel, Spool with O-ring, Orifice
V0	0	V00	V00	BSP Female Swivel, 60° Female Cone
V4	0	V40	V40	BSP Female Swivel, 60° Male Cone
VC	0	VC0	-	VCO for female swivel
W0	0	W00	W00	Splice Connector, Field Attachable, Consists of two couplings joined with an adapter
W4	0	W40	W40	Splice Connector, In-house Attachable
W7	0	W70	W70	Splice Connector, Field Attachable (left and right hand thread)
Z0	0	Z00	Z00	Fillet weld Socket Joint

Chart reference is located on page F-2.

Chart 3 - End Connection Codes

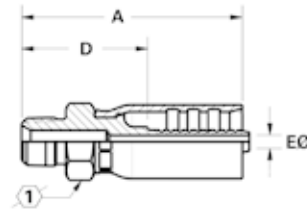
Terminal End Code	Terminal End Configuration	Terminal End & Configuration	Former Code	Description
10	0	100	100	Male Pipe Rigid
14	0	140	140	Male Pipe Swivel
14	B	14B	270	Male Pipe Swivel, 90° Block
20	0	200	200	Female NPT Rigid
24	0	240	240	30° Female Inverted Flare (NPSM)
40	0	400	400	O-Ring Face Seal, (SAE Proposal), Straight
40	4	404	440	O-Ring Face Seal, 45°, Bent Tube
40	S	40S	470	O-Ring Face Seal, 90°, (Short) Bent Tube
40	L	40L	670	O-Ring Face Seal, 90°, (Long) Bent Tube
50	0	500	500	JIC 37° Male Rigid
54	0	540	540	JIC 37° Female Swivel (some SAE 45° Female swivels), Dual Seat
55	0	550	540	JIC 37° Female Swivel, Single Seat
55	4	554	600	JIC 37° Female Swivel, 45° Bent Tube
55	E	55E	T40	JIC 37° Female Swivel, Straight Tube
55	2	552	740	JIC 37° Female Swivel, 22-1/2° Bent Tube
55	5	555	770	JIC 37° Female Swivel, 135° Bent Tube
55	7	557	800	JIC 37° Female Swivel, 67-1/2° Bent Tube
55	L	55L	840	JIC 37° Female Swivel, 90° (Long) Bent Tube
55	S	55S	640	JIC 37° Female Swivel, 90° (Short) Bent Tube
55	3	553	870	JIC 37° Female Swivel, 30° Bent Tube
55	6	556	900	JIC 37° Female Swivel, 60° Bent Tube
57	0	570	570	JIC 37° Male Swivel
94	0	940	940	SAE 45° Male Rigid
A0	0	A00	A00	SAE 45° Female Swivel
A0	4	A04	A40	SAE 45° Female Swivel 45°, Bent Tube
A0	9	A09	B40	SAE 45° Female Swivel, 90°, Bent Tube
A0	E	A0E	B70	SAE 45° Female Swivel, Straight tube
A0	L	A0L	C00	SAE 45° Female Swivel, 90° (Long) Bent Tube
AL	0	AL0	-	Alger quick disconnect
B0	0	B00	B	BSP Female Swivel, 60° Male Cone
B0	4	B04	B-300	BSP Female Swivel, 60° Male Cone, 45° Bent Tube
B0	9	B09	B-100	BSP Female Swivel, 60° Male Cone, 90° Bent Tube
B0	B	B0B	B-600	BSP Female Swivel, 60° Male Cone, 90° Block
BM	0	BM0	BM00	DIN 7642 Metric Banjo
C4	0	C40	Q40	SAE 45° Inverted Flare Male Swivel
C4	4	C44	C40	SAE 45° Inverted Flare Male Swivel, 45° Bent Tube
C4	9	C49	C70	SAE 45° Inverted Flare Male Swivel, 90° Bent Tube
CG	0	CG0	-	CGA connection
CP	0	CP0	-	CPV for female swivel
D0	0	D00	D00	Male O-ring Straight Thread, Rigid
D4	0	D40	D40	Male O-ring Swivel, Straight Thread, Swivel
D4	B	D4B	E70	Male O-ring Swivel, Straight Thread, 90° Block
F7	0	F70	F70	Oxygen, Style B, Female Swivel
FC	0	FC0	-	Autoclave female, medium pressure
GF	0	GF0	GHF	Garden Hose, Female Swivel
GM	0	GM0	GHM	Garden Hose, Male Rigid
GS	0	GS0	GHS	Garden Hose Fitting Set

Chart reference is located on page F-2.

Synflex Permanent Swage Fittings

Male Pipe (903)

903 fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3580, 3440 (-04 to -08), 30CT (-04 to -08)

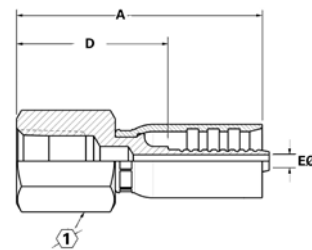


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
90302-021000-0	-02	1/8-27	3	-02	33,0	1.30	19,1	0.75	1,8	0.07	1/2	--
90302-041000-0	-04	1/4-18	3	-02	37,6	1.48	23,8	0.94	1,8	0.07	5/8	--
90303-021000-0	-02	1/8-27	5	-03	47,5	1.87	27,0	1.06	2,8	0.11	9/16	--
90303-041000-0	-04	1/4-18	5	-03	52,3	2.06	31,8	1.25	2,8	0.11	11/16	--
90303-061000-0‡	-06	3/8-18	5	-03	54,6	2.15	35,1	1.38	2,8	0.11	3/4	--
90304-021000-0	-02	1/8-27	6	-04	53,8	2.12	25,4	1.00	4,1	0.16	5/8	--
90304-041000-0	-04	1/4-18	6	-04	58,7	2.31	30,2	1.19	4,1	0.16	11/16	--
90304-061000-0	-06	3/8-18	6	-04	61,0	2.40	33,3	1.31	4,1	0.16	3/4	--
90305-041000-0	-04	1/4-18	8	-05	58,7	2.31	30,2	1.19	5,6	0.22	11/16	--
90305-061000-0	-06	3/8-18	8	-05	61,0	2.40	31,8	1.25	5,6	0.22	3/4	--
90306-041000-0	-04	1/4-18	10	-06	65,8	2.59	33,3	1.31	7,1	0.28	3/4	--
90306-061000-0	-06	3/8-18	10	-06	65,8	2.59	33,3	1.31	7,1	0.28	3/4	--
90306-081000-0	-08	1/2-14	10	-06	72,1	2.84	36,6	1.44	7,1	0.28	15/16	--
90308-061000-0	-06	3/8-18	12	-08	70,6	2.78	33,3	1.31	10,2	0.40	7/8	--
90308-081000-0	-08	1/2-14	12	-08	77,0	3.03	38,1	1.50	10,2	0.40	15/16	--
90312-121000-0	-12	3/4-14	19	-12	81,5	3.21	41,4	1.63	16,0	0.63	1-1/8	--
90316-161000-0	-16	1-11-1/2	25	-16	100,6	3.96	47,8	1.88	20,6	0.81	1-3/8	--

‡Run-to-order product. Contact your Eaton customer service representative for details.

Female Pipe (903)

903 fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3580, 3440 (-04 to -08), 30CT (-04 to -08)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
90304-042000-0	-04	1/4-18	6	-04	59,4	2.34	31,8	1.25	4,0	0.16	3/4	--
90304-062000-0‡	-06	3/8-18	6	-04	61,8	2.43	33,3	1.31	4,0	0.16	7/8	--
90306-062000-0‡	-06	3/8-18	10	-06	66,6	2.62	35,1	1.38	7,1	0.28	7/8	--
90308-082000-0‡	-08	1/2-14	12	-08	75,3	2.96	38,1	1.50	9,9	0.39	1-1/16	--

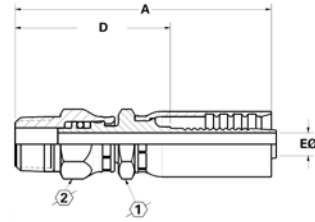
‡Run-to-order product. Contact your Eaton customer service representative for details.

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Male Pipe Swivel (903)

903 fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3580, 3440 (-04 to -08), 30CT (-04 to -08)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90302-021400-0	-02	1/8-27	3	-02	48,3	1.90	49,3	1.94	2,0	0.08	1/2	1/2
90303-041400-0	-04	1/4-18	5	-03	67,1	2.64	46,0	1.81	2,8	0.11	5/8	11/16
90304-041400-0	-04	1/4-18	6	-04	73,2	2.88	46,0	1.81	4,1	0.16	5/8	11/16
90305-041400-0	-04	1/4-18	8	-05	73,2	2.88	44,5	1.75	5,6	0.22	5/8	11/16
90306-061400-0	-06	3/8-18	10	-06	80,5	3.17	49,3	1.94	7,1	0.28	3/4	3/4
90306-081400-0‡	-08	1/2-14	10	-06	85,3	3.36	54,1	2.13	7,1	0.28	3/4	7/8
90308-081400-0	-08	1/2-14	12	-08	91,7	3.61	54,1	2.13	9,9	0.39	7/8	15/16
90312-121400-0	-12	3/4-14	19	-12	98,0	3.86	55,6	2.19	15,2	0.60	1-1/8	1-1/8
90316-161400-0‡	-16	1-11-1/2	25	-16	118,6	4.67	66,8	2.63	20,6	0.81	1-3/8	1-1/2

‡Run-to-order product. Contact your Eaton customer service representative for details.

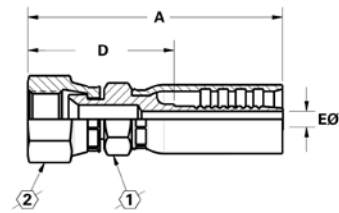
GENERAL INFORMATION
 HYDRAULIC HOSE
 AIR & WATER HOSE & TUBING
 TRUCK HOSE
 AEROCOUP/POLYON FITTINGS
 AEROCOUP/TTC FITTINGS
 SYNIFLEX FITTINGS
 WEATHERHEAD (U & Z SERIES) FITTINGS
 ASSEMBLY EQUIPMENT & INFORMATION
 TECHNICAL DATA

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Female JIC/SAE 37° Swivel (903)

903 fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3580, 3440 (-04 to -08), 30CT (-04 to -08)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90302-035500-0	-03	3/8 - 24	3	-02	40,9	1.61	26,9	1.06	2,0	0.08	1/2	9/16
90302-045400-0	-04	7/16 - 20	3	-02	43,2	1.70	26,9	1.06	2,0	0.08	1/2	5/8
90302-055400-0#	-05	1/2 - 20	3	-02	42,7	1.68	26,9	1.06	2,0	0.08	1/2	3/4
90303-035400-0#	-03	3/8 - 24	5	-03	54,6	2.15	33,3	1.31	2,8	0.11	9/16	9/16
90303-045400-0	-04	7/16 - 20	5	-03	54,6	2.15	35,1	1.38	2,8	0.11	9/16	5/8
90303-055400-0	-05	1/2 - 20	5	-03	54,6	2.15	35,1	1.38	2,8	0.11	9/16	3/4
90304-045400-0	-04	7/16 - 20	6	-04	64,3	2.53	36,6	1.44	4,1	0.16	5/8	5/8
90304-055400-0	-05	1/2 - 20	6	-04	64,3	2.53	36,6	1.44	4,1	0.16	5/8	3/4
90304-055403-0	-05	1/2 - 20	6	-04	64,3	2.53	36,6	1.44	4,1	0.16	5/8	5/8
90304-065500-0	-06	9/16 - 18	6	-04	64,5	2.54	36,6	1.44	4,1	0.16	5/8	3/4
90305-045400-0#	-04	7/16 - 20	8	-05	64,3	2.53	36,6	1.44	5,6	0.22	5/8	5/8
90305-055400-0	-05	1/2 - 20	8	-05	64,3	2.53	33,3	1.31	5,6	0.22	5/8	3/4
90305-065500-0	-06	9/16 - 18	8	-05	64,5	2.54	36,6	1.44	5,6	0.22	5/8	3/4
90306-045400-0#	-04	7/16 - 20	10	-06	68,1	2.68	36,6	1.44	7,1	0.28	13/16	5/8
90306-055400-0#	-05	1/2 - 20	10	-06	68,1	2.68	36,6	1.44	5,8	0.23	3/4	3/4
90306-065500-0	-06	9/16 - 18	10	-06	71,6	2.82	39,6	1.56	7,1	0.28	3/4	3/4
90306-085400-0	-08	3/4 - 16	10	-06	71,4	2.81	39,6	1.56	7,1	0.28	3/4	15/16
90306-105400-0#	-10	7/8 - 14	10	-06	75,2	2.96	42,9	1.69	7,1	0.28	7/8	1-1/16
90308-085400-0	-08	3/4 - 16	12	-08	80,0	3.15	41,4	1.63	9,9	0.39	7/8	15/16
90308-105400-0	-10	7/8 - 14	12	-08	80,0	3.15	41,4	1.63	9,9	0.39	7/8	1-1/16
90308-125500-0	-12	1-1/16 - 12	12	-08	82,6	3.25	44,5	1.75	9,9	0.39	1-1/8	1-1/4
90312-105400-0#	-10	7/8 - 14	19	-12	87,1	3.43	41,4	1.63	12,2	0.48	1-1/8	1-1/16
90312-125500-0	-12	1-1/16 - 12	19	-12	87,1	3.43	44,5	1.75	16,0	0.63	1-1/8	1-1/4
90312-145500-0#	-14	1-3/16 - 12	19	-12	88,6	3.49	42,9	1.69	16,0	0.63	1-3/8	1-1/2
90312-165500-0#	-16	1-5/16 - 12	19	-12	88,6	3.49	42,9	1.69	16,0	0.63	1-3/8	1-1/2
90316-165500-0	-16	1-5/16 - 12	25	-16	105,7	4.16	42,9	1.69	20,6	0.81	1-3/8	1-1/2

#Run-to-order product. Contact your Eaton customer service representative for details.

Torque Values

Hose Size	in lbs	
	Min	Max
-04	50	150
-05	70	200
-06	90	300
-08	150	500
-10	220	700
-12	300	1,000
-16	450	1,400

The maximum torques listed are based upon strength rather than sealing properties. Use of any torque within the minimum/maximum range will prevent damage or leakage.

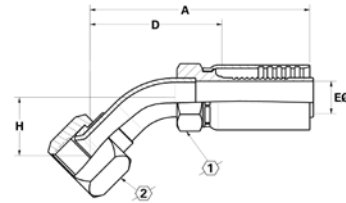
See pages H12-15 for die, pusher, and cage information.

GENERAL INFORMATION
HYDRAULIC HOSE
AIR & WATER HOSE & TUBING
TRUCK HOSE
AEROQUIP/POLYON FITTINGS
AEROQUIP/TTC FITTINGS
SYNFLEX FITTINGS
WEATHERHEAD (U & Z SERIES) FITTINGS
ASSEMBLY EQUIPMENT & INFORMATION
TECHNICAL DATA

Synflex Permanent Swage Fittings

Female JIC/SAE 37° Swivel 45° Elbow (903)

903 fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3580, 3440 (-04 to -08), 30CT (-04 to -08)

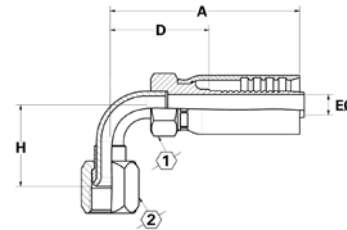


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		H		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
90303-045540-0‡	-04	7/16-20	5	-03	58,4	2.30	38,1	1.50	2,8	0.11	11,9	0.47	9/16	9/16
90304-045540-0‡	-04	7/16-20	6	-04	64,8	2.55	38,1	1.50	4,1	0.16	11,9	0.47	5/8	9/16
90304-055540-0‡	-05	1/2-20	6	-04	67,1	2.64	39,6	1.56	4,1	0.16	13,5	0.53	5/8	5/8
90304-065540-0‡	-06	9/16-18	6	-04	69,3	2.73	41,4	1.63	4,1	0.16	15,0	0.59	5/8	11/16
90305-065540-0	-06	9/16-18	8	-05	69,3	2.73	41,4	1.63	5,6	0.22	15,0	0.59	5/8	11/16
90306-065540-0	-06	9/16-18	10	-06	74,2	2.92	42,9	1.69	7,1	0.28	15,0	0.59	3/4	11/16
90306-085540-0‡	-08	3/4-16	10	-06	78,7	3.10	47,8	1.88	7,1	0.28	18,0	0.71	3/4	7/8
90308-085540-0	-08	3/4-16	12	-08	83,3	3.28	46,0	1.81	9,9	0.39	18,0	0.71	7/8	7/8
90308-105540-0‡	-10	7/8-14	12	-08	87,9	3.46	49,3	1.94	9,9	0.39	21,3	0.84	7/8	1
90312-125540-0‡	-12	1-1/16-12	19	-12	108,2	4.26	65,3	2.57	16,0	0.63	28,4	1.12	1-1/8	1-1/4
90316-165540-0‡	-16	1-5/15-12	25	-16	125,7	4.95	73,2	2.88	20,6	0.81	29,2	1.15	1-3/8	1-1/2

‡Run-to-order product. Contact your Eaton customer service representative for details.

Female JIC/SAE 37° Swivel 90° Elbow (903)

903 fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3580, 3440 (-04 to -08), 30CT (-04 to -08)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		H		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
90302-0355S0-0‡	-03	3/8-24	3	-02	37,7	1.48	23,9	0.94	2,0	0.08	19,1	0.75	1/2	7/16
90302-0455S0-0‡	-04	7/16-20	3	-02	42,4	1.67	28,7	1.13	2,0	0.08	22,2	0.88	1/2	9/16
90303-0455S0-0	-04	7/16-20	5	-03	52,3	2.06	31,8	1.25	2,8	0.11	22,2	0.88	9/16	9/16
90304-0455S0-0	-04	7/16-20	6	-04	58,6	2.31	31,8	1.25	4,0	0.16	22,2	0.88	5/8	9/16
90304-0555S0-0	-05	1/2-20	6	-04	60,2	2.37	49,3	1.94	4,0	0.16	25,4	1.00	5/8	5/8
90304-0655S0-0	-06	9/16-18	6	-04	61,8	2.43	35,1	1.38	4,0	0.16	28,6	1.13	5/8	11/16
90305-0555S0-0‡	-05	1/2-20	8	-05	60,2	2.37	31,8	1.25	5,6	0.22	25,4	1.00	5/8	5/8
90305-0655S0-0	-06	9/16-18	8	-05	61,7	2.43	49,3	1.94	5,6	0.22	28,6	1.13	5/8	11/16
90306-0455S0-0‡	-04	7/16-20	10	-06	63,5	2.50	31,8	1.25	4,0	0.16	22,2	0.88	3/4	9/16
90306-0655S0-0	-06	9/16-18	10	-06	66,5	2.62	35,1	1.38	7,1	0.28	28,6	1.13	3/4	11/16
90306-0855S0-0	-08	3/4-16	10	-06	69,9	2.75	38,1	1.50	7,1	0.28	34,9	1.38	3/4	7/8
90308-0855S0-0	-08	3/4-16	12	-08	74,5	2.93	36,6	1.44	9,9	0.39	34,9	1.38	7/8	7/8
90308-1055S0-0	-10	7/8-14	12	-08	77,6	3.06	39,6	1.56	9,9	0.39	41,3	1.63	7/8	1
90312-1255S0-0‡	-12	1-1/16-12	19	-12	98,3	3.87	55,6	2.19	15,9	0.63	58,7	2.31	1-1/8	1-1/4
90316-1655S0-0‡	-16	1-5/15-12	25	-16	118,9	4.68	66,8	2.63	20,6	0.81	63,5	2.50	1-3/8	1-1/2

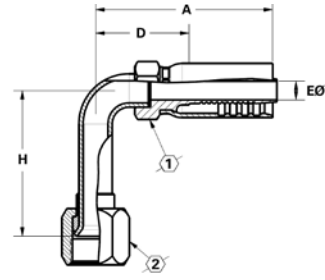
‡Run-to-order product. Contact your Eaton customer service representative for details.

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Female JIC/SAE 37° Swivel 90° Long Drop Elbow (903)

903 fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3580, 3440 (-04 to -08), 30CT (-04 to -08)

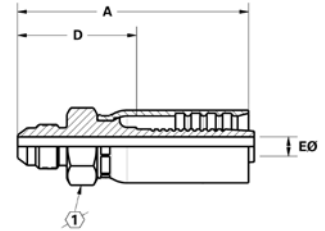


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		H		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
90303-0455L0-0‡	-04	7/16-20	5	-03	52,3	2.06	31,8	1.25	2,8	0.11	45,7	1.80	9/16	9/16
90304-0455L0-0	-04	7/16-20	6	-04	58,6	2.31	31,8	1.25	4,0	0.16	45,7	1.80	5/8	9/16
90304-0555L0-0‡	-05	1/2-20	6	-04	60,2	2.37	49,3	1.94	4,0	0.16	45,0	1.77	5/8	5/8
90304-0655L0-0‡	-06	9/16-18	6	-04	62,4	2.46	35,1	1.38	4,0	0.16	55,4	2.18	5/8	11/16
90305-0655L0-0	-06	9/16-18	8	-05	61,8	2.43	49,3	1.94	5,6	0.22	55,4	2.18	5/8	11/16
90306-0655L0-0	-06	9/16-18	10	-06	66,5	2.62	35,1	1.38	7,1	0.28	55,4	2.18	3/4	11/16
90306-0855L0-0	-08	3/4-16	10	-06	69,9	2.75	38,1	1.50	7,1	0.28	61,7	2.43	3/4	7/8
90308-0855L0-0	-08	3/4-16	12	-08	74,5	2.93	36,6	1.44	9,9	0.39	61,7	2.43	7/8	7/8
90308-1055L0-0	-10	7/8-14	12	-08	77,6	3.06	39,6	1.56	9,9	0.39	65,3	2.57	7/8	1
90312-1255L0-0‡	-12	1-1/16-12	19	-12	98,3	3.87	55,6	2.19	15,9	0.63	94,7	3.73	1-1/8	1-1/4
90316-1655L0-0‡	-16	1-5/16-12	25	-16	119,0	4.69	66,8	2.63	20,6	0.81	110,0	4.33	1-3/8	1-1/2

‡Run-to-order product. Contact your Eaton customer service representative for details.

Male JIC/SAE 37° (903)

903 fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3580, 3440 (-04 to -08), 30CT (-04 to -08)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90303-035000-0‡	-03	3/8-24	5	-03	50,1	1.97	30,2	1.19	2,8	0.11	9/16	--
90303-045000-0	-04	7/16-20	5	-03	51,9	2.05	31,8	1.25	2,8	0.11	9/16	--
90304-045000-0	-04	7/16-20	6	-04	58,3	2.30	31,8	1.25	4,0	0.16	5/8	--
90304-055000-0‡	-05	1/2-20	6	-04	58,3	2.30	31,8	1.25	4,0	0.16	5/8	--
90304-065000-0	-06	9/16-18	6	-04	60,8	2.40	33,3	1.31	4,0	0.16	3/4	--
90305-055000-0	-05	1/2-20	8	-05	58,3	2.30	30,2	1.19	5,6	0.22	5/8	--
90305-065000-0	-06	9/16-18	8	-05	58,4	2.30	30,2	1.19	5,6	0.22	11/16	--
90306-065000-0	-06	9/16-18	10	-06	65,6	2.58	33,3	1.31	7,1	0.28	3/4	--
90306-085000-0	-08	3/4-16	10	-06	68,2	2.68	36,6	1.44	7,1	0.28	13/16	--
90308-085000-0	-08	3/4-16	12	-08	72,9	2.87	35,1	1.38	9,9	0.39	7/8	--
90308-105000-0	-10	7/8-14	12	-08	77,3	3.04	39,6	1.56	9,9	0.39	15/16	--
90308-125000-0‡	-12	1-1/16-12	12	-08	79,8	3.14	41,4	1.63	9,9	0.39	1-1/8	--
90312-125000-0‡	-12	1-1/16-12	19	-12	84,5	3.33	41,4	1.63	15,9	0.61	1-1/8	--
90316-165000-0‡	-16	1-5/16-12	25	-16	100,0	3.94	47,8	1.88	20,6	0.81	1-3/8	--

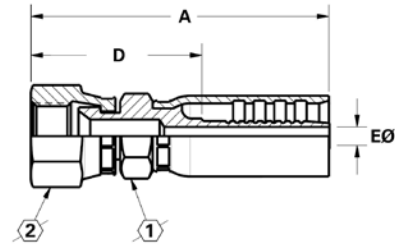
‡Run-to-order product. Contact your Eaton customer service representative for details.

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Female SAE 45° Swivel (903)

903 fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3580, 3440 (-04 to -08), 30CT (-04 to -08)

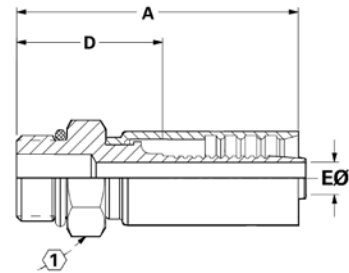


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90303-045400-0	-04	7/16-20	5	-03	54,6	2.15	35,1	1.38	2,8	0.11	9/16	5/8
90303-055400-0	-05	1/2-20	5	-03	54,6	2.15	35,1	1.38	2,8	0.11	9/16	3/4
90304-045400-0	-04	7/16-20	6	-04	64,2	2.53	36,6	1.44	4,0	0.16	5/8	5/8
90304-055400-0	-05	1/2-20	6	-04	64,2	2.53	36,6	1.44	4,0	0.16	5/8	3/4
90304-06A000-0‡	-06	5/8-18	6	-04	64,2	2.53	36,6	1.44	4,0	0.16	5/8	13/16
90305-055400-0	-05	1/2-20	8	-05	64,2	2.53	35,1	1.38	5,6	0.22	5/8	3/4
90305-06A000-0‡	-06	5/8-18	8	-05	64,2	2.53	35,1	1.38	5,6	0.22	5/8	13/16
90306-06A000-0	-06	5/8-18	10	-06	71,3	2.81	39,6	1.56	7,1	0.28	3/4	13/16
90306-085400-0	-08	3/4-16	10	-06	71,3	2.81	39,6	1.56	7,1	0.28	3/4	15/16
90308-085400-0	-08	3/4-16	12	-08	80,0	3.15	41,4	1.63	9,9	0.39	7/8	15/16
90308-105400-0	-10	7/8-14	12	-08	80,0	3.15	41,4	1.63	9,9	0.39	7/8	1-1/16
90312-12A000-0‡	-12	1-1/16-14	19	-12	87,2	3.43	44,5	1.75	15,9	0.63	1-1/8	1-1/4
90316-16A000-0‡	-16	1-3/8-12	25	-16	107,9	4.25	55,6	2.19	20,6	0.81	1-1/2	1-5/8

‡Run-to-order product. Contact your Eaton customer service representative for details.

Male Boss O-Ring (903)

903 fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3580, 3440 (-04 to -08), 30CT (-04 to -08)



DO NOT swage with o-ring installed

# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90303-04D000-0	-04	7/16-20	5	-03	48,0	1.89	26,9	1.06	2,8	.11	9/16	--
90304-04D000-0	-04	7/16-20	6	-04	53,5	2.11	26,2	1.03	4,0	0.16	5/8	--
90304-05D000-0	-05	1/2-20	6	-04	53,5	2.11	26,2	1.03	4,0	0.16	5/8	--
90304-06D000-0	-06	9/16-18	6	-04	54,3	2.14	26,9	1.06	4,0	0.16	11/16	--
90305-05D000-0‡	-05	1/2-20	8	-05	53,5	2.11	22,4	0.88	5,6	0.22	11/16	--
90306-06D000-0‡	-06	9/16-18	10	-06	61,4	2.42	29,5	1.16	7,1	0.28	3/4	--
90306-08D000-0‡	-08	3/4-16	10	-06	62,6	2.47	30,2	1.19	7,1	0.28	7/8	--
90308-08D000-0‡	-08	3/4-16	12	-08	68,9	2.71	27,7	1.09	9,9	0.39	15/16	--
90308-10D000-0‡	-10	7/8-14	16	-10	70,5	2.78	32,5	1.28	9,9	0.39	1-1/16	--

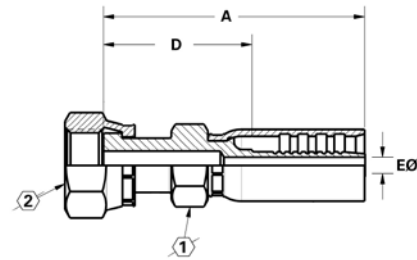
‡Run-to-order product. Contact your Eaton customer service representative for details.

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Female ORS Swivel (903)

903 fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3580, 3440 (-04 to -08), 30CT (-04 to -08)

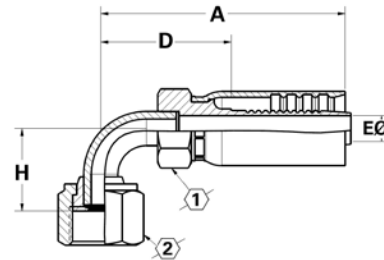


# Part Number	Terminal End Dash Size	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90302-044000-0#	-04	9/16-18	3	-02	45,2	1.78	31,0	1.22	2,0	0.08	5/8	11/16
90304-044000-0	-04	9/16-18	6	-04	66,0	2.60	38,6	1.52	4,0	0.16	5/8	11/16
90304-064000-0#	-06	11/16-16	6	-04	63,6	2.50	36,1	1.42	4,0	0.16	5/8	7/8
90305-044000-0#	-04	9/16-18	8	-05	66,0	2.60	37,5	1.48	5,6	0.22	5/8	11/16
90305-064000-0	-06	11/16-16	8	-05	67,8	2.67	39,2	1.55	9,5	0.38	5/8	13/16
90306-064000-0	-06	11/16-16	10	-06	68,3	2.69	36,6	1.44	6,9	0.27	3/4	7/8
90306-084000-0	-08	13/16-16	10	-06	77,2	3.04	45,4	1.79	6,9	0.27	3/4	15/16
90308-084000-0	-08	13/16-16	12	-08	77,7	3.06	39,8	1.57	9,7	0.38	15/16	1-1/16
90308-104000-0#	-10	1-14	12	-08	84,5	3.33	46,5	1.83	9,9	0.39	7/8	1-1/8
90312-124000-0	-12	1-3/16-12	19	-12	92,5	3.64	49,7	1.96	15,5	0.61	1-1/8	1-3/8
90316-164000-0#	-16	1-7/16-12	25	-16	110,7	4.36	55,1	2.17	20,6	0.81	1-3/8	1-5/8

#Run-to-order product. Contact your Eaton customer service representative for details.

Female ORS Swivel 90° Elbow Short Drop (903)

903 fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3580, 3440 (-04 to -08), 30CT (-04 to -08)



# Part Number	Terminal End Dash Size	Thread	Hose Size		A		D Cut Off Factor		E Ø		H		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
90302-0440S0-0#	-04	9/16-18	3	-02	42,6	1.68	28,7	1.13	2,0	0.08	19,8	0.78	1/2	11/16
90304-0440S0-0	-04	9/16-18	6	-04	58,8	2.31	31,8	1.25	4,0	0.16	19,8	0.78	5/8	11/16
90305-0440S0-0#	-04	9/16-18	8	-05	58,8	2.31	30,2	1.19	5,6	0.22	19,8	0.78	5/8	11/16
90305-0640S0-0	-06	11/16-16	8	-05	63,3	2.49	49,3	1.94	7,1	0.28	22,9	0.90	3/4	13/16
90306-0640S0-0	-06	11/16-16	10	-06	68,1	2.68	36,6	1.44	7,1	0.28	22,9	0.90	3/4	13/16
90308-0840S0-0#	-08	13/16-16	12	-08	75,7	2.98	38,1	1.50	9,9	0.39	29,2	1.15	7/8	15/16
90312-1240S0-0#	-12	1-3/16-12	19	-12	94,2	3.71	50,8	2.00	15,9	0.63	47,8	1.88	1-1/8	1-3/8

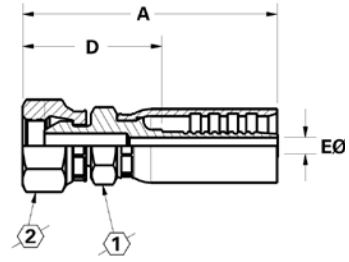
#Run-to-order product. Contact your Eaton customer service representative for details.

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Female SAE 30° Inverted Flare NPSM (903)

903 fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3580, 3440 (-04 to -08), 30CT (-04 to -08)



# Part Number	Terminal End Dash Size	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90302-042400-0	-04	1/4-18	3	-02	41,9	1.65	26,9	1.06	2,0	0.08	1/2	11/16
90303-042400-0	-04	1/4-18	5	-03	54,2	2.13	33,3	1.31	2,8	0.11	5/8	3/4
90304-042400-0	-04	1/4-18	6	-04	60,6	2.38	33,3	1.31	4,0	0.16	5/8	3/4
90304-062400-0‡	-06	3/8-18	6	-04	62,6	2.46	35,1	1.38	4,0	0.16	3/4	7/8
90305-042400-0	-04	1/4-18	8	-05	64,5	2.54	36,6	1.44	5,6	0.22	3/4	3/4
90306-042400-0‡	-04	1/4-18	10	-06	67,7	2.67	36,6	1.44	5,5	0.22	3/4	3/4
90306-062400-0	-06	3/8-18	10	-06	67,4	2.65	30,2	1.19	7,1	0.28	3/4	7/8
90308-082400-0	-08	1/2-14	12	-08	75,9	2.99	38,1	1.50	9,9	0.39	1	1
90312-122400-0‡	-12	3/4-14	19	-12	87,2	3.43	44,5	1.75	15,9	0.63	1-1/8	1-1/4
90316-162400-0‡	-16	1-11-1/2	25	-16	103,1	4.06	47,8	1.88	20,6	0.81	1-3/8	1-1/2

‡Run-to-order product. Contact your Eaton customer service representative for details.

Torque Values

Hose Size	in lbs	
	Min	Max
-04	50	150
-05	70	200
-06	90	300
-08	150	500
-10	220	700
-12	300	1,000
-16	450	1,400

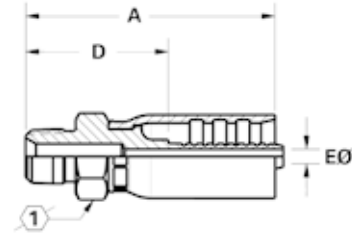
The maximum torques listed are based upon strength rather than sealing properties. Use of any torque within the minimum/maximum range will prevent damage or leakage.

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Male Pipe (90H)

90H fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)

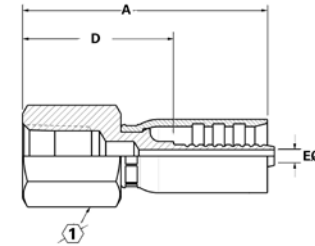


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in		
90H03-021000-0	-02	1/8-27	5	-03	47,5	1.87	26,9	1.06	2,8	0.11	9/16	--
90H03-041000-0	-04	1/4-18	5	-03	52,3	2.06	31,8	1.25	2,8	0.11	11/16	--
90H03-061000-0‡	-06	3/8-18	5	-03	54,6	2.15	35,1	1.38	2,8	0.11	3/4	--
90H04-021000-0	-02	1/8-27	6	-04	53,8	2.12	26,9	1.06	4,1	0.16	5/8	--
90H04-041000-0	-04	1/4-18	6	-04	58,7	2.31	31,8	1.25	4,1	0.16	11/16	--
90H04-061000-0	-06	3/8-18	6	-04	61,0	2.40	33,3	1.31	4,1	0.16	3/4	--
90H06-041000-0	-04	1/4-18	10	-06	65,8	2.59	33,3	1.31	7,1	0.28	3/4	--
90H06-061000-0	-06	3/8-18	10	-06	65,8	2.59	33,3	1.31	7,1	0.28	3/4	--
90H06-081000-0	-08	1/2-14	10	-06	72,1	2.84	39,6	1.56	7,1	0.28	15/16	--
90H08-061000-0	-06	3/8-18	12	-08	70,6	2.78	31,8	1.25	9,9	0.39	7/8	--
90H08-081000-0	-08	1/2-14	12	-08	77,0	3.03	38,1	1.50	9,9	0.39	15/16	--
90H12-121000-0	-12	3/4-14	19	-12	81,5	3.21	41,4	1.63	16,0	0.63	1-1/8	--
90H16-161000-0	-16	1-11-1/2	25	-16	100,6	3.96	47,8	1.88	20,6	0.81	1-3/8	--

‡Run-to-order product. Contact your Eaton customer service representative for details.

Female Pipe (90H)

90H fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in		
90H04-042000-0	-04	1/4-18	6	-04	59.4	2.34	31,8	1.25	4,1	0.16	3/4	--
90H06-062000-0‡	-06	3/8-18	10	-06	66.5	2.62	35,1	1.38	7,1	0.28	7/8	--
90H08-082000-0	-08	1/2-14	12	-08	75.2	2.96	38,1	1.50	9,9	0.39	1-1/16	--

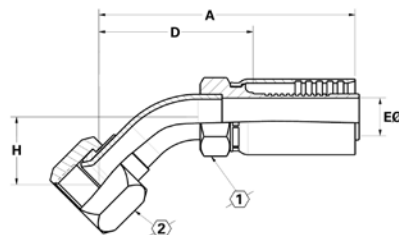
‡Run-to-order product. Contact your Eaton customer service representative for details.

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Female JIC/SAE 37° Swivel 45° Elbow (90H)

90H fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)

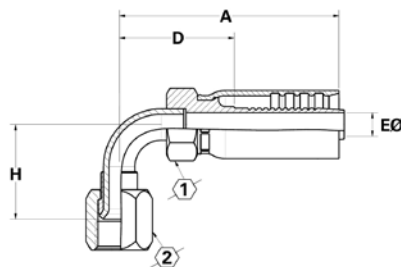


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		H		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
90H03-045540-0‡	-04	7/16-20	5	-03	58,4	2.30	38,1	1.50	2,8	0.11	11,9	0.47	9/16	9/16
90H04-045540-0‡	-04	7/16-20	6	-04	64,8	2.55	38,1	1.50	4,1	0.16	11,9	0.47	5/8	9/16
90H04-055540-0‡	-05	1/2-20	6	-04	67,1	2.64	39,6	1.56	4,1	0.16	13,5	0.53	5/8	5/8
90H06-065540-0	-06	9/16-18	10	-06	74,2	2.92	42,9	1.69	7,1	0.28	15,0	0.59	3/4	11/16
90H06-085540-0‡	-08	3/4-16	10	-06	78,7	3.10	47,8	1.88	7,1	0.28	18,0	0.71	3/4	7/8
90H08-085540-0‡	-08	3/4-16	12	-08	83,3	3.28	46,0	1.81	9,9	0.39	18,0	0.71	7/8	7/8
90H08-105540-0‡	-10	7/8-14	12	-08	87,9	3.46	49,3	1.94	9,9	0.39	21,3	0.84	7/8	1
90H12-125540-0‡	-12	1 1/16-12	19	-12	108,2	4.26	65,0	2.56	16,0	0.63	28,4	1.12	1-1/8	1-1/4
90H16-165540-0‡	-16	1 5/16-12	25	-16	125,7	4.95	73,2	2.88	20,6	0.81	29,2	1.15	1-3/8	1-1/2

‡Run-to-order product. Contact your Eaton customer service representative for details.

Female JIC/SAE 37° Swivel 90° Elbow (90H)

90H fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		H		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
90H03-0455S0-0	-04	7/16-20	5	-03	52,3	2.06	22,4	0.88	2,8	0.11	31,8	1.25	9/16	9/16
90H04-0455S0-0	-04	7/16-20	6	-04	58,6	2.31	22,4	0.88	4,0	0.16	31,8	1.25	5/8	9/16
90H04-0555S0-0‡	-05	1/2-20	6	-04	60,2	2.37	25,4	1.00	4,0	0.16	33,3	1.31	5/8	5/8
90H04-0655S0-0‡	-06	9/16-18	6	-04	61,8	2.43	28,7	1.13	4,0	0.16	35,1	1.38	5/8	11-1/16
90H05-0655S0-0‡	-06	9/16-18	8	-05	61,8	2.43	28,7	1.13	5,6	0.22	33,3	1.31	5/8	11/16
90H06-0455S0-0‡	-04	7/16-20	10	-06	63,5	2.50	22,4	0.88	4,0	0.16	31,8	1.25	3/4	9/16
90H06-0655S0-0‡	-06	9/16-18	10	-06	66,5	2.62	28,7	1.13	7,1	0.28	35,1	1.38	3/4	11/16
90H06-0855S0-0	-08	3/4-16	10	-06	69,9	2.75	35,1	1.38	7,1	0.28	38,1	1.50	3/4	7/8
90H08-0855S0-0	-08	3/4-16	12	-08	74,5	2.93	35,1	1.38	9,9	0.39	36,6	1.44	7/8	7/8
90H08-1055S0-0	-10	7/8-14	12	-08	77,6	3.06	41,4	1.63	9,9	0.39	39,6	1.56	7/8	1
90H12-1255S0-0‡	-12	1-1/16-12	19	-12	98,3	3.87	58,7	2.31	15,9	0.63	55,6	2.19	1-1/8	1-1/4
90H12-1655S0-0‡	-16	1-5/16-12	19	-12	104,6	4.12	63,5	2.50	15,9	0.63	62,0	2.44	1-1/4	1-1/2
90H16-1655S0-0‡	-16	1-5/16-12	25	-16	118,9	4.68	63,5	2.50	20,6	0.81	66,8	2.63	1-3/8	1-1/2

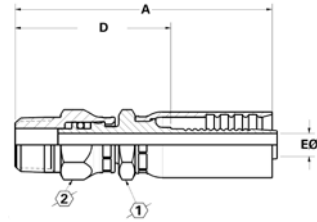
‡Run-to-order product. Contact your Eaton customer service representative for details.

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Male Pipe Swivel (90H)

90H fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)

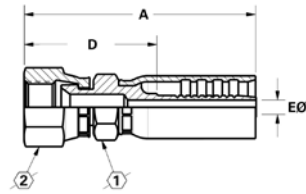


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90H03-041400-0	-04	1/4-18	5	-03	67,1	2.64	46,0	1.81	2,8	0.11	5/8	11/16
90H04-041400-0	-04	1/4-18	6	-04	73,2	2.88	46,0	1.81	4,1	0.16	5/8	11/16
90H06-061400-0	-06	3/8-18	10	-06	80,5	3.17	49,3	1.94	7,1	0.28	3/4	3/4
90H06-081400-0‡	-08	1/2-14	10	-06	85,3	3.36	54,1	2.13	7,1	0.28	3/4	7/8
90H08-081400-0	-08	1/2-14	12	-08	91,7	3.61	54,1	2.13	10,2	0.40	7/8	15/16
90H12-121400-0	-12	3/4-14	19	-12	98,0	3.86	55,6	2.19	15,2	0.60	1-1/8	1-1/8
90H16-161400-0‡	-16	1-11-1/2	25	-16	118,6	4.67	66,8	2.63	20,6	0.81	1-3/8	1-1/2

‡Run-to-order product. Contact your Eaton customer service representative for details.

Female JIC/SAE 37° Swivel (90H)

Fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90H03-045400-0	-04	7/16 - 20	5	-03	54,6	2.15	35,1	1.38	2,8	0.11	9/16	5/8
90H03-055400-0‡	-05	1/2 - 20	5	-03	54,6	2.15	35,1	1.38	2,8	0.11	9/16	3/4
90H04-045400-0	-04	7/16 - 20	6	-04	64,3	2.53	36,6	1.44	4,1	0.16	5/8	5/8
90H04-055400-0	-05	1/2 - 20	6	-04	64,3	2.53	36,6	1.44	4,1	0.16	5/8	3/4
90H04-065500-0	-05	9/16 - 18	6	-04	64,5	2.54	36,6	1.44	4,1	0.16	5/8	3/4
90H05-065500-0‡	-05	9/16 - 18	8	-05	64,5	2.54	36,6	1.44	5,6	0.22	5/8	3/4
90H06-045400-0‡	-04	7/16 - 20	10	-06	68,1	2.68	36,6	1.44	7,1	0.28	13/16	5/8
90H06-055400-0‡	-05	1/2 - 20	10	-06	68,1	2.68	36,6	1.44	5,8	0.23	3/4	3/4
90H06-065500-0	-06	9/16 - 18	10	-06	71,6	2.82	39,6	1.56	7,1	0.28	3/4	3/4
90H06-085400-0	-08	3/4 - 16	10	-06	71,4	2.81	39,6	1.56	7,1	0.28	3/4	15/16
90H08-085400-0	-08	3/4 - 16	12	-08	80,0	3.15	41,4	1.63	9,9	0.39	7/8	15/16
90H08-105400-0	-10	7/8 - 14	12	-08	80,0	3.15	41,4	1.63	9,9	0.39	7/8	1-1/16
90H08-125500-0‡	-12	1-1/16 - 12	12	-08	82,6	3.25	44,5	1.75	9,9	0.39	1-1/8	1-1/4
90H12-105400-0‡	-10	7/8 - 14	19	-12	87,1	3.43	44,5	1.75	16,0	0.63	1-1/8	1-1/16
90H12-125500-0	-12	1-1/16 - 12	19	-12	87,1	3.43	44,5	1.75	16,0	0.63	1-1/8	1-1/4
90H16-165500-0	-16	1-5/16 - 12	25	-16	103,1	4.06	49,3	1.94	20,6	0.81	1-3/8	1-1/2

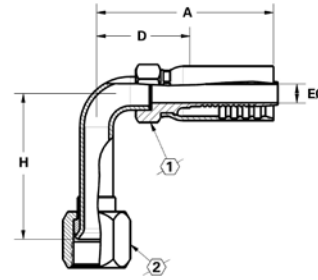
‡Run-to-order product. Contact your Eaton customer service representative for details.

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Female JIC/SAE 37° Swivel 90° Long Drop Elbow (90H)

90H fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)

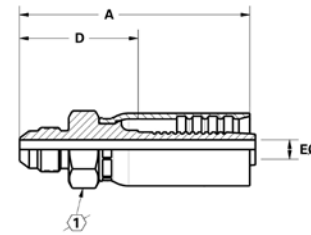


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		H		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
90H03-0455L0-0‡	-04	7/16-20	5	-03	52,3	2.06	31,8	1.25	2,8	0.11	45,7	1.80	9/16	9/16
90H04-0455L0-0‡	-04	7/16-20	6	-04	58,6	2.31	31,8	1.25	4,0	0.16	45,7	1.80	5/8	9/16
90H04-0555L0-0‡	-05	1/2-20	6	-04	60,2	2.37	49,3	1.94	4,0	0.16	45,0	1.77	5/8	5/8
90H04-0655L0-0‡	-06	9/16-18	6	-04	62,4	2.46	35,1	1.38	4,0	0.16	55,4	2.18	5/8	11/16
90H06-0655L0-0	-06	9/16-18	10	-06	66,5	2.62	35,1	1.38	7,1	0.28	55,4	2.18	3/4	11/16
90H06-0855L0-0	-08	3/4-16	10	-06	69,9	2.75	38,1	1.50	7,1	0.28	61,7	2.43	3/4	7/8
90H08-0855L0-0‡	-08	3/4-16	12	-08	74,5	2.93	36,6	1.44	9,9	0.39	61,7	2.43	7/8	7/8
90H08-1055L0-0	-10	7/8-14	12	-08	77,6	3.06	39,6	1.56	9,9	0.39	65,3	2.57	7/8	1
90H12-1255L0-0‡	-12	1-1/16-12	19	-12	98,3	3.87	55,6	2.19	15,9	0.63	94,7	3.73	1-1/8	1-1/4
90H16-1655L0-0‡	-16	1-5/16-12	25	-16	119,0	4.69	66,8	2.63	20,6	0.81	110,0	4.33	1-3/8	1-1/2

‡Run-to-order product. Contact your Eaton customer service representative for details.

Male JIC/SAE 37° (90H)

90H fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90H	Dash Size											
90H03-045000-0	-04	7/16-20	5	-03	51,9	2.05	31,8	1.25	2,8	0.11	9/16	--
90H04-045000-0	-04	7/16-20	6	-04	58,3	2.30	31,8	1.25	4,0	0.16	5/8	--
90H04-055000-0‡	-05	1/2-20	6	-04	58,3	2.30	31,8	1.25	4,0	0.16	5/8	--
90H04-065000-0‡	-06	9/16-18	6	-04	60,8	2.40	33,3	1.31	4,0	0.16	3/4	--
90H06-065000-0	-06	9/16-18	10	-06	65,6	2.58	33,3	1.31	7,1	0.28	3/4	--
90H06-085000-0	-08	3/4-16	10	-06	68,2	2.68	36,6	1.44	7,1	0.28	13/16	--
90H08-085000-0	-08	3/4-16	12	-08	72,9	2.87	35,1	1.38	9,9	0.39	7/8	--
90H08-105000-0‡	-10	7/8-14	12	-08	77,1	3.03	39,6	1.56	9,9	0.39	15/16	--
90H08-125000-0‡	-12	1-1/16-12	12	-08	79,8	3.14	41,4	1.63	15,9	0.39	1-1/8	--
90H12-125000-0‡	-12	1-1/16-12	19	-12	84,5	3.33	41,4	1.63	20,6	0.81	1-1/8	--

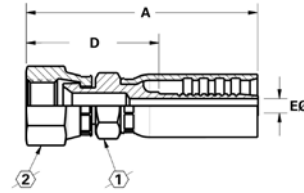
‡Run-to-order product. Contact your Eaton customer service representative for details.

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Female SAE 45° Swivel (90H)

90H fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)



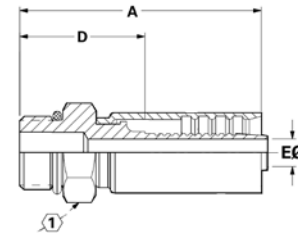
# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
90H03-045400-0	-04	7/16-20	5	-03	2,8	0.11	35,1	1.38	2,8	0.11	9/16	5/8
90H03-055400-0‡	-05	1/2-20	5	-03	2,8	0.11	35,1	1.38	2,8	0.11	9/16	3/4
90H04-045400-0	-04	7/16-20	6	-04	4,0	0.16	36,6	1.44	4,0	0.16	5/8	5/8
90H04-055400-0‡	-05	1/2-20	6	-04	4,0	0.16	36,6	1.44	4,0	0.16	5/8	3/4
90H04-06A000-0‡	-06	5/8-18	6	-04	4,0	0.16	36,6	1.44	4,0	0.16	5/8	13/16
90H06-06A000-0	-06	5/8-18	10	-06	7,1	0.28	39,6	1.56	7,1	0.28	3/4	13/16
90H06-085400-0	-08	3/4-16	10	-06	7,1	0.28	39,6	1.56	7,1	0.28	3/4	15/16
90H08-105400-0	-10	7/8-14	10	-06	7,1	0.28	39,6	1.56	7,1	0.28	3/4	1-1/16
90H12-12A000-0‡	-12	1-1/16-14	19	-12	15,9	0.63	44,5	1.75	15,9	0.63	1-1/8	1-1/4

‡Run-to-order product. Contact your Eaton customer service representative for details.

Male Boss O-Ring (90H)

90H fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)

DO NOT swage with o-ring installed



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
90H03-04D000-0	-04	7/16-20	5	-03	47,2	1.86	26,9	1.06	2,8	0.11	9/16	--
90H04-04D000-0‡	-04	7/16-20	6	-04	53,5	2.11	26,2	1.03	4,0	0.16	5/8	--
90H04-05D000-0‡	-05	1/2-20	6	-04	53,6	2.11	26,2	1.03	4,0	0.16	5/8	--
90H06-06D000-0‡	-06	9/16-18	10	-06	61,5	2.42	25,4	1.00	7,1	0.28	3/4	--
90H06-08D000-0‡	-08	3/4-16	10	-06	62,7	2.47	26,2	1.03	7,1	0.28	7/8	--
90H08-08D000-0‡	-08	3/4-16	12	-08	70,7	2.78	26,2	1.03	9,9	0.39	15/16	--
90H08-10D000-0‡	-10	7/8-14	12	-08	72,2	2.84	29,5	1.16	9,9	0.39	1-1/16	--

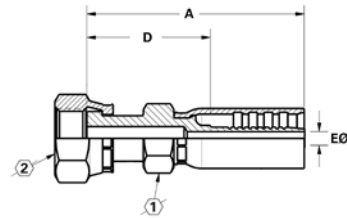
‡Run-to-order product. Contact your Eaton customer service representative for details.

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Female ORS Swivel (90H)

90H fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)

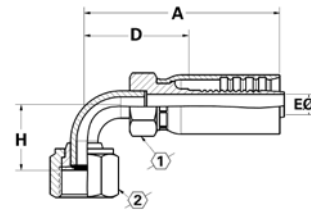


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90H04-044000-0	-04	9/16-18	6	-04	66,0	2.60	38,6	1.52	4,0	0.16	5/8	11/16
90H06-064000-0	-06	11/16-16	10	-06	68,3	2.69	36,6	1.44	6,9	0.27	3/4	7/8
90H08-084000-0	-08	13/16-16	12	-08	77,7	3.06	39,8	1.57	9,7	0.38	7/8	1-1/16
90H08-104000-0‡	-10	1-14	12	-08	84,5	3.33	46,5	1.83	9,7	0.38	7/8	1-1/8
90H12-124000-0‡	-12	1-3/16-12	19	-12	92,5	3.64	50,7	2.00	15,5	0.61	1-1/8	1-3/8
90H16-164000-0‡	-16	1-7/16-12	25	-16	110,7	4.36	55,1	2.17	20,6	0.81	1-3/8	1-5/8

‡Run-to-order product. Contact your Eaton customer service representative for details.

Female ORS Swivel 90° Elbow Short Drop (90H)

90H fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		H		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
90H04-0440S0-0‡	-04	9/16-18	6	-04	58,8	2.31	31,8	1.25	4,0	0.16	19,8	0.78	5/8	11/16
90H06-0640S0-0	-06	11/16-16	10	-06	68,1	2.68	36,6	1.44	7,1	0.28	22,9	0.90	3/4	13/16
90H08-0840S0-0‡	-08	13/16-16	12	-08	75,7	2.98	38,1	1.50	9,9	0.39	29,2	1.15	7/8	15/16
90H12-1240S0-0‡	-12	1-3/16-12	19	-12	94,2	3.71	50,8	2.00	15,9	0.63	47,8	1.88	1-1/8	1-3/8

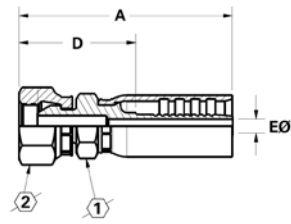
‡Run-to-order product. Contact your Eaton customer service representative for details.

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Female SAE 30° Inverted Flare NPSM (90H)

90H fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12), 3630 (-16), 3440 (-12 to -16)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90H03-042400-0‡	-04	1/4-18	5	-03	54,2	2.13	33,3	1.31	2,8	0.11	5/8	3/4
90H04-042400-0	-04	1/4-18	6	-04	60,6	2.38	33,3	1.31	4,0	0.16	5/8	3/4
90H06-042400-0‡	-04	1/4-18	10	-06	67,7	2.67	36,6	1.44	5,5	0.22	3/4	3/4
90H06-062400-0	-06	3/8-18	10	-06	67,4	2.65	30,2	1.19	7,1	0.28	7/8	7/8
90H08-082400-0	-08	1/2-14	12	-08	75,9	2.99	38,1	1.50	9,9	0.39	1	1
90H12-122400-0‡	-12	3/4-14	19	-12	87,2	3.43	44,5	1.75	15,9	0.63	1-1/8	1-1/4
90H16-162400-0	-16	1-11-1/2	25	-16	103,1	4.06	47,8	1.88	20,6	0.81	1-3/8	1-1/2

‡Run-to-order product. Contact your Eaton customer service representative for details.

GENERAL INFORMATION

HYDRAULIC HOSE

AIR & WATER HOSE & TUBING

TRUCK HOSE

AEROQUIP/POLYON FITTINGS

AEROQUIP/TTC FITTINGS

SYNFLEX FITTINGS

WEATHERHEAD (U & Z SERIES) FITTINGS

ASSEMBLY EQUIPMENT & INFORMATION

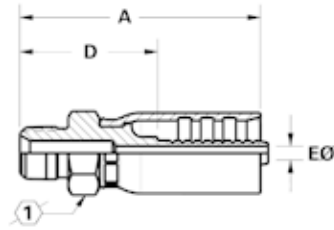
TECHNICAL DATA

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Male Pipe (90N)

Fittings or use with hose: 30CT (-10)

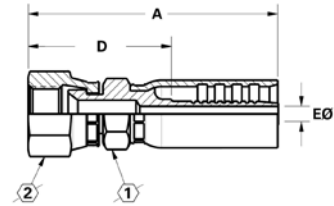


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
90N12-121000-0	-12	3/4-14	19	-12	83,8	3.30	41,4	1.63	16,0	0.63	1-1/8	--
90N16-161000-0‡	-16	1-11-1/2	25	-16	101,6	4.00	47,8	1.88	20,6	0.81	1-3/8	--

‡Run-to-order product. Contact your Eaton customer service representative for details.

Female JIC/SAE 37° Swivel (90N)

Fittings or use with hose: 30CT (-10)

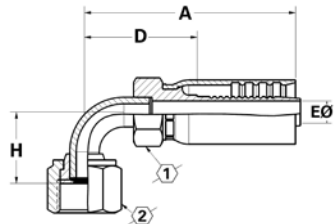


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
90N10-105400-0	-10	7/8 - 14	16	-10	88,1	3.47	47,8	1.88	11,9	0.47	1-1/8	1-1/16
90N10-125500-0	-12	1-1/16 - 12	16	-10	88,1	3.47	47,8	1.88	11,9	0.47	1-1/8	1-1/4
90N12-105500-0‡	-10	7/8 - 14	19	-12	88,1	3.47	44,5	1.75	12,2	0.48	1-1/8	1-1/16
90N12-125500-0	-12	1-1/16 - 12	19	-12	88,1	3.47	44,5	1.75	16,0	0.63	1-1/8	1-1/4
90N16-165500-0	-16	1-5/16 - 12	25	-16	103,1	4.06	47,8	1.88	20,6	0.81	1-3/8	1-1/2

‡Run-to-order product. Contact your Eaton customer service representative for details.

Female ORS Swivel 90° Elbow Short Drop (90N)

90N fittings for use with hose: 30CT (-10)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		H		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	mm	in	in	in
90N12-1240S0-0‡	-12	1-3/16-12	19	-12	95,2	3.75	50,8	2.00	15,9	0.63	47,8	1.88	1-1/8	1-3/8

‡Run-to-order product. Contact your Eaton customer service representative for details.

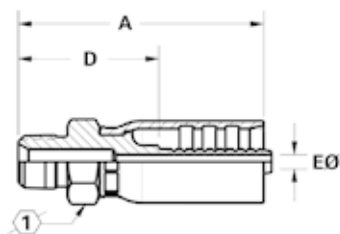
See pages H12-15 for die, pusher, and cage information.





GENERAL INFORMATION
HYDRAULIC HOSE
AIR & WATER HOSE & TUBING
TRUCK HOSE
AEROCOUP/POLYON FITTINGS
AEROCOUP/TTC FITTINGS
SYNFLEX FITTINGS
WEATHERHEAD (U & Z SERIES) FITTINGS
ASSEMBLY EQUIPMENT & INFORMATION
TECHNICAL DATA

Synflex Permanent Swage Fittings

Male Pipe (90V)

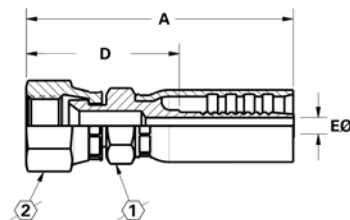
90V fittings for use with hose: 3V10, 3EV0







# Part Number	Terminal End	 Thread	 Hose Size		A		D Cut Off Factor		E Ø			
					mm	in	mm	in	mm	in	in	in
90V03-021000-0	-02	1/8-27	5	-03	47,5	1.87	27,2	1.07	2,0	0.08	9/16	--
90V03-041000-0	-04	1/4-18	5	-03	52,3	2.06	32,0	1.26	2,0	0.08	11/16	--
90V03-061000-0	-06	3/8-18	5	-03	54,6	2.15	34,3	1.35	2,0	0.08	3/4	--
90V04-021000-0	-02	1/8-27	6	-04	53,8	2.12	26,4	1.04	3,6	0.14	5/8	--
90V04-041000-0	-04	1/4-18	6	-04	58,7	2.31	31,2	1.23	3,6	0.14	11/16	--
90V04-061000-0	-06	3/8-18	6	-04	61,0	2.40	33,5	1.32	3,6	0.14	3/4	--
90V06-041000-0	-04	1/4-18	10	-06	67,6	2.66	35,3	1.39	6,9	0.27	3/4	--
90V06-061000-0	-06	3/8-18	10	-06	67,6	2.66	35,3	1.39	6,9	0.27	3/4	--
90V06-081000-0	-08	1/2-14	10	-06	73,9	2.91	41,7	1.64	6,9	0.27	15/16	--

Female JIC/SAE 37° Swivel (90V)

90V fittings for use with hose: 3V10, 3EV0



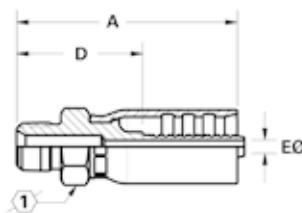
# Part Number	Terminal End	 Thread	 Hose Size		A		D Cut Off Factor		E Ø			
					mm	in	mm	in	mm	in	in	in
90V03-045400-0	-04	7/16-20	5	-03	54,6	2.15	34,3	1.35	2,0	0.08	9/16	5/8
90V04-045400-0	-04	7/16-20	6	-04	64,3	2.53	36,8	1.45	3,6	0.14	5/8	5/8
90V04-065500-0	-06	9/16-18	6	-04	64,5	2.54	37,1	1.46	3,6	0.14	5/8	3/4
90V06-065500-0	-06	9/16-18	10	-06	73,4	2.89	41,1	1.62	6,9	0.27	3/4	3/4

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Male Pipe Brass (906, 9C6)

Fittings for use with hose: 3130

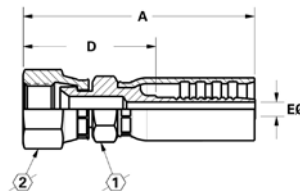


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90604-041000-0	-04	1/4-18	6	-04	53,8	2.12	31,2	1.23	4,1	0.16	11/16	--
90606-061000-0‡	-06	3/8-18	10	-06	63,5	2.50	31,8	1.25	7,1	0.28	11/16	--

‡Run-to-order product. Contact your Eaton customer service representative for details.

Female JIC/SAE 37° Swivel Brass (906, 9C6)

Fittings for use with hose: 3130



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90604-045400-0	-04	7/16-20	6	-04	56,4	2.22	28,7	1.32	4,0	0.16	11/16	11/16
90606-065500-0‡	-06	9/16-18	10	-06	71,9	2.83	40,1	1.58	7,1	0.28	3/4	13/16

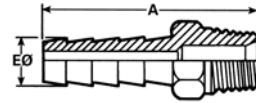
‡Run-to-order product. Contact your Eaton customer service representative for details.

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Fittings

NPT Male/Hose Barb Brass (3980)

Fittings for use with hose: 3630

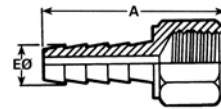


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
3980-77320	-03	1/8-27	5	-03	34,5	1.36	--	--	--	--	7/16	--
3980-77420‡	-03	1/4-18	5	-03	39,1	1.54	--	--	--	--	9/16	--
3980-71720‡	-04	1/8-27	8	-04	40,1	1.58	--	--	--	--	1/2	--
3980-71820	-04	1/4-18	8	-04	44,7	1.76	--	--	--	--	9/16	--
3980-71920	-04	3/8-18	8	-04	44,7	1.76	--	--	--	--	11/16	--
3980-72020	-06	1/4-18	10	-06	44,7	1.76	--	--	--	--	9/16	--
3980-72120	-06	3/8-18	10	-06	44,7	1.76	--	--	--	--	11/16	--
3980-72220	-06	1/2-24	10	-06	50,0	1.97	--	--	--	--	7/8	--
3980-77520	-08	3/8-18	12	-08	44,7	1.76	--	--	--	--	11/16	--
3980-77620	-08	1/2-14	12	-08	50,0	1.97	--	--	--	--	7/8	--
3980-77920‡	-08	3/4-14	12	-08	50,0	1.97	--	--	--	--	1-1/16	--
3980-77720‡	-12	1/2-14	19	-12	55,6	2.19	--	--	--	--	7/8	--
3980-77820‡	-12	3/4-14	19	-12	55,6	2.19	--	--	--	--	1-1/16	--

‡Run-to-order product. Contact your Eaton customer service representative for details.

NPT Female/Hose Barb Brass (3980)

Fittings for use with hose: 3630



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
3980-82320‡	-03	1/4-18	5	-03	36,6	1.44	--	--	--	--	5/8	--
3980-71520	-04	1/4-18	6	-04	42,2	1.66	--	--	--	--	5/8	--
3980-84420‡	-06	1/4-18	10	-06	42,2	1.66	--	--	--	--	5/8	--
3980-71620	-06	3/8-18	10	-06	42,2	1.66	--	--	--	--	3/4	--

‡Run-to-order product. Contact your Eaton customer service representative for details.

Hose Splicer Brass (3980)

Fittings for use with hose: 3630

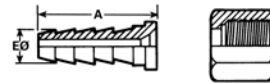


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
3980-82920	-04	--	6	-04	51,6	2.03	--	--	--	--	--	--
3980-83020	-06	--	10	-06	52,3	2.06	--	--	--	--	--	--
3980-83120	-08	--	12	-08	52,3	2.06	--	--	--	--	--	--
3680-83220	-12	--	19	-12	63,5	2.50	--	--	--	--	--	--

Synflex Permanent Fittings

Female Swivel/Hose Barb 37°JIC/ 45° SAE Brass (3983)

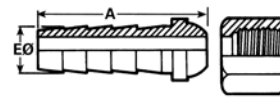
Fittings for use with hose: 3630



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
3983-24412‡	-03	1/4-18	5	-03	29,7	1.17	--	--	--	--	5/8	--
3983-24413	-04	1/4-18	6	-04	35,3	1.39	--	--	--	--	5/8	--
3983-24605	-06	3/8-18	10	-06	36,8	1.45	--	--	--	--	3/4	--
3983-24802	-08	1/2-14	12	-08	39,1	1.54	--	--	--	--	15/16	--
3983-25202‡	-12	3/4-14	19	-12	42,9	1.69	--	--	--	--	1-1/8	--

NPS Female Swivel/Hose Barb Ball Seat Type Brass (3983)

Fittings for use with hose: 3630

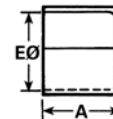


# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
3983-24412‡	-03	1/4-18	5	-03	29,7	1.17	--	--	--	--	5/8	--
3983-24413	-04	1/4-18	6	-04	35,3	1.39	--	--	--	--	5/8	--
3983-24605	-06	3/8-18	10	-06	36,8	1.45	--	--	--	--	3/4	--
3983-24802	-08	1/2-14	12	-08	39,1	1.54	--	--	--	--	15/16	--
3983-25202‡	-12	3/4-14	19	-12	42,9	1.69	--	--	--	--	1-1/8	--

‡Run-to-order product. Contact your Eaton customer service representative for details.

Brass Ferrule (3981)

Fittings for use with hose: 3630



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
3981-30220	-03	--	5	-03	11,9	0.47	--	--	10,2	0.40	--	--
3981-30320	-04	--	6	-04	25,4	1.00	--	--	12,7	0.50	--	--
3981-19120	-06	--	10	-06	25,4	1.00	--	--	16,7	0.66	--	--
3981-30420	-08	--	12	-08	25,4	1.00	--	--	20,6	0.81	--	--
3981-30520	-12	--	19	-12	22,4	0.88	--	--	29,2	1.15	--	--

390C series brass fittings are ordered by selecting components from the parts shown to the right and on the next page.

Fittings are intended for use with hose clamps or brass ferrules.

Construction:

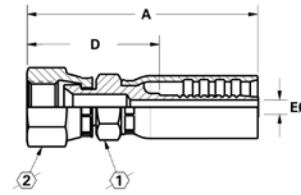
- Machined from 360 alloy brass
- Pipe thread manufactured to dryseal specifications
- 3/16" ID hose barb stems contain three barbs
- 1/4" ID and larger contain four barbs

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Female JIC/SAE 37° Swivel Stainless Steel
AISI 316 (90A)

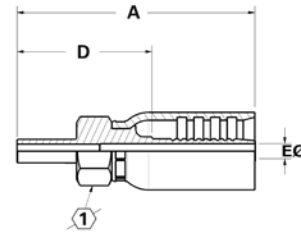
90A fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 3580, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3440 (-04 to -08), 3840, 34PW (-04 to -08), 31B0, 30CT (-03 to -08)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90A03-045400-0	-04	7/16-20	5	-03	54,6	2.15	33,3	1.31	2,8	0.11	9/16	5/8
90A04-045400-0	-04	7/16-20	6	-04	64,2	2.53	36,6	1.44	4,0	0.16	5/8	5/8
90A06-065500-0	-06	9/16-18	10	-06	71,6	2.82	39,6	1.56	7,1	0.28	3/4	3/4
90A08-085400-0	-08	3/4-16	12	-08	80,0	3.15	41,4	1.63	9,9	0.39	7/8	15/16
90A08-105400-0#	-10	7/8-14	12	-08	80,0	3.15	41,4	1.63	9,9	0.39	7/8	1-1/16
90A12-125500-0#	-12	1-1/16-12	19	-12	87,2	3.43	44,5	1.75	15,9	0.63	1-1/8	1-1/4
90A16-165500-0#	-16	1-5/16-12	25	-16	103,0	4.06	50,8	2.00	20,7	0.81	1-3/8	1-1/2

Stand Pipe Stainless Steel (90A)

90A fittings for use with hose: 3630 (-03 to -12), 3R30, 3130, 3580, 37AL, 3740 (-12 to -16), 3800 (-03 to -08), 3440 (-04 to -08), 3840, 34PW (-04 to -08), 31B0, 30CT (-03 to -08)



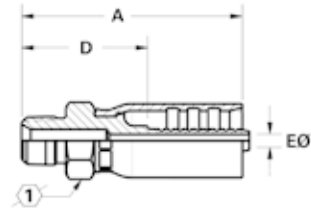
# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90A04-04J000-0	-04	--	6	-04	63,4	2.50	36,6	1.44	4,0	0.16	5/8	--
90A06-06J000-0	-06	--	10	-06	69,9	2.75	38,1	1.50	7,1	0.28	3/4	--
90A08-08J000-0	-08	--	12	-08	81,2	3.20	42,9	1.69	9,9	0.39	7/8	--

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Male Pipe Stainless Steel (90L)

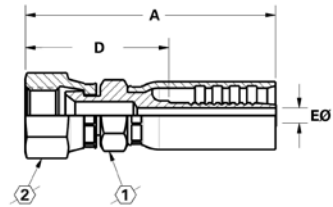
90L fittings for use with hose: 3630 (-16), 3R80 (-03 to -16), 3E80 (-03 to -16), 3440 (-12 to -16), 34PW (-12 to -16), 34BA (-06)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
90L04-041000-0	-04	1/4 - 18	6	-04	58,7	2.31	31,8	1.25	4,1	0.16	11/16	--
90L06-061000-0	-06	3/8 - 18	10	-06	66,0	2.60	33,3	1.31	7,1	0.28	3/4	--
90L08-081000-0	-08	3/8 - 18	12	-08	77,0	3.03	38,1	1.50	10,2	0.40	15/16	--
90L12-121000-0	-12	3/4 - 14	19	-12	81,5	3.21	41,4	1.63	16,0	0.63	1-1/8	--
90L16-161000-0	-16	1-11 1/2	25	-16	100,6	3.96	47,8	1.88	20,6	0.81	1-3/8	--

Female JIC/SAE 37° Swivel Stainless Steel AISI 316 (90L)

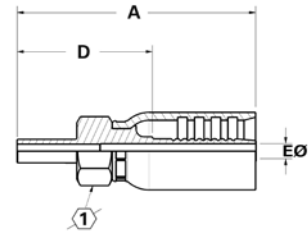
90L fittings for use with hose: 3630 (-16), 3R80 (-03 to -16), 3E80 (-03 to -16), 3440 (-12 to -16), 34PW (-12 to -16), 34BA (-06)



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
90L03-045400-0	-04	7/16-20	5	-03	54,6	2.15	35,1	1.38	2,8	0.11	9/16	5/8
90L04-045400-0	-04	7/16-20	6	-04	64,2	2.53	36,6	1.44	4,0	0.16	5/8	5/8
90L06-065500-0	-06	9/16-18	10	-06	71,6	2.82	39,6	1.56	7,1	0.28	3/4	3/4
90L06-085400-0	-08	3/4-16	10	-06	71,3	2.81	39,6	1.56	7,1	0.28	3/4	15/16
90L08-085400-0	-08	3/4-16	12	-08	80,0	3.15	41,4	1.63	9,9	0.39	7/8	15/16
90L08-105400-0	-10	7/8-14	12	-08	80,0	3.15	41,4	1.63	9,9	0.39	7/8	1-1/16
90L12-125500-0	-12	1-1/16-12	19	-12	87,2	3.43	44,5	1.75	15,9	0.63	1-1/8	1-1/4
90L16-165500-0	-16	1-5/16-12	25	-16	103,0	4.06	49,3	1.94	20,6	0.81	1-3/8	1-1/2

Stand Pipe Stainless Steel (90L)

90L fittings for use with hose: 3630 (-16), 3R80 (-03 to -16), 3E80 (-03 to -16), 3440 (-12 to -16), 34PW (-12 to -16), 34BA (-06)



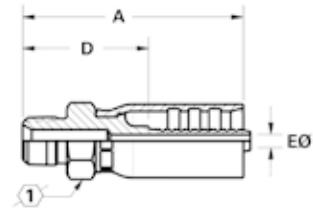
# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
90L04-04J000-0	-04	--	6	-04	63,4	2.50	36,6	1.44	4,0	0.16	5/8	--
90L06-06J000-0	-06	--	10	-06	69,9	2.75	38,1	1.50	7,1	0.28	3/4	--
90L08-08J000-0	-08	--	12	-08	81,2	3.20	42,9	1.69	9,9	0.39	7/8	--

See pages H12-15 for die, pusher, and cage information.

Synflex Permanent Swage Fittings

Male Pipe Stainless Steel (9CV)

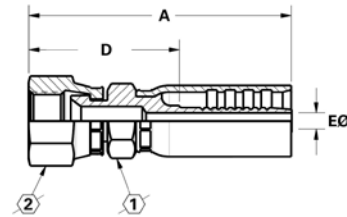
9CV fittings for use with hose: 3V10, 3EV0



# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
9CV03-021000-0	-02	1/8 - 27	5	-03	47,5	1.87	27,2	1.07	2,0	.08	9/16	--
9CV03-041000-0	-04	1/4-18	5	-03	52,3	2.06	31,8	1.25	2,0	.08	11/16	--
9CV03-061000-0	-06	3/8-18	5	-03	54,6	2.15	34,3	1.35	2,0	.08	3/4	--
9CV04-041000-0	-04	1/4-18	6	-04	58,7	2.31	31,2	1.23	3,6	0.14	11/16	--
9CV04-061000-0	-06	3/8-18	6	-04	61,0	2.40	33,5	1.32	3,6	0.14	3/4	--
9CV06-061000-0	-06	3/8-18	10	-06	67,6	2.66	35,3	1.39	6,9	0.27	3/4	--

Female JIC/SAE 37° Swivel Stainless Steel (9CV)

9CV fittings for use with hose: 3V10, 3EV0



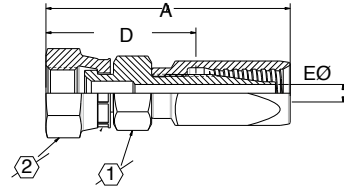
# Part Number	Terminal End	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
	Dash Size		DN	Dash Size	mm	in	mm	in	mm	in	in	in
9CV03-045400-0	-04	7/16-20	5	-03	54,6	2.15	34,3	1.35	2,0	0.08	9/16	5/8
9CV04-045400-0	-04	7/16-20	6	-04	64,3	2.53	36,8	1.45	3,6	0.14	5/8	5/8
9CV04-065500-0	-06	9/16-18	6	-04	64,5	2.54	37,1	1.46	3,6	0.14	5/8	3/4
9CV06-065500-0	-06	9/16-18	10	-06	73,4	2.89	41,1	1.62	6,9	0.27	3/4	3/4
9CV06-085400-0	-08	3/4-16	10	-06	73,9	2.91	41,7	1.64	6,9	0.27	3/4	15/16





See pages H12-15 for die, pusher, and cage information.

Synflex Reusable Fittings

Female JIC/SAE 37° Swivel (902)

902 fittings for use with hose: 37AL



# Part Number	Termi- nal End	 Thread	 Hose Size		A		D Cut Off Factor		E Ø			
					mm	in	mm	in	mm	in	in	in
90204-045400-0‡	-04	7/16-20	6	-04	57,2	2.25	34,8	1.37	4,3	0.17	11/16	5/8
90204-055400-0‡	-05	1/2-20	6	-04	60,2	2.37	37,8	1.49	4,3	0.17	5/8	3/4
90206-065500-0‡	-06	9/16-18	10	-06	70,6	2.78	37,6	1.48	6,9	0.27	11/16	3/4
90208-085400-0‡	-08	3/4-16	12	-08	82,3	3.24	43,2	1.70	9,9	0.39	7/8	15/16

‡Run-to-order product. Contact your Eaton customer service representative for details.

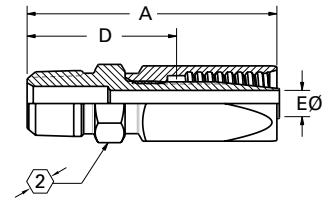
GENERAL INFORMATION
HYDRAULIC HOSE
AIR & WATER HOSE & TUBING
TRUCK HOSE
AEROQUIP/POLYON FITTINGS
AEROQUIP/TTC FITTINGS
SYNFLEX FITTINGS
WEATHERHEAD (U & Z SERIES) FITTINGS
ASSEMBLY EQUIPMENT & INFORMATION
TECHNICAL DATA





See pages H12-15 for die, pusher, and cage information.

Synflex Reusable Fittings

Male Pipe Brass (904)

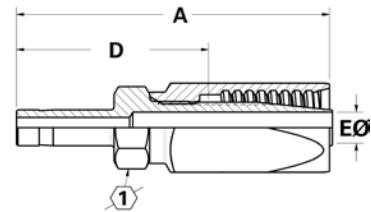
904 fittings for use with hose: 37AL







# Part Number	Terminal End	 Thread	 Hose Size		A		D Cut Off Factor		E Ø			
					mm	in	mm	in	mm	in	in	in
90404-041000-0	-04	1/8 - 27	6	-04	52,6	2.07	31,2	1.23	5,1	.20	9/16	--
90406-061000-0	-06	3/8 - 18	10	-06	63,8	2.51	33,8	1.33	8,1	.32	11/16	--
90408-081000-0	-08	1/2 - 14	12	-08	78,2	3.08	45,0	1.77	7,9	.31	7/8	--

Stand Pipe with Hook Groove Brass (904)

904 fittings for use with hose: 37AL



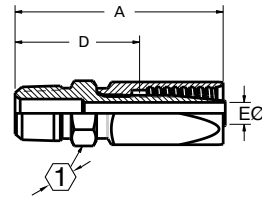
# Part Number	Terminal End	 Thread	 Hose Size		A		D Cut Off Factor		E Ø			
					mm	in	mm	in	mm	in	in	in
90404-04JK00-0	-04	--	6	-04	55,6	2.19	34,3	1.35	5,6	0.22	5/8	--
90406-06JK00-0	-06	--	10	-06	69,3	2.73	39,1	1.54	8,1	0.32	3/16	--
90408-08JK00-0	-08	--	12	-08	83,8	3.30	50,3	1.98	7,9	0.31	1	--

See pages H12-15 for die, pusher, and cage information.

Synflex Reusable Fittings

Male Pipe Stainless Steel (908)

908 fittings for use with hose: 37AL

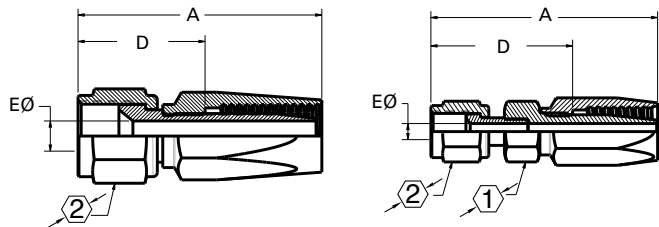


# Part Number	Terminal End Dash Size	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90803-021000-0‡	-02	1/8 - 27	5	-03	45,7	1.80	23,1	0.91	3,6	0.14	7/16	--
90804-041000-0‡	-04	1/4 - 18	6	-04	56,4	2.22	29,5	1.16	5,6	0.22	9/16	--
90806-061000-0‡	-06	3/8 - 18	10	-06	64,0	2.52	32,3	1.27	8,1	0.32	11/16	--
90808-081000-0‡	-08	1/2 - 14	12	-08	78,2	3.08	40,1	1.58	11,0	0.43	7/8	--

‡Run-to-order product. Contact your Eaton customer service representative for details.

Female JIC/SAE 37° Swivel Stainless Steel (908)

908 fittings for use with hose: 37AL



Coupling Style 1

Coupling Style 2

# Part Number	Terminal End Dash Size	Thread	Hose Size		A		D Cut Off Factor		E Ø		1	2
			DN	Dash Size	mm	in	mm	in	mm	in	in	in
90803-04550-0*‡	-04	7/16-20	5	-03	46,7	1.84	25,4	1.00	3,7	0.14	9/16	9/16
90804-04550-0‡	-04	7/16-20	6	-04	65,3	2.57	39,8	1.57	4,4	0.17	9/16	5/8
90804-05550-0*‡	-05	1/2-20	6	-04	55,9	2.2	30,9	1.22	5,6	0.22	5/8	5/8
90805-06550-0*‡	-06	9/16-18	8	-05	60,5	2.38	32,5	1.28	6,7	0.27	11/16	3/4
90806-06550-0‡	-06	9/16-18	10	-05	68,6	2.70	38,3	1.51	7,5	0.30	11/16	13/16
90806-08550-0*‡	-06	3/4-16	10	-05	66,3	2.61	36,1	1.42	8,2	0.32	7/8	13/16
90808-08550-0‡	-08	3/4-16	12	-08	97,5	3.84	64,2	2.53	9,7	0.38	7/8	1
90808-10550-0‡	-10	7/8-14	12	-08	77,0	3.03	43,8	1.73	11,1	0.44	1	1

*Denotes Style 1 design

‡Run-to-order product. Contact your Eaton customer service representative for details.

See pages H12-15 for die, pusher, and cage information.

Weatherhead Fittings

336 E Series	G2-5
U Series	G6-23
Z Series	G24-44



GENERAL
INFORMATION

HYDRAULIC
HOSE

AIR & WATER HOSE
& TUBING

TRUCK
HOSE

AERQUIP/POLYON
FITTINGS

AERQUIP/TTC
FITTINGS

SYNFLEX
FITTINGS

WEATHERHEAD
(U & Z SERIES)
FITTINGS

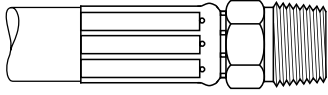
ASSEMBLY
EQUIPMENT &
INFORMATION

TECHNICAL
DATA

Coll-O-Crimp 336 'E' Series

Fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12)

Hose End 336 'E' Series



⚠ Refer to important safety information on pages A3.

Ordering Information: Order individually by part number.

Application: General purpose high-pressure hydraulics. Use Synflex 3E80 non-conductive hose where shock hazards exist.

Compatible Hose: 3R80 (-03 to -12), 3E80 (-03 to -12)

Pressure: Determined by maximum operating pressure for hose size and hose end configuration whichever is less.

Material: Low carbon steel

Plating: Zinc; clear trivalent chromate

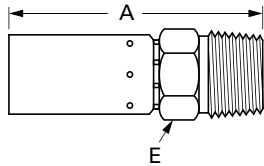
Advantages: Wide selection of hose and end configurations allowing for a diverse number of applications where hose compatibility is a problem.

Assemble With: ET1000, ET4000, T-400-1, T-410-1, T-420-1, T-440-1, T-460, T-462, T-465, T-480

Label Set: FS-3500

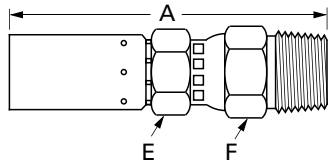
Note: Refer to current price list for availability of cataloged items. Configurations and dimensions subject to change without notice.

Male Pipe Rigid



Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
3/16	1/8	33603E-102	1/8-27	1.88	1.06	.11	9/16
3/16	1/4	33603E-104	1/4-18	2.06	1.25	.11	11/16
1/4	1/8	33604E-102	1/8-27	2.13	1.06	.16	5/8
1/4	1/4	33604E-104	1/4-18	2.31	1.25	.16	11/16
1/4	3/8	33604E-106	3/8-18	2.40	1.31	.16	3/4
3/8	1/4	33606E-104	1/4-18	2.59	1.15	.28	3/4
3/8	3/8	33606E-106	3/8-18	2.59	1.15	.28	3/4
3/8	1/2	33606E-108	1/2-14	2.84	1.41	.28	15/16
1/2	3/8	33608E-106	3/8-18	2.78	1.13	.39	7/8
1/2	1/2	33608E-108	1/2-14	3.03	1.38	.39	15/16
3/4	3/4	33612E-112	3/4-14	3.22	1.38	.63	1-1/8
1	1	33616E-116	1-11-1/2	3.97	1.62	.81	1-3/8

Male Pipe Swivel



Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
3/16	1/4	33603E-J04	1/4-18	2.64	1.84	.11	5/8	11/16
1/4	1/4	33604E-J04	1/4-18	2.87	1.79	.16	5/8	11/16
3/8	3/8	33606E-J06	3/8-18	3.15	1.72	.28	3/4	3/4
3/8	1/2	33606E-J08	1/2-14	3.31	1.88	.28	3/4	7/8
1/2	1/2	33608E-J08	1/2-14	3.61	1.97	.39	7/8	15/16

Note: Swivel for installation purposes only. (Not for temperatures above 212°F.)

See pages H12-15 for die, pusher, and cage information.

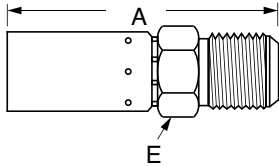
Weatherhead fittings for Weatherhead customers only.

Coll-O-Crimp

336 'E' Series

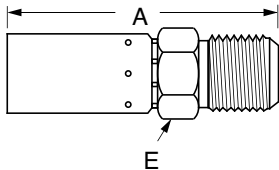
Fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12)

JIC 37° Male Rigid



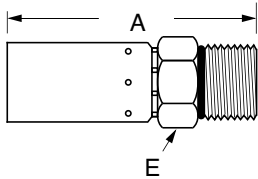
Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
3/16	1/4	33603E-504	7/16-20	2.05	1.25	.11	9/16
1/4	1/4	33604E-504	7/16-20	2.30	1.22	.16	5/8
1/4	5/16	33604E-505	1/2-20	2.30	1.23	.16	5/8
3/8	3/8	33606E-506	9/16-18	2.59	1.13	.28	3/4
3/8	1/2	33606E-508	3/4-16	2.69	1.25	.28	13/16
1/2	1/2	33608E-508	3/4-16	2.88	1.25	.39	7/8
1/2	5/8	33608E-510	7/8-14	3.10	1.42	.39	15/16
1/2	3/4	33608E-512	1-1/16-12	3.15	1.52	.39	1-1/8
3/4	3/4	33612E-512	1-1/16-12	3.32	1.52	.61	1-1/8

SAE 45° Flare Male Rigid



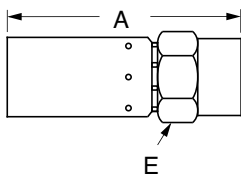
Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
3/16	1/4	33603E-304	7/16-20	2.00	1.19	.11	9/16
3/8	3/8	33606E-306	5/8-18	2.65	1.19	.28	3/4
1/2	1/2	33608E-308	3/4-16	3.03	1.31	.39	7/8

Male Straight Thread O-Ring Rigid



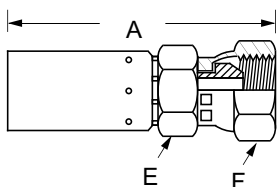
Hose I.D.	Port Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
3/16	1/4	33603E-P04	7/16-20	1.86	1.06	.11	9/16
1/4	5/16	33604E-P05	1/2-20	2.11	1.03	.16	5/8
1/4	3/8	33604E-P06	9/16-18	2.14	1.06	.16	11/16
3/8	3/8	33606E-P06	9/16-18	2.42	1.00	.28	3/4
3/8	1/2	33606E-P08	3/4-16	2.47	1.03	.28	7/8
1/2	1/2	33608E-P08	3/4-16	2.78	1.03	.39	15/16
1/2	5/8	33608E-P10	7/8-14	2.84	1.16	.39	1-1/16

Female Pipe Rigid



Hose I.D.	Pipe Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
1/4	1/4	33604E-204	1/4-18	2.34	1.25	.16	3/4
1/2	1/2	33608E-208	1/2-14	3.03	1.31	.39	1-1/16

Female Straight Pipe Swivel



Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	1/4	33604E-054	1/4-18	2.38	1.31	.16	5/8	3/4
3/8	3/8	33606E-056	3/8-18	2.66	1.22	.28	3/4	7/8
1/2	1/2	33608E-058	1/2-14	3.06	1.38	.39	1	1
3/4	3/4	33612E-062	3/4-14	3.43	1.62	.63	1-1/8	1-1/8

Note: For use with male pipe fittings with internal seat.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

GENERAL INFORMATION

HYDRAULIC HOSE

AIR & WATER HOSE & TUBING

TRUCK HOSE

AEROQUIP/POLYON FITTINGS

AEROQUIP/TTC FITTINGS

SYNFLEX FITTINGS

WEATHERHEAD (U & Z SERIES) FITTINGS

ASSEMBLY EQUIPMENT & INFORMATION

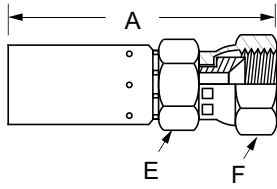
TECHNICAL DATA

Coll-O-Crimp 336 'E' Series

Fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12)

JIC 37° Female Swivel

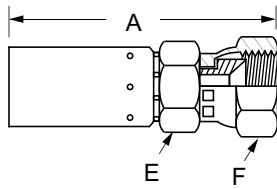
(Exceptions Noted)



Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
3/16	1/4	33603E-604 ^a	7/16-20	2.16	1.38	.11	9/16	5/8
3/16	5/16	33603E-605 ^a	1/2-20	2.16	1.38	.11	9/16	3/4
1/4	1/4	33604E-604 ^a	7/16-20	2.53	1.44	.16	5/8	5/8
1/4	5/16	33604E-605 ^a	1/2-20	2.53	1.44	.16	5/8	3/4
1/4	3/8	33604E-606	9/16-18	2.53	1.44	.16	5/8	3/4
3/8	3/8	33606E-606	9/16-18	2.81	1.38	.28	3/4	3/4
3/8	1/2	33606E-608 ^a	3/4-16	2.81	1.38	.28	3/4	15/16
1/2	1/2	33608E-608 ^a	3/4-16	3.16	1.63	.39	7/8	15/16
1/2	5/8	33608E-610 ^a	7/8-14	3.16	1.63	.39	7/8	1-1/16
3/4	3/4	33612E-612	1-1/16-12	3.44	1.63	.63	1-1/8	1-1/4
1	1	33616E-616	1-5/16-12	4.06	1.75	.81	1-3/8	1-1/2

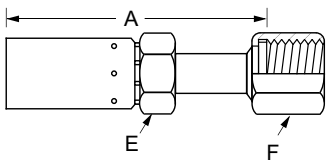
^a Swivel nuts are universal – both SAE 37° and 45° connections.

SAE 45° Female Swivel



Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	3/8	33604E-406	5/8-18	2.53	1.44	.16	5/8	13/16
3/8	3/8	33606E-406	5/8-18	2.81	1.38	.28	3/4	13/16

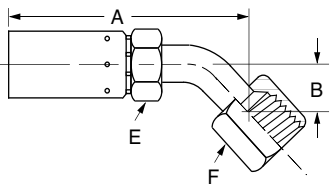
Female FOR-SEAL® Swivel Straight



Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	1/4	33604E-S64	9/16-18	2.60	1.52	.16	5/8	11/16
3/8	3/8	33606E-S66	11/16-16	2.92	1.61	.21	3/4	13/16
1/2	1/2	33608E-S68	13/16-16	3.29	1.72	.38	7/8	15/16
3/4	3/4	33612E-S72	1-3/16-12	3.71	1.95	.61	1-1/8	1-3/8
1	1	33616E-S76	1-7/16-12	4.36	2.11	.81	1-3/8	1-5/8

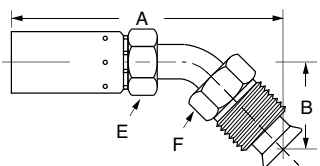
JIC 37° Female Swivel 45° Tube Elbow

(Exceptions Noted)



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
3/16	1/4	33603E-684 ^a	7/16-20	2.30	.47	1.50	.11	9/16	9/16
1/4	5/16	33604E-685 ^a	1/2-20	2.65	.53	1.56	.16	5/8	5/8
3/8	3/8	33606E-686	9/16-18	2.92	.59	1.48	.28	3/4	11/16
3/8	1/2	33606E-688 ^a	3/4-16	3.10	.71	1.66	.28	3/4	7/8
1/2	1/2	33608E-688 ^a	3/4-16	3.28	.71	1.66	.39	7/8	7/8
1/2	5/8	33608E-690 ^a	7/8-14	3.52	.84	1.84	.39	7/8	1
3/4	3/4	33612E-692	1-1/16-12	4.33	1.12	2.44	.62	1-1/8	1-1/4

Inverted Male Swivel 45° Tube Elbow



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
3/8	3/8	33606E-B46	5/8-18	3.30	.97	1.88	.28	3/4	5/8

See pages H12-15 for die, pusher, and cage information.

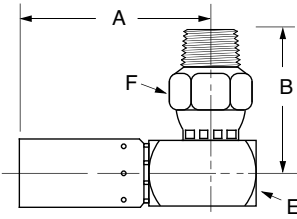
Weatherhead fittings for Weatherhead customers only.

Coll-O-Crimp

336 'E' Series

Fittings for use with hose: 3R80 (-03 to -12), 3E80 (-03 to -12)

Male Pipe Swivel 90° Elbow

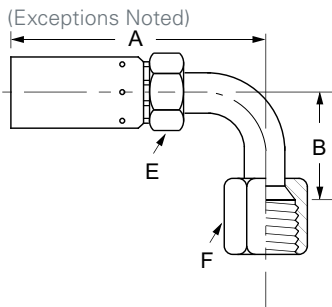


Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
3/8	3/8	33606E-M06	3/8-18	2.19	1.64	.88	.28	.81	3/4
1/2	1/2	33608E-M08	1/2-14	2.48	1.95	.94	.39	1	15/16

Note:

Swivel for installation purposes only.
(Not for temperatures above 212°F.)

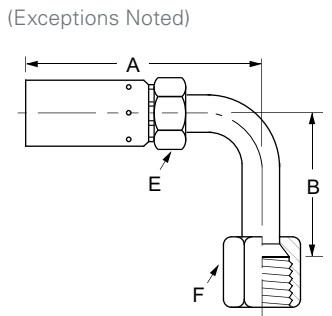
JIC 37° Female Swivel 90° Tube Elbow



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	1/4	33604E-664 ^a	7/16-20	2.28	.88	1.31	.16	5/8	9/16
1/4	5/16	33604E-665 ^a	1/2-20	2.38	1.00	1.31	.16	5/8	5/8
3/8	3/8	33606E-666	9/16-18	2.63	1.13	1.19	.28	3/4	11/16
3/8	1/2	33606E-668 ^a	3/4-16	2.75	1.38	1.31	.28	3/4	7/8
1/2	1/2	33608E-668 ^a	3/4-16	2.94	1.38	1.31	.39	7/8	7/8
1/2	5/8	33608E-670 ^a	7/8-14	3.06	1.63	1.44	.39	7/8	1
3/4	5/8	33612E-670 ^a	7/8-14	3.38	1.63	1.56	.50	1-1/8	1
3/4	3/4	33612E-672	1-1/16-12	3.88	2.31	2.06	.62	1-1/8	1-1/4
1	1	33616E-676	1-5/16-12	4.75	2.50	2.31	.58	1-3/8	1-1/2

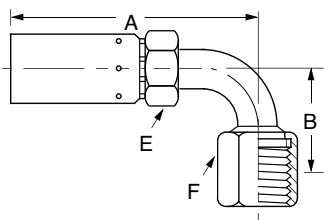
^a Swivel nuts are universal – both SAE 37° and 45° connections.

JIC 37° Female Swivel Long Drop 90° Tube Elbow



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	5/16	33604E-645	1/2-20	2.38	1.77	1.30	.16	5/8	5/8
3/8	3/8	33606E-646	9/16-18	2.63	2.18	1.19	.28	3/4	11/16
3/8	1/2	33606E-648	3/4-16	2.75	2.43	1.31	.28	3/4	7/8
1/2	5/8	33608E-650	7/8-14	3.06	2.57	1.44	.39	7/8	1
3/4	3/4	33612E-652	1-1/16-12	3.88	3.73	2.06	.62	1-1/8	1-1/4

Female FOR-SEAL® Swivel Short Drop 90° Elbow



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	1/4	33604E-A24	9/16-18	2.31	.78	1.23	.16	5/8	11/16
3/8	3/8	33606E-A26	11/16-16	2.74	.90	1.43	.28	3/4	13/16
1/2	1/2	33608E-A28	13/16-16	3.04	1.15	1.48	.39	7/8	15/16
3/4	3/4	33612E-A32	1-3/16-12	3.78	1.88	2.02	.63	1-1/8	1-3/8

See pages H12-15 for die, pusher, and cage information.

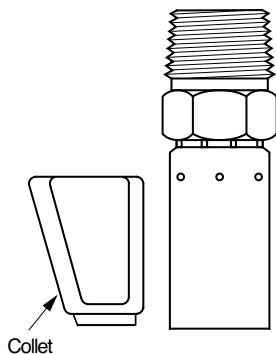
Weatherhead fittings for Weatherhead customers only.

Coll-O-Crimp

'U' Series

Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

Hose End 'U' Series



Note:

Refer to current price list for availability of cataloged items. Configurations and dimensions subject to change without notice.

Ordering Information: Order individually by part number. O-rings not supplied with flange hose ends. Order o-rings by catalog number; reference individual listings for details.

Refer to important safety information on pages 3.

Application: General purpose low, medium, and high pressure hydraulic.

Compatible Hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

Pressure: Determined by maximum operating pressure for hose size and hose end configuration whichever is lesser.

Material: Low carbon steel

Plating: Zinc; clear trivalent chromate

Advantages:

Wide selection of hose and end configurations allowing a diverse number of applications. An ideal series to introduce hydraulics.

Assemble With:

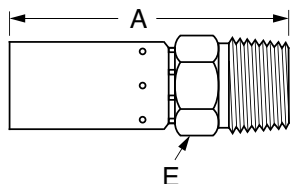
Weatherhead customers use T400-1, T410-1, T-420-1, T-440, T-460, T-462, T-465, T-480, ET1000, ET4000, ET4001, and ET4020.

Aeroquip customers use ET1000.

Label Set: FS-1100

'U' Series fittings are available to Aeroquip customers for use on select Eaton Synflex hose.

Male Pipe Rigid



Hose I.D.	Pipe Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
1/4	1/8	04U-102	1/8-27	2.31	.75	.16	9/16
1/4	1/4	04U-104	1/4-18	2.49	.94	.16	9/16
1/4	3/8	04U-106	3/8-18	2.52	1.00	.16	11/16
1/4	1/2	04U-108	1/2-14	2.77	1.06	.16	7/8
3/8	1/4	06U-104	1/4-18	2.52	1.00	.25	11/16
3/8	3/8	06U-106	3/8-18	2.52	1.00	.25	11/16
3/8	1/2	06U-108	1/2-14	2.77	1.25	.25	7/8
1/2	1/4	08U-104	1/4-18	2.56	.88	.28	13/16
1/2	3/8	08U-106	3/8-18	2.57	1.14	.36	3/4
1/2	1/2	08U-108	1/2-14	2.75	1.31	.36	13/16
1/2	3/4	08U-112	3/4-14	2.83	1.28	.36	1-1/16
3/4	1/2	12U-108	1/2-14	3.62	1.44	.61	1
3/4	3/4	12U-112	3/4-14	3.61	1.44	.61	1-1/16
3/4	1	12U-116	1-11-1/2	3.84	1.69	.61	1-3/8
1	3/4	16U-112	3/4-14	4.23	1.88	.81	1-1/4
1	1	16U-116	1-11-1/2	3.90	1.69	.81	1-3/8

See pages H12-15 for die, pusher, and cage information.

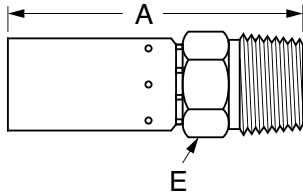
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

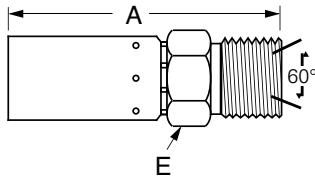
British Standard Tapered Male Pipe (BSPT/JIS) Rigid



Hose I.D.	BSPT Pipe Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
1/4	1/4	04U-154	R-1/4-19*	2.51	1.00	.16	3/4
3/8	3/8	06U-156	R-3/8-19*	2.54	1.06	.25	11/16
1/2	1/2	08U-158	R-1/2-14*	2.78	1.31	.36	7/8
3/4	3/4	12U-162	R-3/4-14*	3.62	1.44	.61	1-1/8
1	1	16U-166	R-1-11*	4.23	2.00	.81	1-3/8

*R as part of thread size is ISO designation for tapered thread.

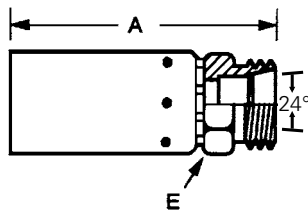
British Standard 60° (BSPP) Cone Male Pipe Rigid



Hose I.D.	BSPT Pipe Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
1/4	1/4	04U-P54	G-1/4-19**	2.38	.88	.16	11/16
3/8	3/8	06U-P56	G-3/8-19**	2.48	.94	.25	3/4
3/8	1/2	06U-P58	G-1/2-14**	2.62	1.06	.25	1
1/2	3/8	08U-P56	G-3/8-19**	2.54	1.13	.32	13/16
1/2	1/2	08U-P58	G-1/2-14**	2.62	1.19	.36	1
3/4	3/4	12U-P62	G-3/4-14**	3.65	1.50	.61	1-1/8
1	1	16U-P66	G-1-11**	3.91	1.69	.81	1-3/8

**G as part of thread size is ISO designation for parallel thread.

Male DIN 24° Seat I. Rh. (Light)



Hose I.D.	Tube Size (mm)	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
1/4	8	04U-08A	M14x1.5	2.27	.81	.16	9/16
1/4	10	04U-10A	M16x1.5	2.36	.88	.16	11/16
3/8	10	06U-10A	M16x1.5	2.36	.94	.25	11/16
3/8	12	06U-12A	M18x1.5	2.36	.94	.25	3/4
1/2	15	08U-15A	M22x1.5	2.42	1.00	.36	7/8
3/4	22	12U-22A	M30x2.0	3.45	1.31	.61	1-1/4
1	28	16U-28A	M36x2.0	3.73	1.50	.81	1-1/2

See pages H12-15 for die, pusher, and cage information.

Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

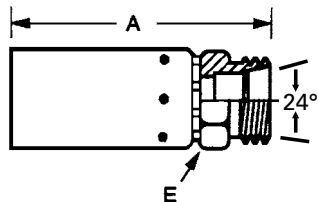
Coll-O-Crimp

'U' Series

Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

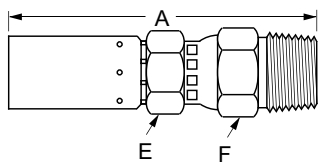
Male DIN 24° Seat

s. Rh. (Heavy)



Hose I.D.	Tube Size (mm)	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
1/4	8	04U-08F	M16x1.5	2.39	.88	.16	11/16
1/4	10	04U-10F	M18x1.5	2.40	.88	.16	3/4
3/8	10	06U-10F	M18x1.5	2.40	.94	.25	3/4
3/8	12	06U-12F	M20x1.5	2.42	1.00	.25	13/16
3/8	14	06U-14F	M22x1.5	2.50	1.06	.25	7/8
1/2	16	08U-16F	M24x1.5	2.57	1.13	.36	1
3/4	20	12U-20F	M30x2	3.53	1.38	.61	1-1/4
3/4	25	12U-25F	M36x2	3.71	1.56	.61	1-1/2
1	30	16U-30F	M42x2	3.98	1.75	.81	1-11/16

Male Pipe Swivel

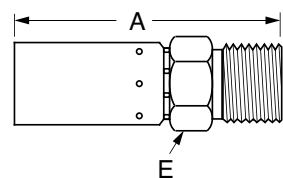


Hose I.D.	Tube Size (mm)	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	1/4	04U-J04	1/4-18	3.38	1.88	.16	5/8	13/16
3/8	1/4	06U-J04	1/4-18	3.40	1.94	.25	11/16	13/16
3/8	3/8	06U-J06	3/8-18	3.38	1.94	.25	11/16	7/8
3/8	1/2	06U-J08	1/2-14	3.60	2.13	.25	3/4	7/8
1/2	3/8	08U-J06	3/8-18	3.45	2.00	.36	13/16	7/8
1/2	1/2	08U-J08	1/2-14	3.60	2.19	.36	13/16	7/8
3/4	3/4	12U-J12	3/4-14	4.73	2.56	.61	1	1-1/4
1	1	16U-J16	1-11-1/2	4.83	2.63	.80	1-1/4	1-3/8

Note:

Swivel for installation purposes only. (Not for temperatures above 212°F.)

FOR-SEAL Male Rigid



Hose I.D.	Tube Size	Part Number	Thread Size	O-Ring	A	Hose Cut-Off Factor	Hole Dia.	Hex E
1/4	1/4	04U-E64	9/16-18	4629x4	2.34	.88	.16	5/8
3/8	3/8	06U-E66	11/16-16	4629x6	2.43	1.00	.25	13/16
3/8	1/2	06U-E68	13/16-16	4629x8	2.54	1.13	.38	7/8
3/8	5/8	06U-E70	1-14	4629x10	2.70	1.27	.25	1-1/16
1/2	1/2	08U-E68	13/16-16	4629x8	2.54	1.13	.36	7/8
1/2	5/8	08U-E70	1-14	4629x10	2.78	1.35	.36	1-1/16
1/2	3/4	08U-E72	1-3/16-12	4629x12	2.76	1.31	.36	1-1/4
3/4	3/4	12U-E72	1-3/16-12	4629x12	3.58	1.44	.61	1-1/4
3/4	1	12U-E76	1-7/16-12	4629x16	3.60	1.44	.61	1-1/2
1	1	16U-E76	1-7/16-12	4629x16	3.73	1.50	.81	1-1/2

Does not include o-ring. See page H9-11 for o-rings.

See pages H12-15 for die, pusher, and cage information.

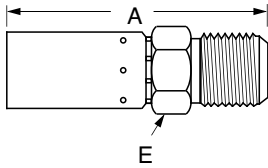
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

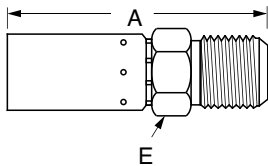
Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

JIC 37° Male Rigid



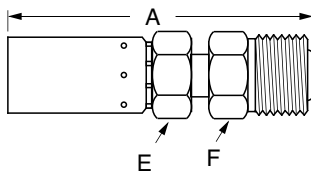
Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
1/4	1/4	04U-504	7/16-20	2.48	1.00	.16	1/2
1/4	5/16	04U-505	1/2-20	2.51	1.00	.16	9/16
1/4	3/8	04U-506	9/16-18	2.55	1.00	.16	5/8
3/8	3/8	06U-506	9/16-18	2.54	1.00	.25	11/16
3/8	1/2	06U-508	3/4-16	2.67	1.25	.25	13/16
3/8	5/8	06U-510	7/8-14	2.83	1.31	.25	15/16
1/2	1/2	08U-508	3/4-16	2.70	1.19	.38	13/16
1/2	5/8	08U-510	7/8-14	2.83	1.31	.36	15/16
1/2	3/4	08U-512	1-1/16-12	2.87	1.44	.36	1-1/8
3/4	5/8	12U-510	7/8-14	3.64	1.44	.43	1
3/4	3/4	12U-512	1-1/16-12	3.74	1.56	.61	1-1/16
3/4	7/8	12U-514	1-3/16-12	3.81	1.63	.61	1-1/4
3/4	1	12U-516	1-5/16-12	3.81	1.63	.61	1-3/8
1	7/8	16U-514	1-3/16-12	4.18	1.94	.72	1-1/4
1	1	16U-516	1-5/16-12	4.20	2.00	.81	1-3/8
1	1-1/4	16U-520	1-5/8-12	4.02	1.81	.81	1-11/16

SAE 45° Flare Male Rigid



Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
3/8	3/8	06U-306	5/8-18	2.60	1.13	.28	11/16
3/4	3/4	12U-312	1-1/16-14	3.87	1.69	.61	1-1/8

Inverted Male Swivel Straight



Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	3/16	04U-B03	3/8-24	3.75	2.25	.12	9/16	3/8
1/4	1/4	04U-B04	7/16-24	3.14	1.69	.16	9/16	7/16
1/4	5/16	04U-B05	1/2-20	3.13	1.63	.21	9/16	1/2
3/8	1/4	06U-B04	7/16-24	3.13	1.69	.16	11/16	7/16
3/8	5/16	06U-B05	1/2-20	3.16	1.75	.21	11/16	1/2
3/8	3/8	06U-B06	5/8-18	3.33	1.94	.24	11/16	5/8
3/8	7/16	06U-B07	11/16-18	3.33	1.94	.24	11/16	11/16
1/2	1/2	08U-B08	3/4-18	3.69	2.25	.33	13/16	3/4
1/2	5/8	08U-B10	7/8-18	3.43	2.00	.33	13/16	7/8

See pages H12-15 for die, pusher, and cage information.

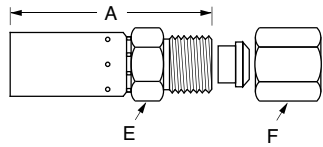
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

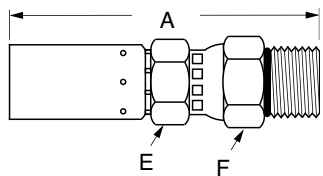
Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

Flareless Tube Rigid Ermeto 7000 Series (With Nut and Sleeve)



Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	1/4	04U-754	7/16-20	2.38	.94	.16	9/16	9/16
1/4	5/16	04U-755	1/2-20	2.41	.93	.16	11/16	5/8
3/8	1/4	06U-754	7/16-20	2.40	1.00	.20	11/16	9/16
3/8	5/16	06U-755	1/2-20	2.40	1.00	.23	11/16	5/8
3/8	3/8	06U-756	9/16-18	2.42	1.00	.25	11/16	11/16
1/2	1/2	08U-758	3/4-16	2.51	1.13	.36	13/16	7/8
1/2	5/8	08U-760	7/8-14	2.64	1.25	.36	15/16	1
3/4	3/4	12U-762	1-1/16-12	3.55	1.38	.61	1-1/8	1-1/4
1	1	16U-766	1-5/16-12	3.98	1.75	.81	1-3/8	1-1/2

Male Straight Thread O-Ring Swivel



Hose I.D.	Port Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	1/4	04U-R04	7/16-20	3.33	1.81	.16	5/8	13/16
3/8	3/8	06U-R06	9/16-18	3.29	1.86	.25	11/16	7/8
3/8	1/2	06U-R08	3/4-16	3.25	1.75	.25	11/16	7/8
1/2	1/2	08U-R08	3/4-16	3.27	1.81	.36	13/16	7/8
1/2	5/8	08U-R10	7/8-14	3.41	2.00	.36	13/16	1-1/8
1/2	3/4	08U-R12	1-1/16-12	3.57	2.06	.36	13/16	1-1/4
3/4	5/8	12U-R10	7/8-14	4.23	2.06	.50	1	1-1/8

(Includes o-ring. for replacement o-ring, see page H9-11)

Note:

Swivel for installation purposes only. (Not for temperatures above 212°F.)

See pages H12-15 for die, pusher, and cage information.

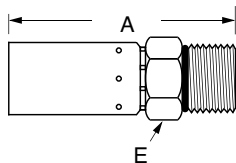
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

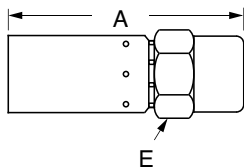
Male Straight Thread O-Ring Rigid



Hose I.D.	Port Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
1/4	1/4	04U-P04	7/16-20	2.29	.81	.16	9/16
1/4	5/16	04U-P05	1/2-20	2.32	.88	.16	5/8
1/4	3/8	04U-P06	9/16-18	2.35	.88	.16	11/16
3/8	3/8	06U-P06	9/16-18	2.35	.94	.25	11/16
3/8	1/2	06U-P08	3/4-16	2.46	1.06	.25	7/8
3/8	5/8	06U-P10	7/8-14	2.57	1.13	.25	1
1/2	1/2	08U-P08	3/4-16	2.46	1.06	.36	7/8
1/2	5/8	08U-P10	7/8-14	2.55	1.13	.36	1
1/2	3/4	08U-P12	1-1/16-12	2.66	1.25	.36	1-1/4
3/4	5/8	12U-P10	7/8-14	3.36	1.19	.50	1
3/4	3/4	12U-P12	1-1/16-12	3.49	1.31	.61	1-1/4
3/4	1	12U-P16	1-5/16-12	3.50	1.31	.61	1-1/2
1	1	16U-P16	1-5/16-12	3.63	1.44	.81	1-1/2

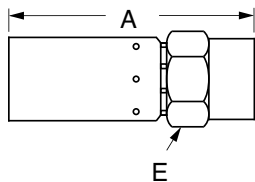
Includes O-ring. For replacement O-ring, see page H9-11.

Female Grease Tap



Hose I.D.	Part Number	Thread Size	A	Cut-Off Factor	Hose Hole Dia.	Hex E
1/4	04U-C34	.511-27	2.45	.90	.16	3/4

Female Pipe Rigid



Hose I.D.	Pipe Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E
1/4	1/8	04U-202	1/8-27	2.20	.75	.16	5/8
1/4	1/4	04U-204	1/4-18	2.43	.94	.16	3/4
3/8	1/4	06U-204	1/4-18	2.46	1.06	.25	3/4
3/8	3/8	06U-206	3/8-18	2.57	1.13	.25	7/8
1/2	1/2	08U-208	1/2-14	2.82	1.38	.36	1-1/8
3/4	3/4	12U-212	3/4-14	3.71	1.56	.61	1-3/8

See pages H12-15 for die, pusher, and cage information.

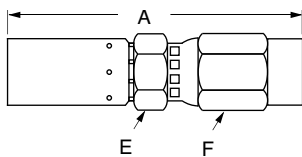
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

Female Pipe Swivel

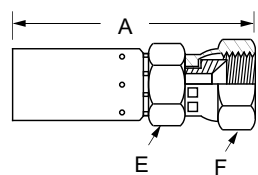


Hose I.D.	Pipe Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	1/4	04U-254	1/4-18	3.52	2.06	.20	5/8	13/16
3/8	3/8	06U-256	3/8-18	3.61	2.19	.32	11/16	7/8
1/2	1/2	08U-258	1/2-14	3.85	2.38	.43	13/16	1-1/8
3/4	3/4	12U-262	3/4-14	4.81	2.63	.61	1	1-3/8
1	1	16U-266	1-11-1/2	5.26	3.06	.80	1-1/4	1-5/8

Note:

Swivel for installation purposes only.
(Not for temperatures above 212°F.)

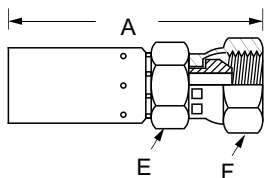
JIC 37° Female Swivel (Exceptions Noted)



Hose I.D.	Pipe Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	1/4	04U-604 ^a	7/16-20	2.61	1.13	.16	9/16	9/16
1/4	5/16	04U-605 ^a	1/2-20	2.67	1.18	.16	9/16	5/8
1/4	3/8	04U-606	9/16-18	2.72	1.25	.16	9/16	11/16
3/8	1/4	06U-604 ^a	7/16-20	2.66	1.25	.16	11/16	9/16
3/8	3/8	06U-606	9/16-18	2.77	1.31	.25	11/16	11/16
3/8	1/2	06U-608 ^a	3/4-16	2.86	1.44	.25	11/16	7/8
3/8	5/8	06U-610 ^a	7/8-14	3.00	1.56	.25	7/8	1
3/8	3/4	06U-612	1-1/16-12	3.15	1.69	.25	1	1-1/4
1/2	3/8	08U-606	9/16-18	2.68	1.25	.30	13/16	11/16
1/2	1/2	08U-608 ^a	3/4-16	2.79	1.38	.36	13/16	7/8
1/2	5/8	08U-610 ^a	7/8-14	3.00	1.56	.36	13/16	1
1/2	3/4	08U-612	1-1/16-12	3.12	1.44	.36	1	1-1/4
1/2	1	08U-616	1-5/16-12	3.17	1.75	.36	1-1/4	1-1/2
3/4	5/8	12U-610 ^a	7/8-14	3.75	1.56	.48	1	1
3/4	3/4	12U-612	1-1/16-12	3.86	1.69	.61	1	1-1/4
3/4	7/8	12U-614	1-3/16-12	3.88	1.69	.61	1-1/8	1-3/8
3/4	1	12U-616	1-5/16-12	4.07	1.88	.61	1-1/4	1-1/2
1	3/4	16U-612	1-1/16-12	4.37	2.13	.61	1-1/4	1-1/4
1	7/8	16U-614	1-3/16-12	4.35	2.13	.72	1-1/4	1-3/8
1	1	16U-616	1-5/16-12	4.46	2.25	.81	1-1/4	1-1/2
1	1-1/4	16U-620	1-5/8-12	4.30	2.19	.81	1-5/8	2

^a Swivel nuts are universal – both SAE 37° and 45° connections.

Female Straight Pipe Swivel (NPSM)



Hose I.D.	Pipe Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	1/4	04U-054	1/4-18	2.55	1.06	.16	1/2	11/16
3/8	3/8	06U-056	3/8-18	2.65	1.19	.27	11/16	7/8
1/2	1/2	08U-058	1/2-14	2.85	1.44	.36	13/16	1
3/4	3/4	12U-062	3/4-14	3.77	1.63	.61	1	1-1/4
1	1	16U-066	1-11-1/2	4.34	2.13	.81	1-1/4	1-1/2

(Connects to male pipe fitting with internal seat.)

See pages H12-15 for die, pusher, and cage information.

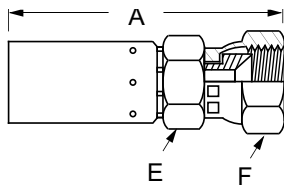
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

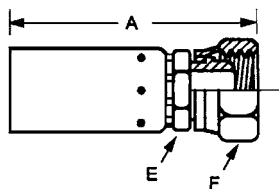
SAE 45° Female Swivel



Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
3/8	3/8	06U-406	5/8-18	2.68	1.25	.25	11/16	3/4
3/4	3/4	12U-412	1-1/16-14	3.86	1.69	.61	1	1-1/4

Female Swivel DIN Universal Seat

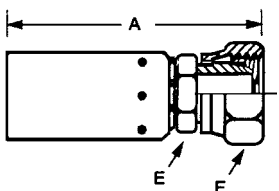
l. Rh. (Light)



Hose I.D.	Tube Size (mm)	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	6	04U-06C	M12x1.5	2.73	1.25	.16	9/16	11/16
1/4	8	04U-08C	M14x1.5	2.76	1.25	.16	9/16	11/16
1/4	10	04U-10C	M16x1.5	2.82	1.38	.16	9/16	3/4
3/8	10	06U-10C	M16x1.5	2.78	1.38	.25	11/16	3/4
3/8	12	06U-12C	M18x1.5	2.93	1.50	.25	11/16	7/8
1/2	15	08U-15C	M22x1.5	2.98	1.56	.36	13/16	1-1/16
3/4	22	12U-22C	M30x2.0	4.03	1.88	.61	1-1/8	1-7/16
1	28	16U-28C	M36x2.0	4.47	2.25	.78	1-1/4	1-5/8

Female Swivel DIN 24° Seat

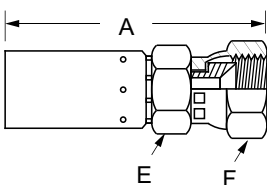
s. Rh. DKO (Heavy)



Hose I.D.	Tube Size (mm)	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	8	04U-58C	M16x1.5	2.88	1.40	.16	9/16	3/4
1/4	10	04U-60C	M18x1.5	2.78	1.31	.16	5/8	7/8
1/4	12	04U-62C	M20x1.5	2.67	1.19	.16	3/4	1
3/8	10	06U-60C	M18x1.5	2.78	1.38	.22	3/4	7/8
3/8	12	06U-62C	M20x1.5	2.87	1.44	.25	3/4	1
3/8	14	06U-64C	M22x1.5	2.92	1.50	.25	3/4	1-1/16
1/2	16	08U-66C	M24x1.5	3.06	1.63	.36	7/8	1-1/8
3/4	20	12U-70C	M30x2.0	3.91	1.75	.48	1-1/8	1-7/16
3/4	25	12U-75C	M36x2.0	4.24	2.06	.61	1-1/4	1-5/8
1	30	16U-80C	M42x2.0	4.34	2.13	.81	1-5/8	2

Female Swivel 30° Flare

(Komatsu, Linkbelt)



Hose I.D.	Part Number	Thread Size	A	Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	04U-14K	M14x1.5	2.89	1.19	.18	9/16	3/4
3/8	06U-18K	M18x1.5	2.86	1.44	.31	11/16	7/8
1/2	08U-22K	M22x1.5	2.99	1.56	.39	13/16	1
3/4	12U-30K	M30x1.5	3.86	1.69	.61	1-1/8	1-3/8
1	16U-33K	M33x1.5	4.53	2.31	.81	1-1/4	1-5/8

See pages H12-15 for die, pusher, and cage information.

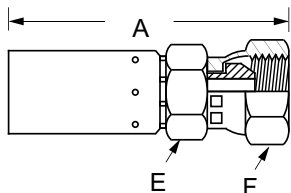
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

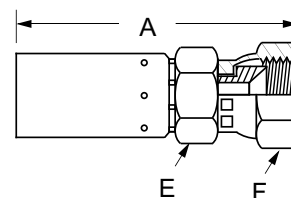
British Standard (BSPP) 60° Cone Female Pipe Swivel



Hose I.D.	BSPP Pipe Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	1/4	04U-354	G-1/4-19*	2.75	1.25	.16	9/16	3/4
1/4	3/8	04U-356	G-3/8-19*	2.84	1.38	.16	3/4	7/8
3/8	3/8	06U-356	G-3/8-19*	2.84	1.44	.25	3/4	7/8
3/8	1/2	06U-358	G-1/2-14*	2.97	1.56	.25	7/8	1-1/16
1/2	1/2	08U-358	G-1/2-14*	3.05	1.63	.36	13/16	1-1/16
1/2	5/8	08U-360	G-5/8-14*	2.96	1.56	.36	13/16	1-3/16
3/4	3/4	12U-362	G-3/4-14*	3.87	1.75	.61	1	1-1/4
1	1	16U-366	G-1-11*	4.47	2.25	.81	1-1/4	1-1/2

*G as part of thread size is ISO designation for parallel thread.

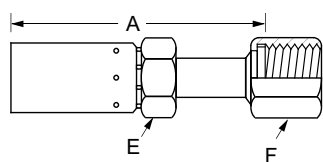
Female JIS 30° Flare Parallel Pipe Swivel



Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	1/4	04U-04L	G-1/4-19	2.73	1.25	.16	9/16	3/4
3/8	3/8	06U-06L	G-3/8-19	2.84	1.38	.25	11/16	7/8
1/2	1/2	08U-08L	G-1/2-14	3.02	1.56	.36	13/16	1-1/16
3/4	3/4	12U-12L	G-3/4-14	3.85	1.75	.61	1	1-1/4
1	1	16U-16L	G-1-11	4.13	1.94	.81	1-1/4	1-1/2

*G as part of thread size is ISO Designation for parallel thread.

Female FOR-SEAL® Swivel Straight



Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
1/4	1/4	04U-S64	9/16-18	2.56	1.08	.16	9/16	11/16
1/4	3/8	04U-S66	11/16-16	2.85	1.37	.26	9/16	13/16
1/4	1/2	04U-S68	13/16-16	3.19	1.75	.36	11/16	15/16
3/8	1/4	06U-S64	9/16-18	2.81	1.38	.16	11/16	5/8
3/8	3/8	06U-S66	11/16-16	2.64	1.21	.26	11/16	13/16
3/8	1/2	06U-S68	13/16-16	2.80	1.37	.28	11/16	15/16
3/8	5/8	06U-S70*	1-14	3.03	1.60	.25	15/16	1-1/8
1/2	3/8	08U-S66	11/16-16	2.75	1.32	.26	13/16	13/16
1/2	1/2	08U-S68	13/16-16	2.80	1.37	.36	13/16	15/16
1/2	5/8	08U-S70	1-14	3.30	1.87	.46	13/16	1-1/8
1/2	3/4	08U-S72	1-3/16-12	3.38	1.94	.36	1	1-3/8
3/4	5/8	12U-S70	1-14	3.85	1.70	.46	1	1-1/8
3/4	3/4	12U-S72	1-3/16-12	3.95	1.80	.61	1-1/8	1-3/8
3/4	1	12U-S76	1-7/16-12	4.78	2.81	.61	1-1/4	1-5/8
1	3/4	16U-S72	1-3/16-12	4.36	2.16	.55	1-1/4	1-3/8
1	1	16U-S76	1-7/16-12	4.24	2.04	.78	1-1/4	1-5/8

* Crimp nut design

See pages H12-15 for die, pusher, and cage information.

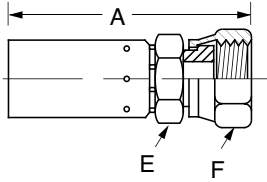
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp 'U' Series

Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

BSPP Flat Face Female Swivel

(HIAB Cranes-Swedish)

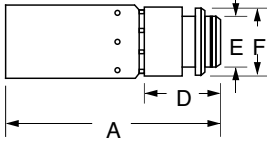


Hose I.D.	Tube Size	Part Number	Thread Size	A	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
3/8	3/8	06U-06P	G-3/8-19*	2.90	1.50	.25	11/16	7/8
3/8	1/2	06U-08P	G-1/2-14*	2.96	1.50	.25	3/4	1-1/16
1/2	1/2	08U-08P	G-1/2-14*	3.02	1.56	.36	13/16	1-1/16
1/2	3/4	08U-12P	G-3/4-14*	3.06	1.63	.36	1	1-1/4
3/4	3/4	12U-12P	G-3/4-14*	3.92	1.75	.61	1	1-1/4

*G as part of thread size is ISO designation for parallel thread.

READY-LOK Male Connector

(For Deep Mining Markets)

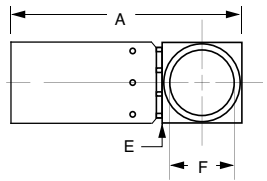


Hose I.D.	Connect. Size	Part Number	A	Hose Cut-Off Factor	Hole Dia.	Length D	Dia. E	Dia. F
1/4	1/4	04U-04S	2.82	1.31	.16	1.13	.39	.59
3/8	3/8	06U-06S	2.84	1.31	.26	1.13	.54	.78
1/2	1/2	08U-08S	2.82	1.31	.36	1.13	.70	.94
3/4	3/4	12U-12S	3.64	1.50	.61	1.13	.94	1.14
1	1	16U-16S	3.94	1.75	.81	1.34	1.22	1.53

(O-ring and backup ring included.)

Banjo

(Ford Tractor)



Hose I.D.	Part Number	A	Hose Cut-Off Factor	Hole Dia.	Hex E
3/8	06U-L06	2.56	.69	.62	7/8

GENERAL
INFORMATION

HYDRAULIC
HOSE

AIR & WATER HOSE
& TUBING

TRUCK
HOSE

AEROQUIP/POLYON
FITTINGS

AEROQUIP/TTC
FITTINGS

SYNFLEX
FITTINGS

WEATHERHEAD
(U & Z SERIES)
FITTINGS

ASSEMBLY
EQUIPMENT &
INFORMATION

TECHNICAL
DATA

See pages H12-15 for die, pusher, and cage information.

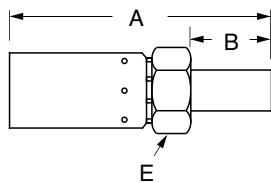
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

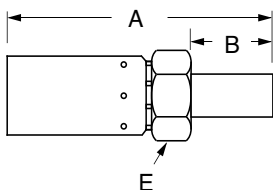
Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

Metric Standpipe Straight Tube



Hose I.D.	Tube O.D. (mm)	Part Number	A	B	Hose Cut-Off Factor	Hole Dia.	Hex E
1/4	8	04U-38T	3.06	1.00	1.56	.15	5/8
1/4	10	04U-40T	3.10	1.04	1.63	.15	5/8
3/8	10	06U-40T	3.10	1.04	1.63	.24	13/16
3/8	12	06U-42T	3.10	1.04	1.63	.24	13/16
3/8	14	06U-44T	3.28	1.22	1.81	.24	13/16
1/2	15	08U-45T	3.12	1.00	1.69	.35	7/8
1/2	16	08U-46T	3.34	1.22	1.91	.35	7/8
3/4	22	12U-52T	4.13	1.19	1.88	.61	1
3/4	25	12U-55T	4.53	1.59	2.25	.61	1
1	28	16U-58T	4.43	1.25	2.25	.81	1-1/2
1	30	16U-60T	4.89	1.71	2.69	.81	1-1/2

Standpipe Straight Tube



Hose I.D.	Tube O.D.	Part Number	A	B	Hose Cut-Off Factor	Hole Dia.	Hex E
1/4	1/4	04U-T04	3.16	1.10	1.69	.15	9/16
3/8	3/8	06U-T06	3.36	1.30	1.94	.25	11/16
1/2	1/2	08U-T08	3.70	1.58	2.25	.33	3/4
3/4	3/4	12U-T12	4.11	1.17	1.94	.58	1
1	1	16U-T16	4.48	1.30	2.31	.76	1-1/4

See pages H12-15 for die, pusher, and cage information.

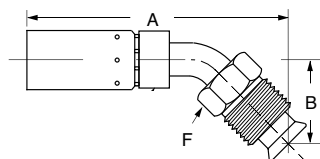
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

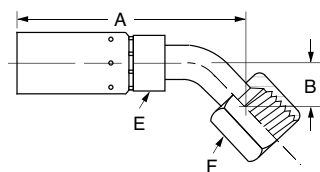
Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

Inverted Male Swivel 45° Tube Elbow



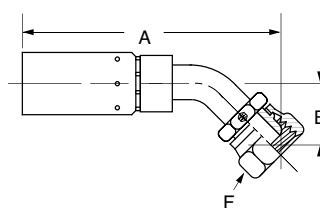
Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
1/4	3/16	04U-B43	3/8-24	3.48	.69	2.00	.12	3/8
1/4	1/4	04U-B44	7/16-24	3.61	.93	2.13	.15	7/16
1/4	5/16	04U-B45	1/2-20	3.98	1.14	2.50	.21	1/2
3/8	1/4	06U-B44	7/16-24	3.59	.93	2.19	.15	7/16
3/8	5/16	06U-B45	1/2-20	4.02	1.14	2.56	.21	1/2
3/8	3/8	06U-B46	5/8-18	4.05	1.34	2.63	.24	5/8
3/8	7/16	06U-B47	11/16-18	4.05	1.34	2.63	.24	11/16
1/2	1/2	08U-B48	3/4-18	4.85	1.58	3.44	.33	3/4

SAE 45° Female Swivel 45° Tube Elbow



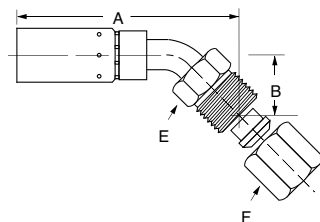
Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex Dia. F	Hex F
3/8	3/8	06U-486	5/8-18	3.18	.39	1.75	.21	11/16	3/4

Female Swivel DIN Universal Seat 45° Tube Elbow I. Rh. (Light)



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
1/4	8	04U-08D	M14x1.5	3.08	.73	1.63	.16	11/16
1/4	10	04U-10D	M16x1.5	3.21	.79	1.75	.16	3/4
3/8	10	06U-10D	M16x1.5	3.90	.96	2.47	.25	3/4
3/8	12	06U-12D	M18x1.5	3.93	.96	2.50	.25	7/8
1/2	15	08U-15D	M22x1.5	3.48	.91	2.06	.36	1-1/16
3/4	22	12U-22D	M30x2.0	4.62	1.19	2.44	.61	1-7/16
1	28	16U-28D	M36x2.0	5.52	1.59	3.32	.81	1-5/8

Flareless 45° Tube Elbow 7000 Ermeto Series



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex Dia. F	Hex F
3/8	3/8	06U-956	9/16-18	4.08	.88	2.65	.28	11/16	11/16

See pages H12-15 for die, pusher, and cage information.

Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

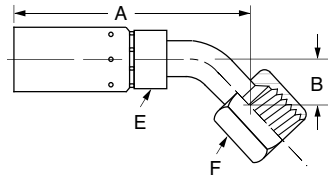
Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

GENERAL INFORMATION

HYDRAULIC HOSE

JIC 37° Female Swivel 45° Tube Elbow

(Exceptions Noted)



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex Dia. E	Hex F
1/4	1/4	04U-684 ^a	7/16-20	2.98	.33	1.50	.15	9/16	9/16
1/4	5/16	04U-685 ^a	1/2-20	3.14	.36	1.69	.21	9/16	5/8
3/8	1/4	06U-684 ^a	7/16-20	3.08	.33	1.69	.15	11/16	9/16
3/8	3/8	06U-686	9/16-18	3.17	.39	1.75	.25	11/16	11/16
3/8	1/2	06U-688 ^a	3/4-16	3.51	.55	2.08	.25	3/4	7/8
1/2	1/2	08U-688 ^a	3/4-16	3.51	.55	2.08	.35	13/16	7/8
1/2	5/8	08U-690 ^a	7/8-14	3.76	.63	2.31	.36	13/16	1
3/4	3/4	12U-692	1-1/16-12	4.79	.78	2.64	.59	1	1-1/4
3/4	1	12U-696	1-5/16-12	5.18	1.10	3.00	.61	1-1/4	1-1/2
1	1	16U-696	1-5/16-12	5.28	1.10	3.06	.76	1-1/4	1-1/2

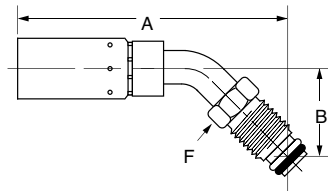
^a Swivel nuts are universal – both SAE 37° and 45° connections.

AIR & WATER HOSE & TUBING

TRUCK HOSE

AEROQUIP/POLYON FITTINGS

Male Swivel 45° Tube Elbow O-Ring Port

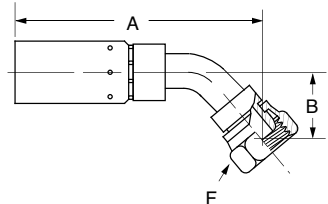


Hose I.D.	Tube O.D.	Part Number	O-Ring	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
1/2	5/8	08U-L50	7629x7	7/8-14	4.75	1.84	3.38	.36	7/8

AEROQUIP/TTC FITTINGS

SYNFLEX FITTINGS

British Standard 60° Cone (BSPP) Female Swivel 45° Tube Elbow



Hose I.D.	BSPP Pipe Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
1/4	1/4	04U-44P	G-1/4-19*	3.69	.91	2.25	.15	3/4
3/8	3/8	06U-46P	G-3/8-19*	3.85	.90	2.44	.25	7/8
1/2	1/2	08U-48P	G-1/2-14*	3.88	.87	2.44	.33	1-1/16
3/4	3/4	12U-52P	G-3/4-14*	5.53	1.31	3.38	.61	1-1/4
1	1	16U-56P	G-1-11*	5.39	1.46	3.19	.76	1-1/2

*G as part of thread size is ISO designation for parallel thread.

**Part number will crimp in COC ET4000, T-410-1, T-420-1, and T-440-1 presses only.

WEATHERHEAD (U & Z SERIES) FITTINGS

ASSEMBLY EQUIPMENT & INFORMATION

TECHNICAL DATA

See pages H12-15 for die, pusher, and cage information.

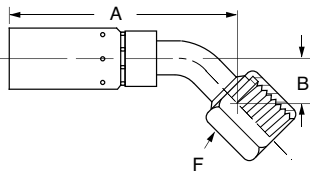
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

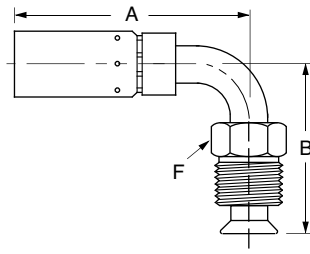
Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

Female FOR-SEAL® Swivel 45° Tube Elbow



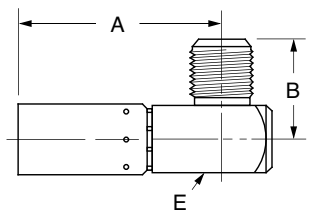
Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
1/4	1/4	04U-L64	9/16-18	3.14	.41	1.68	.16	11/16
1/4	3/8	04U-L66	11/16-16	3.24	.43	1.75	.16	13/16
3/8	3/8	06U-L66	11/16-16	3.26	.43	1.81	.26	13/16
3/8	1/2	06U-L68	13/16-16	3.58	.60	2.15	.26	15/16
1/2	3/8	08U-L66	11/16-16	3.32	.43	1.88	.26	13/16
1/2	1/2	08U-L68	13/16-16	3.56	.60	2.13	.36	15/16
1/2	5/8	08U-L70	1-14	3.67	.65	2.25	.36	1-1/8
3/4	5/8	12U-L70	1-14	4.49	.65	2.31	.46	1-1/8
3/4	3/4	12U-L72	1-3/16-12	4.96	.84	2.81	.59	1-3/8
3/4	1	12U-L76	1-7/16-12	5.29	.94	3.13	.76	1-5/8
1	3/4	16U-L72	1-3/16-12	4.99	.83	2.79	.56	1-3/8
1	1	16U-L76	1-7/16-12	5.29	.95	3.06	.76	1-5/8
1	1-1/4	16U-L80	1-11/16-12	5.00	1.07	2.79	.81	1-7/8

Inverted Male Swivel 90° Tube Elbow



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
1/4	3/16	04U-B63	3/8-24	2.85	1.06	1.38	.12	3/8
1/4	1/4	04U-B64	7/16-24	2.89	1.36	1.38	.15	7/16
1/4	5/16	04U-B65	1/2-20	3.08	1.61	1.63	.21	1/2
3/8	1/4	06U-B64	7/16-24	2.89	1.36	1.44	.15	7/16
3/8	5/16	06U-B65	1/2-20	3.08	1.61	1.50	.21	1/2
3/8	3/8	06U-B66	5/8-18	3.40	1.97	1.88	.24	5/8
3/8	7/16	06U-B67	11/16-18	3.40	1.97	2.00	.24	11/16
1/2	1/2	08U-B68	3/4-18	3.50	2.32	2.06	.35	3/4

SAE 37° Male Rigid 90° Elbow



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Square E
3/8	5/8	06U-X60	7/8-14	2.50	1.10	1.06	.36	11/16
1/2	5/8	08U-X60	7/8-14	2.75	1.13	1.31	.36	3/4
3/4	5/8	12U-X60	7/8-14	4.15	1.32	2.00	.48	1-1/8

See pages H12-15 for die, pusher, and cage information.

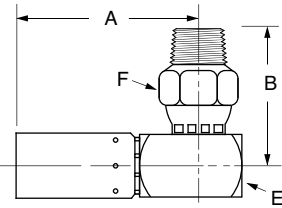
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

Male Pipe Swivel 90° Elbow



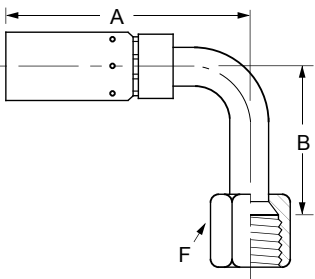
Hose I.D.	Pipe Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Square E	Hex F
1/4	1/4	04U-M04	1/4-18	2.43	1.79	1.00	.15	11/16	13/16
3/8	1/4	06U-M04	1/4-18	2.50	1.83	1.06	.24	11/16	13/16
3/8	3/8	06U-M06	3/8-18	2.50	1.84	1.06	.24	11/16	7/8
3/8	1/2	06U-M08	1/2-14	2.50	1.97	1.07	.24	11/16	7/8
1/2	1/2	08U-M08	1/2-14	2.75	1.96	1.31	.35	3/4	7/8
3/4	3/4	12U-M12	3/4-14	4.15	2.46	2.00	.61	1-1/8	1-1/4

Note:

Swivel for installation purposes only. (Not for temperatures above 212°F.)

JIC 37° Female Swivel Long Drop 90° Tube Elbow

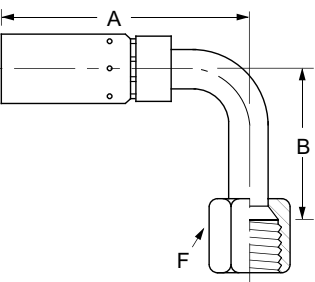
(Exceptions Noted)



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
1/4	1/4	04U-644 ^a	7/16-20	2.95	1.80	1.50	.15	9/16
3/8	1/4	06U-644 ^a	7/16-20	2.89	1.80	1.44	.15	9/16
3/8	3/8	06U-646	9/16-18	3.18	2.18	1.75	.24	11/16
3/8	1/2	06U-648 ^a	3/4-16	3.35	2.43	1.92	.24	7/8
1/2	1/2	08U-648 ^a	3/4-16	3.33	2.43	1.88	.35	7/8
1/2	5/8	08U-650 ^a	7/8-14	3.45	2.57	2.00	.36	1
3/4	3/4	12U-652	1-1/16-12	4.81	3.73	2.63	.58	1-1/4
1	1	16U-656L33	1-5/16-12	5.18	3.37	3.00	.76	1-1/2

^a Swivel nuts are universal – both SAE 37° and 45° connections.

SAE 45° Female Swivel Long Drop 90° Tube Elbow



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
3/8	3/8	06U-446	5/8-18	3.19	2.18	1.75	.24	3/4

See pages H12-15 for die, pusher, and cage information.

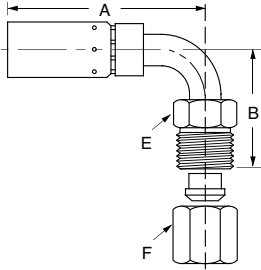
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

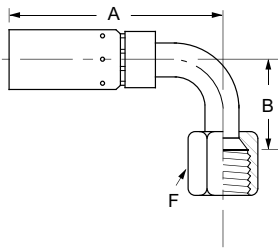
Flareless 90° Tube 7000 Ermeto Series



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex E	Hex F
3/8	3/8	06U-976	9/16-18	3.14	1.54	1.69	.28	5/8	11/16

JIC 37° Female Swivel 90° Tube Elbow

(Exceptions Noted,
Refer to Footnotes)

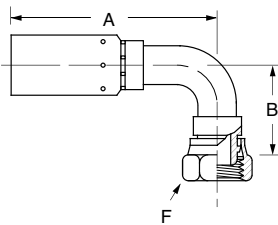


Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
1/4	1/4	04U-664 ^a	7/16-20	2.90	.68	1.44	.15	9/16
1/4	5/16	04U-665 ^a	1/2-20	3.09	.77	1.63	.21	5/8
1/4	3/8	04U-666	9/16-18	3.16	.85	1.63	.25	11/16
3/8	1/4	06U-664 ^a	7/16-20	2.85	.68	1.44	.15	9/16
3/8	3/8	06U-666	9/16-18	3.20	.85	1.75	.25	11/16
3/8	1/2	06U-668 ^a	3/4-16	3.27	1.09	1.75	.33	7/8
1/2	1/2	08U-668 ^a	3/4-16	3.33	1.09	1.88	.33	7/8
1/2	5/8	08U-670 ^a	7/8-14	3.92	1.23	2.50	.36	1
3/4	5/8	12U-670 ^a	7/8-14	4.29	1.23	2.14	.46	1
3/4	3/4	12U-672	1-1/16-12	4.76	1.82	2.63	.58	1-1/4
1	1	16U-676	1-5/16-12	5.03	2.14	2.81	.76	1-1/2
1	1-1/4	16U-677	1-5/8-12	5.06	3.31	2.86	.76	2

^a Swivel nuts are universal – both SAE 37° and 45° connections.

Female Swivel Universal Seat DIN 90° Tube Elbow

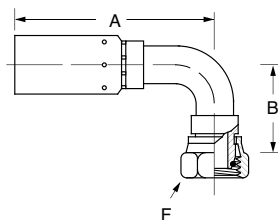
I. Rh. (Light)



Hose I.D.	Tube Size (mm)	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
1/4	8	04U-58D	M14x1.5	2.99	1.48	1.50	.16	11/16
1/4	10	04U-60D	M16x1.5	3.31	1.65	1.81	.16	3/4
3/8	10	06U-60D	M16x1.5	3.29	1.65	1.88	.25	3/4
3/8	12	06U-62D	M18x1.5	3.31	1.65	1.88	.25	7/8
1/2	15	08U-65D	M22x1.5	3.73	1.93	2.31	.36	1-1/16
3/4	22	12U-72D	M30x2.0	4.97	2.59	2.81	.61	1-7/16
1	28	16U-78D	M36x2.0	4.95	3.27	2.75	.81	1-5/8

Female 24° Swivel DIN 90° Tube Elbow

s Rh. DKO (Heavy)



Hose I.D.	Tube Size (mm)	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
3/8	12	06U-62E	M20x1.5	3.25	1.53	1.82	.25	1
3/8	14	06U-64E	M22x1.5	3.61	1.63	2.19	.25	1-1/16
1/2	16	08U-66E	M24x1.5	3.69	1.95	2.25	.33	1-1/8
3/4	25	12U-75E**	M36x2.0	5.27	2.90	3.13	.61	1-5/8
1	30	16U-80E**	M42x2.0	5.19	2.79	3.00	.77	2

**Part number will crimp in COC T-410, T-420, T-440, ET1000, and ET4000 presses only.
(Includes o-ring)

GENERAL
INFORMATION

HYDRAULIC
HOSE

AIR & WATER HOSE
& TUBING

TRUCK
HOSE

AEROQUIP/POLYON
FITTINGS

AEROQUIP/TTC
FITTINGS

SYNFLEX
FITTINGS

WEATHERHEAD
(U & Z SERIES)
FITTINGS

ASSEMBLY
EQUIPMENT &
INFORMATION

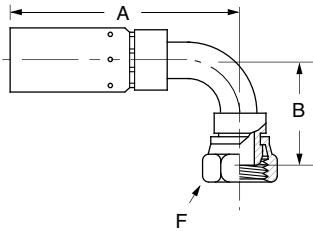
TECHNICAL
DATA

Coll-O-Crimp

'U' Series

Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

British Standard (BSPP) 60°
Cone Female Pipe Swivel
90° Tube Elbow

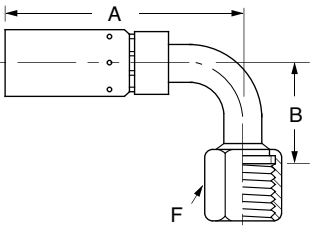


Hose I.D.	BSPP Pipe Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
1/4	1/4	04U-74P	G-1/4-19*	2.99	1.50	1.50	.16	3/4
3/8	3/8	06U-76P	G-3/8-19*	3.26	1.60	1.83	.25	7/8
3/8	1/2	06U-78P	G-1/2-14*	3.06	1.67	1.63	.25	1-1/16
1/2	1/2	08U-78P	G-1/2-14*	3.96	1.89	2.56	.36	1-1/16
1/2	5/8	08U-80P	G-5/8-14*	3.55	1.44	2.13	.36	1-1/4
3/4	3/4	12U-82P	G-3/4-14*	5.02	2.49	2.88	.58	1-1/4
1	1	16U-86P**	G-1-11*	4.95	3.09	2.75	.77	1-1/2

*G as part of thread size is ISO designation for parallel thread.

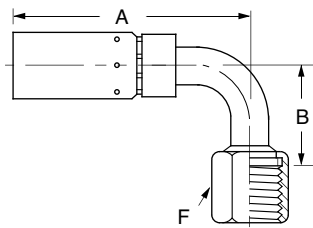
**Part number will crimp in C-O-C ET4000, T-410, T-420, and T-440 presses only.

Female FOR-SEAL Swivel
Short Drop
90° Elbow



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
1/4	1/4	04U-A24	9/16-18	3.00	.81	1.50	.16	11/16
1/4	3/8	04U-A26	11/16-16	3.13	.90	1.75	.16	13/16
3/8	1/4	06U-A24	9/16-18	3.00	.81	1.56	.16	11/16
3/8	3/8	06U-A26	11/16-16	3.13	.90	1.81	.26	13/16
3/8	1/2	06U-A28	13/16-16	3.33	1.15	1.88	.26	15/16
1/2	3/8	08U-A26	11/16-16	3.13	.90	1.75	.26	13/16
1/2	1/2	08U-A28	13/16-16	3.34	1.15	1.91	.36	15/16
1/2	5/8	08U-A30	1-14	3.46	1.27	2.03	.36	1-1/8
1/2	3/4	08U-A32	1-3/16-12	3.98	1.88	2.56	.36	1-3/8
3/4	5/8	12U-A30	1-14	4.26	1.27	2.13	.46	1-1/8
3/4	3/4	12U-A32	1-3/16-12	4.86	1.88	2.69	.59	1-3/8
3/4	1	12U-A36	1-7/16-12	5.14	2.21	2.98	.61	1-5/8
1	1	16U-A36	1-7/16-12	5.23	2.21	3.00	.76	1-5/8
1	1-1/4	16U-A40	1-11/16-12	5.06	2.59	2.86	.81	1-7/8

Female FOR-SEAL Swivel
Medium Drop
90° Tube Elbow



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
1/4	1/4	04U-J34	9/16-18	3.07	1.26	1.59	.16	11/16
1/4	3/8	04U-J36	11/16-16	3.13	1.51	1.69	.16	13/16
1/4	1/2	04U-J38	13/16-16	3.37	1.62	1.88	.16	15/16
3/8	3/8	06U-J36	11/16-16	3.20	1.51	1.69	.24	13/16
3/8	1/2	06U-J38	13/16-16	3.36	1.62	1.93	.25	15/16
1/2	3/8	08U-J36	11/16-16	3.20	1.51	1.72	.24	13/16
1/2	1/2	08U-J38	13/16-16	3.37	1.62	1.94	.33	15/16
1/2	3/4	08U-J42	1-3/16-12	4.02	2.28	2.59	.36	1-3/8
3/4	5/8	12U-J40	1-1/4	3.95	1.85	2.00	.46	1-1/8
3/4	3/4	12U-J42	1-3/16-12	4.83	2.28	2.69	.58	1-3/8
1	1	16U-J46	1-7/16-12	5.33	2.78	3.13	.76	1-5/8
1	1-1/4	16U-J50	1-11/16-12	5.11	3.22	3.04	.81	1-7/8

See pages H12-15 for die, pusher, and cage information.

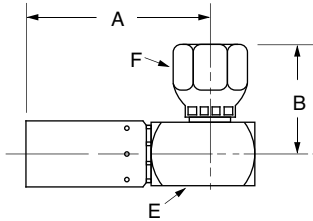
Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Coll-O-Crimp

'U' Series

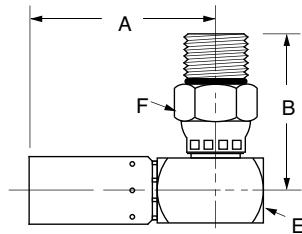
Fittings for use with hose: 3130 (-04 to -12), 37AL (-06 & -08), 3740

JIC 37° Female Swivel 90° Elbow



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Square E	Hex F
1/4	1/4	04U-554	7/16-20	2.43	1.06	.95	.16	11/16	9/16
3/8	3/8	06U-556	9/16-18	2.50	1.18	1.06	.25	11/16	11/16
1/2	1/2	08U-558	3/4-16	2.75	1.35	1.31	.36	3/4	7/8
1/2	5/8	08U-560	7/8-14	2.75	1.34	1.31	.36	3/4	1
3/4	5/8	12U-560	7/8-14	4.15	1.54	2.00	.61	1-1/8	1
3/4	3/4	12U-562	1-1/16-12	4.15	1.62	2.00	.61	1-1/8	1-1/4
3/4	7/8	12U-564	1-3/16-12	4.15	1.68	2.00	.61	1-1/8	1-3/8

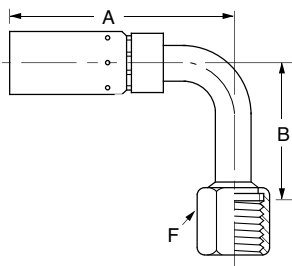
Male Straight Thread O-Ring Swivel 90° Elbow



Hose I.D.	Tube Size	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Square E	Hex F
1/4	3/8	04U-R66	9/16-18	2.43	1.68	.94	.16	11/16	7/8
3/8	3/8	06U-R66	9/16-18	2.50	1.68	1.06	.25	11/16	7/8
3/8	1/2	06U-R68	3/4-16	2.50	1.64	1.06	.25	11/16	7/8
3/8	5/8	06U-R70	7/8-14	2.50	1.80	1.06	.25	11/16	1
1/2	1/2	08U-R68	3/4-16	2.75	1.64	1.31	.36	3/4	7/8
1/2	5/8	08U-R70	7/8-14	2.75	1.79	1.31	.36	3/4	1-1/8
1/2	3/4	08U-R72	1-1/16-12	2.75	1.89	1.31	.36	3/4	1-1/4
3/4	3/4	12U-R72	1-1/16-12	4.15	2.24	2.00	.61	1-1/8	1-7/16

Note: Swivel for installation purposes only. (Not for temperatures above 212°F.)

Female FOR-SEAL® Swivel Long Drop 90° Tube Elbow



Hose I.D.	Tube Size (mm)	Part Number	Thread Size	A	B	Hose Cut-Off Factor	Hole Dia.	Hex F
1/4	1/4	04U-A64	9/16-18	3.14	1.80	1.63	.16	11/16
1/4	3/8	04U-A66	11/16-16	3.31	2.13	1.83	.16	13/16
3/8	3/8	06U-A66	11/16-16	3.34	2.13	1.91	.24	13/16
3/8	1/2	06U-A68	13/16-16	3.37	2.51	1.94	.25	15/16
1/2	1/2	08U-A68	13/16-16	3.28	2.51	1.85	.36	15/16
1/2	5/8	08U-A70	1-14	3.49	2.76	2.00	.36	1-1/8
3/4	3/4	12U-A72	1-3/16-12	4.87	3.78	2.72	.59	1-3/8
1	1	16U-A76	1-7/16-12	5.34	4.50	3.13	.76	1-5/8

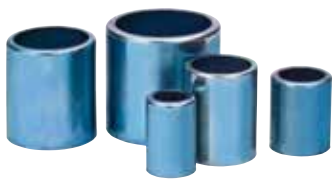
See pages H12-15 for die, pusher, and cage information.

Weatherhead 'U' Series fittings available for Aeroquip and Synflex customers.

Thermoplastic Hose Crimp Sleeves

GENERAL INFORMATION

HYDRAULIC HOSE



Synflex Crimp Sleeves

AIR & WATER HOSE & TUBING

Sleeve Part No.	Hose ID		
	Dash size	DN (mm)	in
FF91064-04S	-4	6	0.25
FF91064-06S	-6	10	0.38
FF91064-08S	-8	12	0.50
FF91064-12S	-12	19	0.75
FF91064-16S	-16	25	1.00

TRUCK HOSE

Synflex Qualified Hoses

SAE Standard	Hose	Sizes	Hose Type
100R7	3130	-04 thru -16	Conductive
	3740	-12 thru -16	Non-Conductive
100R8	3R80	-06 thru -16	Conductive
	3E80	-06 thru -16	Non-Conductive

AEROQUIP/POLYON FITTINGS

Steel crimp sleeve enables use of Aeroquip TTC and Weatherhead Z Series hose fittings with select conductive and non-conductive Synflex 100R7 and 100R8 hoses.

Markets:

- Material Handling
- Oil & Gas
- Construction
- Agriculture
- Manufacturing

Features:

- Custom blue plating provides corrosion protection and visual indication of use once crimped with hose fitting.
- Sleeve design provides ease of hose and fitting assembly and is qualified for use with Eaton crimp equipment.

Benefits:

- There are over 500 fitting configuration options to choose from with additional jump sizes and terminal ends. Additional options enable the customer to reduce their inventory carrying costs.
- Performance meets or exceeds SAE 100R7 and 100R8 industry standards.

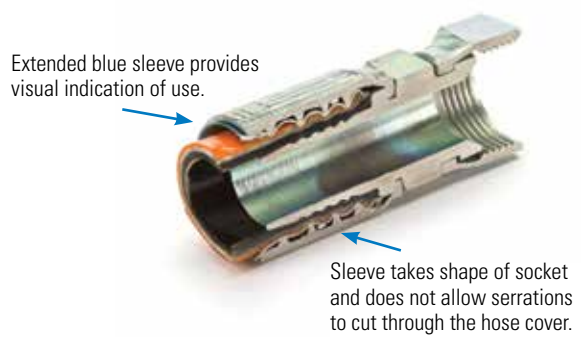
AEROQUIP/TTC FITTINGS

SYNFLEX FITTINGS

WEATHERHEAD (U & Z SERIES) FITTINGS

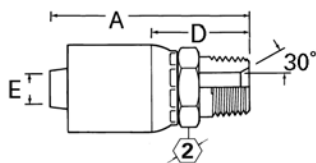
ASSEMBLY EQUIPMENT & INFORMATION

TECHNICAL DATA



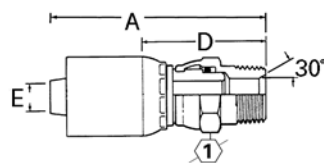
Fittings for use with hose: 3130 (-04 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

Male Pipe Rigid



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		in
			mm	in	mm	in	mm	in	
04Z-102	1/8-27	-04	46,7	1.84	23,4	0.92	4,3	0.17	9/16
04Z-104	1/4-18	-04	52,3	2.06	29,0	1.14	4,3	0.17	9/16
04Z-106	3/8-18	-04	48,3	1.90	24,9	0.98	4,3	0.17	11/16
04Z-108	1/2-14	-04	51,3	2.02	31,2	1.23	4,3	0.17	7/8
06Z-104	1/4-18	-06	55,4	2.18	30,0	1.18	6,6	0.26	11/16
06Z-106	3/8-18	-06	57,7	2.27	32,5	1.28	6,6	0.26	11/16
06Z-108	1/2-14	-06	57,7	2.27	32,5	1.28	4,1	0.16	7/8
08Z-104	1/4-18	-08	61,0	2.40	31,2	1.23	7,6	0.30	13/16
08Z-106	3/8-18	-08	63,2	2.49	33,5	1.32	9,7	0.38	13/16
08Z-108	1/2-14	-08	69,6	2.74	39,6	1.56	9,7	0.38	7/8
08Z-112	3/4-14	-08	65,0	2.56	35,3	1.39	9,7	0.38	11/16
12Z-108	1/2-14	-12	70,6	2.78	40,6	1.60	14,2	0.56	11/8
12Z-112	3/4-14	-12	72,1	2.84	41,9	1.65	15,5	0.61	11/8
12Z-116	1-11 1/2	-12	71,1	2.80	40,9	1.61	15,5	0.61	13/8
16Z-112	3/4-14	-16	76,7	3.02	42,4	1.67	19,3	0.76	13/8
16Z-116	1-11 1/2	-16	81,8	3.22	47,2	1.86	20,8	0.82	13/8
16Z-120	1 1/4-11 1/2	-16	78,2	3.08	43,7	1.72	20,8	0.82	1 11/16

Male Pipe Swivel



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		in
			mm	in	mm	in	mm	in	
04Z-J04	1/4-18	-04	64,5	2.54	41,4	1.62	4,3	0.17	3/4
06Z-J04	1/4-18	-06	63,5	2.54	42,4	1.67	6,6	0.26	3/4
06Z-J06	3/8-18	-06	67,6	2.66	42,4	1.67	6,6	0.26	7/8
06Z-J08	1/2-14	-06	72,4	2.85	47,0	1.85	6,6	0.26	7/8
08Z-J06	3/8-18	-08	73,2	2.88	43,4	1.71	9,7	0.38	7/8
08Z-J08	1/2-14	-08	79,5	3.13	49,8	1.96	9,7	0.38	15/16
12Z-J12	3/4-14	-12	82,3	3.24	52,1	2.05	15,5	0.61	1 3/8
16Z-J16	1-11 1/2	-16	98,6	3.88	64,3	2.53	20,6	0.81	1 1/2

Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

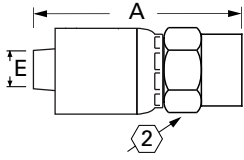
Fittings for use with hose: 3130 (-04 to -16),
3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

GENERAL INFORMATION

HYDRAULIC HOSE

Female Pipe Rigid

Dryseal NPTF



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor		EØ		Ø
			mm	in	mm	in	mm	in	in
04Z-202	1/8-27	-04	52,6	2.07	32,5	1.28	4,3	0.17	9/16
04Z-204	1/4-18	-04	58,4	2.30	38,4	1.51	4,3	0.17	3/4
06Z-204	1/4-18	-06	58,4	2.30	37,1	1.46	6,6	0.26	3/4
06Z-206	3/8-18	-06	61,2	2.41	39,9	1.57	6,6	0.26	7/8
08Z-208	1/2-14	-08	66,5	2.62	42,0	1.65	9,7	0.38	1 1/16
12Z-212	3/4-14	-12	90,9	3.58	64,0	2.52	15,5	0.61	1 5/16

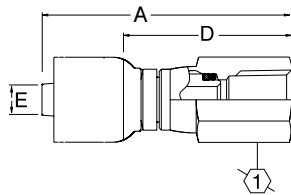
* G as part of thread size is ISO Designation for parallel thread.

AIR & WATER HOSE & TUBING

TRUCK HOSE

AEROCOUP/POLYON FITTINGS

Female Pipe Swivel

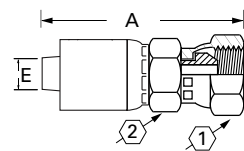


Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		Ø
			mm	in	mm	in	mm	in	in
04Z-254	1/4-18	-04	72,9	2.87	49,5	1.95	4,3	0.17	3/4
06Z-256	3/8-18	-06	75,4	2.97	50,0	1.97	6,6	0.26	7/8
08Z-258	1/2-14	-08	90,9	3.58	61,2	2.41	9,7	0.38	1 1/16
12Z-262	3/4-14	-12	92,2	3.63	62,0	2.44	15,5	0.61	1 3/8
16Z-266	1-11 1/2	-16	111,0	4.37	77,5	3.05	20,6	0.81	1 5/8

AEROCOUP/TTC FITTINGS

SYNFLEX FITTINGS

Female Straight Pipe Swivel (NPSM)



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		Ø	Ø
			mm	in	mm	in	mm	in	in	in
04Z-054	1/4-18	-04	47,8	1.88	27,7	1.09	4,3	0.17	9/16	11/16
06Z-056	3/8-18	-06	51,8	2.04	30,5	1.20	6,6	0.26	11/16	7/8
08Z-058	1/2-14	-08	61,0	2.40	35,8	1.41	9,7	0.38	7/8	1
12Z-062	3/4-14	-12	66,5	2.62	39,6	1.56	15,5	0.61	1 1/8	1 1/4
16Z-066	1-11 1/2	-16	79,0	3.11	29,9	1.18	20,8	0.81	1 3/8	1 1/2

WEATHERHEAD (U & Z SERIES) FITTINGS

ASSEMBLY EQUIPMENT & INFORMATION

TECHNICAL DATA

Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

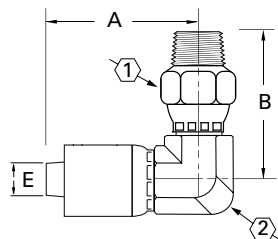
See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

Z Series

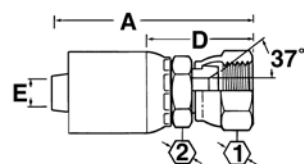
Fittings for use with hose: 3130 (-04 to -16),
3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

Male Pipe Swivel
90° Elbow



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		⊕2	⊕1	B
			mm	in	mm	in	mm	in	in	in	
04Z-M04	1/4-18	-04	54,6	2.15	31,2	1.23	4,3	0.17	3/4	3/4	1.81
06Z-M04	1/4-18	-06	54,9	2.16	33,7	1.33	6,6	0.26	3/4	7/8	1.96
06Z-M06	3/8-18	-06	59,2	2.33	33,7	1.33	6,6	0.26	3/4	7/8	1.80
08Z-M08	1/2-14	-08	68,1	2.68	38,3	1.51	9,6	0.38	3/4	15/16	2.05
12Z-M12	3/4-14	-12	94,5	3.72	64,2	2.53	15,4	0.61	11/4	1 3/8	2.72

JIC/37° Female Swivel



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		⊕1	⊕2
			mm	in	mm	in	mm	in	in	in
04Z-603	3/8-24	-04	49,3	1.94	25,9	1.02	3,3	0.13	1/2	9/16
04Z-604	7/16-20	-04	50,8	2.00	27,2	1.07	4,3	0.17	9/16	9/16
04Z-605	1/2-20	-04	50,3	1.98	26,9	1.06	4,3	0.17	5/8	9/16
04Z-606	9/16-18	-04	51,6	2.03	28,2	1.11	4,3	0.17	11/16	9/16
06Z-604	7/16-20	-06	55,6	2.19	30,2	1.19	4,3	0.17	9/16	11/16
06Z-605	1/2-20	-06	56,9	2.24	31,5	1.24	5,8	0.23	5/8	11/16
06Z-606	9/16-18	-06	57,9	2.28	32,5	1.28	6,6	0.26	11/16	11/16
06Z-608	3/4-16	-06	58,7	2.31	33,3	1.31	6,6	0.26	7/8	11/16
06Z-610	7/8-14	-06	57,4	2.26	13,2	0.52	6,6	0.26	1	13/16
06Z-612	1 1/16-12	-06	59,5	2.34	38,4	1.51	6,7	0.26	1 1/4	1
08Z-606	9/16-18	-08	59,9	2.36	34,5	1.36	9,6	0.33	11/16	13/16
08Z-608	3/4-16	-08	66,8	2.63	37,1	1.46	9,7	0.38	7/8	13/16
08Z-610	7/8-14	-08	67,1	2.64	37,3	1.47	9,7	0.38	1	13/16
08Z-612	1 1/16-12	-08	69,3	2.73	39,6	1.56	9,7	0.38	1 1/4	1
08Z-616	1 5/16-12	-08	77,7	3.06	48,0	1.89	9,7	0.38	1 1/2	1 1/4
12Z-608	3/4-16	-12	66,0	2.60	38,8	1.53	9,9	0.39	7/8	1 1/8
12Z-610	7/8-14	-12	71,4	2.81	41,4	1.63	12,2	0.48	1	1 1/8
12Z-612	1 1/16-12	-12	72,1	2.84	41,9	1.65	15,5	0.61	1 1/4	1 1/8
12Z-614	1 3/16-12	-12	72,1	2.84	41,9	1.65	15,5	0.61	1 3/8	1 1/8
12Z-616	1 5/16-12	-12	73,9	2.91	43,7	1.72	15,5	0.61	1 1/2	1 1/4
16Z-612	1 1/16-12	-16	80,0	3.15	45,7	1.80	15,5	0.61	1 1/4	1 3/8
16Z-614	1 3/16-12	-16	80,0	3.15	46,5	1.83	20,6	0.81	1 3/8	1 3/8
16Z-616	1 5/16-12	-16	83,6	3.29	49,0	1.93	20,6	0.81	1 1/2	1 3/8
16Z-620	1 5/8-12	-16	80,5	3.17	46,0	1.81	20,6	0.81	2	

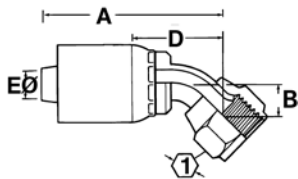
Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

Fittings for use with hose: 3130 (-04 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

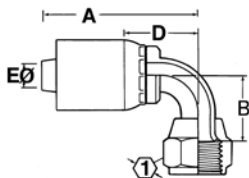
JIC/37° Female Swivel
45° Tube Elbow
(Exceptions noted, refer to footnotes)



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		B		① in
			mm	in	mm	in	mm	in	mm	in	
04Z-684 ^a	7/16-20	-04	49,8	1.96	26,4	1.04	3,8	0.15	8,4	0.33	9/16
04Z-685 ^a	1/2-20	-04	51,8	2.04	28,4	1.12	4,3	0.17	9,4	0.37	5/8
04Z-686	9/16-18	-04	53,1	2.09	29,7	1.17	4,3	0.17	9,9	0.39	11/16
06Z-684 ^a	7/16-20	-06	44,5	1.75	23,4	0.92	4,1	0.16	8,4	0.33	9/16
06Z-686	9/16-18	-06	58,7	2.31	33,3	1.31	6,1	0.24	9,9	0.39	11/16
06Z-688 ^a	3/4-16	-06	67,3	2.65	42,2	1.66	6,6	0.26	14,0	0.55	7/8
08Z-688 ^a	3/4-16	-08	71,6	2.82	41,9	1.65	9,4	0.37	14,0	0.55	7/8
08Z-690 ^a	7/8-14	-08	77,0	3.03	47,2	1.86	9,7	0.38	15,0	0.59	1
12Z-696	1 5/16-12	-12	87,1	3.43	60,2	2.37	15,5	0.61	26,9	1.06	1 1/2
12Z-692	1 1/16-12	-12	87,1	3.43	56,9	2.24	14,7	0.58	19,8	0.78	1 1/4
16Z-696	1 5/16-12	-16	95,0	3.74	60,7	2.39	19,3	0.76	27,2	1.07	1 1/2

^a Swivel nuts are universal – both SAE 37° and 45° connections.

JIC/37° Female Swivel
90° Elbow
(Exceptions noted, refer to footnotes)



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		B		① in
			mm	in	mm	in	mm	in	mm	in	
04Z-664 ^a	7/16-20	-04	46,7	1.84	23,4	0.92	3,8	0.15	17,3	0.68	9/16
04Z-665 ^a	1/2-20	-04	48,8	1.92	25,4	1.00	4,3	0.17	19,3	0.76	5/8
04Z-666	9/16-18	-04	50,8	2.00	27,4	1.08	4,3	0.17	21,3	0.84	11/16
06Z-664 ^a	7/16-20	-06	46,0	1.81	24,9	0.98	4,1	0.16	17,3	0.68	9/16
06Z-666	9/16-18	-06	56,1	2.21	31,0	1.22	6,1	0.24	21,3	0.84	11/16
06Z-668 ^a	3/4-16	-06	61,5	2.42	36,1	1.42	6,6	0.26	27,7	1.09	7/8
08Z-666	9/16-18	-08	61,7	2.43	32,0	1.26	6,1	0.24	21,3	0.84	11/16
08Z-668 ^a	3/4-16	-08	65,8	2.59	36,1	1.42	9,4	0.37	27,7	1.09	7/8
08Z-670 ^a	7/8-14	-08	70,6	2.78	41,0	1.61	9,7	0.38	30,2	1.19	1
12Z-670 ^a	7/8-14	-12	65,3	2.57	39,6	1.56	11,7	0.46	30,2	1.19	1
12Z-672	1 1/16-12	-12	85,4	3.36	55,1	2.17	17,4	0.58	45,7	1.80	1 1/4
12Z-676	1 5/16-12	-12	85,6	3.37	55,4	2.18	15,5	0.61	60,7	2.39	1 1/2
16Z-676	1 5/16-12	-16	90,4	3.56	55,9	2.20	19,3	0.76	60,7	2.39	1 1/2
16Z-677	1 5/8-12	-16	95,8	3.77	62,2	2.45	20,8	0.82	69,9	2.75	2

^a Swivel nuts are universal – both SAE 37° and 45° connections.

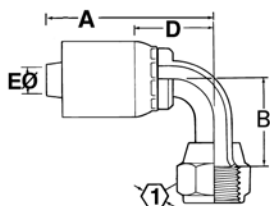
Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

Fittings for use with hose: 3130 (-04 to -16),
3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

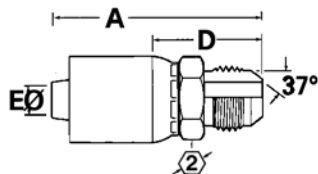
JIC/37° Female Swivel
90° Long Drop Tube Elbow
(Exceptions noted, refer to footnotes)



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		B		① in
			mm	in	mm	in	mm	in	mm	in	
04Z-644 ^a	7/16-20	-04	46,7	1.84	23,4	0.92	3,8	0.15	45,7	1.80	9/16
04Z-645 ^a	1/2-20	-04	48,8	1.92	25,4	1.00	4,3	0.17	45,7	1.80	5/8
06Z-644 ^a	7/16-20	-06	46,0	1.81	24,9	0.98	4,3	0.17	45,7	1.80	9/16
06Z-646	9/16-18	-06	56,4	2.22	31,2	1.23	6,1	0.24	55,4	2.18	11/16
06Z-648 ^a	3/4-16	-06	64,5	2.54	39,1	1.54	6,6	0.26	62,2	2.45	7/8
08Z-648 ^a	3/4-16	-08	68,8	2.71	39,1	1.54	9,4	0.37	62,2	2.45	7/8
08Z-650 ^a	7/8-14	-08	70,6	2.78	40,9	1.61	9,7	0.38	65,3	2.57	1
12Z-652	1 1/16-12	-12	85,3	3.36	55,1	2.17	14,7	0.58	94,0	3.70	1 1/4
16Z-656	1 5/16-12	-16	90,4	3.56	55,9	2.20	19,3	0.76	116,3	4.58	1 1/2

^a Swivel nuts are universal – both SAE 37° and 45° connections.

JIC/37° Male Rigid



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		② in
			mm	in	mm	in	mm	in	
04Z-504	7/16-20	-04	50,8	2.00	27,2	1.07	4,3	0.17	9/16
04Z-505	1/2-20	-04	46,7	1.84	23,4	0.92	4,3	0.17	9/16
04Z-506	9/16-18	-04	47,0	1.85	23,6	0.93	4,3	0.17	5/8
06Z-506	9/16-18	-06	54,9	2.16	29,7	1.17	6,6	0.26	11/16
06Z-508	3/4-16	-06	53,3	2.10	28,2	1.11	6,6	0.26	13/16
06Z-510	7/8-14	-06	53,3	2.10	30,7	1.21	6,6	0.26	15/16
08Z-508	3/4-16	-08	65,3	2.57	35,8	1.41	9,7	0.38	13/16
08Z-510	7/8-14	-08	61,5	2.42	32,0	1.26	9,7	0.38	15/16
08Z-512	1 1/16-12	-08	65,8	2.59	36,1	1.42	9,7	0.38	11/8
12Z-510	7/8-14	-12	70,6	2.78	40,4	1.59	12,2	0.48	1 1/8
12Z-512	1 1/16-12	-12	74,7	2.94	44,5	1.75	15,5	0.61	1 1/8
12Z-514	1 3/16-12	-12	69,3	2.73	39,1	1.54	15,5	0.61	1 1/4
12Z-516	1 5/16-12	-12	69,9	2.75	39,6	1.56	15,5	0.61	1 3/8
16Z-514	1 3/16-12	-16	79,0	3.11	45,7	1.80	18,3	0.72	1 3/8
16Z-516	1 5/16-12	-16	82,6	3.25	48,3	1.90	20,8	0.82	1 3/8
16Z-520	1 5/8-12	-16	77,0	3.03	43,4	1.71	20,6	0.81	1 11/16

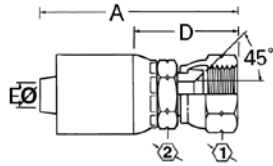
Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

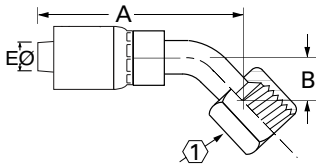
Fittings for use with hose: 3130 (-04 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

SAE 45° Female Swivel



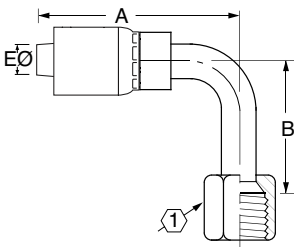
Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①	②
			mm	in	mm	in	mm	in	in	in
04Z-404	7/16-20	-04	50,8	2.00	27,2	1.07	4,3	0.17	9/16	9/16
06Z-404	7/16-20	-06	55,6	2.19	30,2	1.19	4,8	0.19	9/16	11/16
06Z-406	5/8-18	-06	58,7	2.31	33,3	1.31	6,6	0.26	3/4	11/16
06Z-408	3/4-16	-06	58,7	2.31	33,3	1.31	6,6	0.26	7/8	11/16
08Z-408	3/4-16	-08	66,8	2.63	37,1	1.46	9,7	0.38	7/8	13/16
08Z-410	7/8-14	-08	67,1	2.64	37,3	1.47	9,7	0.38	1	13/16
12Z-412	1 1/16-14	-12	72,1	2.84	41,9	1.65	15,5	0.61	1 1/4	1 1/8

SAE 45° Female Swivel
45° Tube Elbow



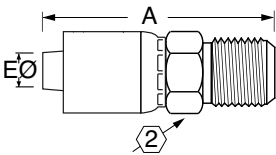
Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①	B
			mm	in	mm	in	mm	in		
06Z-486	5/8-18	-06	58,2	2.29	36,8	1.45	6,1	0.24	3/4	0.73

SAE 45° Female Swivel Long Drop
90° Tube Elbow



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①	B
			mm	in	mm	in	mm	in		
06Z-446	5/8-18	-06	47,5	1.87	26,2	1.03	6.1	0.24	3/4	2.18

SAE 45° Flare Male Rigid



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②
			mm	in	mm	in	mm	in	
06Z-306	5/8-18	-06	52,3	2.06	31,2	1.23	6,6	0.26	11/16
12Z-312	1 1/16-14	-12	74,7	2.94	47,8	1.88	15,5	0.61	1 1/8

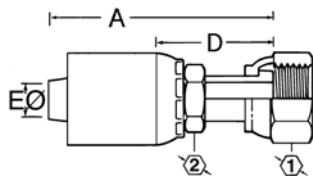
Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

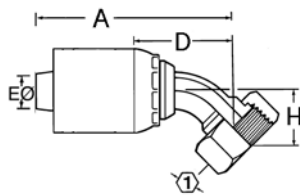
Fittings for use with hose: 3130 (-04 to -16),
3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

Female FOR-SEAL® Swivel



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①	②
			mm	in	mm	in	mm	in	in	in
04Z-S64	9/16-18	-04	49,5	1.95	26,2	1.03	4,3	0.17	11/16	9/16
04Z-S66	11/16-16	-04	51,8	2.04	28,4	1.12	4,3	0.17	13/16	5/8
04Z-S68	13/16-16	-04	52,3	2.06	32,5	1.28	4,1	0.16	13/16	15/16
06Z-S64	9/16-18	-06	54,4	2.14	29,2	1.15	4,3	0.17	11/16	11/16
06Z-S66	11/16-16	-06	56,6	2.23	31,5	1.24	6,6	0.26	13/16	11/16
06Z-S68	13/16-16	-06	58,9	2.32	33,5	1.32	6,6	0.26	15/16	13/16
08Z-S66	11/16-16	-08	63,8	2.51	34,0	1.34	6,6	0.26	13/16	7/8
08Z-S68	13/16-16	-08	67,8	2.67	38,1	1.50	9,7	0.38	15/16	7/8
08Z-S70	1-14	-08	67,1	2.64	37,3	1.47	9,7	0.38	1 1/8	15/16
08Z-S72	1 3/16-12	-08	71,1	2.80	41,4	1.63	9,7	0.38	1 3/8	1 1/8
12Z-S70	1-14	-12	71,4	2.81	41,4	1.62	12,2	0.48	1 1/8	1 1/8
12Z-S72	1 3/16-12	-12	73,9	2.91	43,7	1.72	15,5	0.61	1 3/8	1 1/8
12Z-S76	1 7/16-12	-12	75,7	2.98	45,5	1.79	15,5	0.61	1 5/8	1 3/8
16Z-S72	1 3/16-12	-16	81,8	3.22	47,2	1.86	15,5	0.61	1 3/8	1 3/8
16Z-S76	1 7/16-12	-16	83,6	3.29	49,3	1.94	20,6	0.81	1 5/8	1 3/8
16Z-S80	1 11/16-12	-16	82,6	3.25	48,3	1.90	20,6	0.81	1 7/8	1 5/8

Female FOR-SEAL® Swivel
45° Tube Elbow



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		①
			mm	in	mm	in	mm	in	mm	in	in
04Z-L64	9/16-18	-04	53,8	2.12	30,5	1.20	4,3	0.17	10,2	0.40	11/16
04Z-L66	11/16-16	-04	58,4	2.30	35,1	1.38	4,3	0.17	10,9	0.43	13/16
06Z-L64	9/16-18	-06	58,4	2.30	33,0	1.30	4,3	0.17	10,4	0.41	11/16
06Z-L66	11/16-16	-06	61,7	2.43	36,3	1.43	6,6	0.26	10,9	0.43	13/16
06Z-L68	13/16-16	-06	69,6	2.74	44,2	1.74	6,6	0.26	15,0	0.59	15/16
08Z-L66	11/16-16	-08	67,3	2.65	37,6	1.48	6,6	0.26	10,9	0.43	13/16
08Z-L68	13/16-16	-08	75,2	2.96	45,5	1.79	9,1	0.36	15,0	0.59	15/16
08Z-L70	1-14	-08	80,8	3.18	51,1	2.01	9,7	0.38	16,5	0.65	1 1/8
08Z-L72	1 3/16-12	-08	89,2	3.51	59,4	2.34	9,7	0.38	21,1	0.83	1 3/8
12Z-L70	1-14	-12	78,5	3.09	51,8	2.04	11,4	0.45	16,5	0.65	1 1/8
12Z-L72	1 3/16-12	-12	90,7	3.57	60,5	2.38	14,0	0.55	21,1	0.83	1 3/8
12Z-L76	1 7/16-12	-12	102,6	4.04	72,4	2.85	15,5	0.61	23,9	0.94	1 5/8
16Z-L72	1 3/16-12	-16	94,5	3.72	60,9	2.40	14,0	0.55	21,1	0.83	1 3/8
16Z-L76	1 7/16-12	-16	107,4	4.23	73,2	2.88	19,8	0.78	23,9	0.94	1 5/8
16Z-L80	1 11/16-12	-16	117,3	4.62	83,8	3.30	20,7	0.81	25,4	1.00	1 7/8

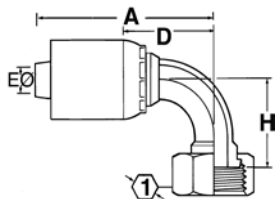
Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

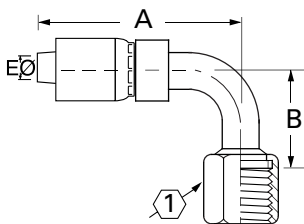
Fittings for use with hose: 3130 (-04 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

Female FOR-SEAL® Swivel Short Drop 90° Tube Elbow



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		1
			mm	in	mm	in	mm	in	mm	in	
04Z-A24	9/16-18	-04	53,1	2.09	29,7	1.17	4,3	0.17	20,8	0.82	11/16
04Z-A26	11/16-16	-04	56,4	2.22	33,0	1.30	4,3	0.17	22,9	0.90	13/16
06Z-A24	9/16-18	-06	56,1	2.21	30,7	1.21	4,3	0.17	20,8	0.82	11/16
06Z-A26	11/16-16	-06	59,4	2.34	34,0	1.34	6,6	0.26	22,9	0.90	13/16
06Z-A28	13/16-16	-06	66,5	2.62	41,4	1.62	6,6	0.26	29,2	1.15	15/16
08Z-A26	11/16-16	-08	65,0	2.56	35,3	1.39	6,6	0.26	22,9	0.90	13/16
08Z-A28	13/16-16	-08	72,1	2.84	42,4	1.67	9,1	0.36	29,2	1.15	15/16
08Z-A30	1-14	-08	78,0	3.07	48,5	1.91	9,7	0.38	32,3	1.27	1 1/8
08Z-A32	1 3/16-12	-08	87,6	3.45	57,9	2.28	9,7	0.38	47,8	1.88	1 3/8
12Z-A30	1-14	-12	79,0	3.11	49,0	1.93	11,4	0.45	32,3	1.27	1 1/8
12Z-A32	1 3/16-12	-12	88,6	3.49	58,4	2.30	14,0	0.55	47,8	1.88	1 3/8
12Z-A36	1 7/16-12	-12	102,6	4.04	72,4	2.85	15,5	0.61	56,1	2.21	1 5/8
16Z-A36	1 7/16-12	-16	107,2	4.22	72,9	2.87	20,6	0.81	56,1	2.21	1 5/8
16Z-A40	1 11/16-12	-16	123,2	4.85	89,0	3.50	20,6	0.81	63,8	2.51	1 7/8

Female FOR-SEAL® Swivel Medium Drop 90° Tube Elbow



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		1	B
			mm	in	mm	in	mm	in		
04Z-J34	9/16-18	-04	49,5	1.95	29,7	1.17	4,3	0.17	11/16	1.26
04Z-J36	11/16-16	-04	55,1	2.17	32,8	1.29	4,3	0.17	13/16	1.51
04Z-J38	13/16-16	-04	55,9	2.20	35,8	1.41	4,3	0.17	15/16	1.67
06Z-J36	11/16-16	-06	55,1	2.17	34,0	1.34	6,6	0.26	13/16	1.51
06Z-J38	13/16-16	-06	57,4	2.26	36,1	1.42	6,6	0.26	15/16	1.67
08Z-J36	11/16-16	-08	63,0	2.48	37,6	1.48	6,1	0.24	13/16	1.51
08Z-J38	13/16-16	-08	67,6	2.66	42,4	1.67	9,1	0.36	15/16	1.62
08Z-J42	1 3/16-12	-08	98,3	3.87	72,9	2.87	9,7	0.38	1 3/8	2.13
12Z-J40	1-14	-12	67,6	2.66	40,6	1.60	11,4	0.45	1 1/8	1.78
12Z-J42	1 3/16-12	-12	85,3	3.36	58,4	2.30	13,9	0.55	1 3/8	2.28
16Z-J46	1 7/16-12	-16	106,2	4.18	72,6	2.86	19,8	0.78	1 5/8	2.78
16Z-J50	1 11/16-12	-16	141,2	5.56	107,7	4.24	20,6	0.81	1 7/8	3.06

Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

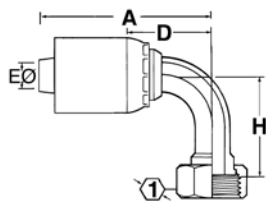
See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

GENERAL INFORMATION
HYDRAULIC HOSE
AIR & WATER HOSE & TUBING
TRUCK HOSE
AERODUPLICATION FITTINGS
AERODUPLICATION FITTINGS
SYN/FLEX FITTINGS
WEATHERHEAD (U & Z SERIES) FITTINGS
ASSEMBLY EQUIPMENT & INFORMATION
TECHNICAL DATA

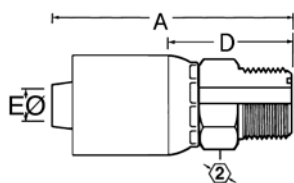
Fittings for use with hose: 3130 (-04 to -16),
3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

Female FOR-SEAL®
Swivel Long Drop
90° Tube Elbow



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		H		in
			mm	in	mm	in	mm	in	mm	in	
04Z-A64	9/16-18	-04	53,1	2.09	29,7	1.17	4,3	0.17	45,7	1.80	11/16
04Z-A66	11/16-16	-04	56,4	2.22	33,0	1.30	4,3	0.17	54,1	2.13	13/16
04Z-A68	13/16-16	-04	65,8	2.59	42,4	1.67	4,3	0.17	64,8	2.55	15/16
06Z-A66	11/16-16	-06	59,4	2.34	34,0	1.34	6,1	0.24	54,1	2.13	13/16
06Z-A68	13/16-16	-06	68,8	2.71	43,4	1.71	6,6	0.26	64,8	2.55	15/16
08Z-A68	13/16-16	-08	72,9	2.87	43,2	1.70	9,4	0.37	64,8	2.55	15/16
08Z-A70	1-14	-08	78,0	3.07	48,5	1.91	9,7	0.38	70,1	2.76	1 1/8
12Z-A72	1 3/16-12	-12	88,4	3.48	58,2	2.29	14,2	0.56	96,0	3.78	1 3/8
12Z-A76	1 7/16-12	-12	102,6	4.04	72,4	2.85	15,5	0.61	114,3	4.50	1 5/8
16Z-A76	1 7/16-12	-16	107,2	4.22	72,6	2.86	19,8	0.78	114,3	4.50	1 5/8

FOR-SEAL® Male Rigid



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		in
			mm	in	mm	in	mm	in	
04Z-E64	9/16-18	-04	45,2	1.78	21,8	0.86	4,3	0.17	5/8
06Z-E66	11/16-16	-06	50,5	1.99	25,1	0.99	6,6	0.26	3/4
06Z-E68	13/16-16	-06	49,5	1.95	24,1	0.95	6,6	0.26	7/8
08Z-E68	13/16-16	-08	58,4	2.30	28,7	1.13	9,7	0.38	7/8
08Z-E70	1-14	-08	55,1	2.17	29,7	1.17	9,7	0.38	1 1/16
08Z-E72	1 3/16-12	-08	57,7	2.27	32,3	1.27	9,7	0.38	1 1/4
12Z-E72	1 3/16-12	-12	66,8	2.63	36,6	1.44	15,5	0.61	1 1/4
12Z-E76	1 7/16-12	-12	64,3	2.53	34,0	1.34	15,5	0.61	1 1/2
16Z-E76	1 7/16-12	-16	75,2	2.96	41,7	1.64	20,7	0.81	1 1/2

Does not include o-ring. See pages H9-11 for o-ring information.

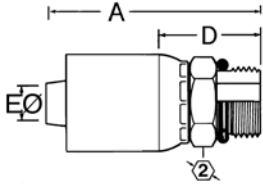
Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

Fittings for use with hose: 3130 (-04 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

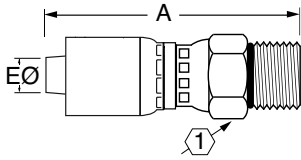
Male Straight Thread
O-ring Rigid



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		Ø
			mm	in	mm	in	mm	in	
04Z-P04	7/16-20	-04	46,7	1.84	23,4	0.92	4,3	0.17	9/16
04Z-P05	1/2-20	-04	46,7	1.84	23,4	0.92	4,3	0.17	5/8
04Z-P06	9/16-18	-04	45,2	1.78	21,8	0.86	4,3	0.17	11/16
06Z-P06	9/16-18	-06	50,8	2.00	25,4	1.00	6,6	0.26	11/16
06Z-P08	3/4-16	-06	50,0	1.97	24,9	0.98	6,6	0.26	7/8
06Z-P10	7/8-14	-06	47,8	1.88	26,7	1.05	6,6	0.26	1
08Z-P08	3/4-16	-08	59,9	2.36	30,2	1.19	9,7	0.38	7/8
08Z-P10	7/8-14	-08	57,4	2.26	27,7	1.09	9,7	0.38	1
08Z-P12	1 1/16-12	-08	60,7	2.39	31,0	1.22	9,7	0.38	1 1/4
12Z-P10	7/8-14	-12	64,3	2.53	37,1	1.46	12,2	0.48	1 1/8
12Z-P12	1 1/16-12	-12	62,0	2.44	31,8	1.25	15,5	0.61	1 1/4
12Z-P16	1 5/16-12	-12	65,0	2.56	34,8	1.37	15,5	0.61	1 1/2
16Z-P16	1 5/16-12	-16	69,6	2.74	35,3	1.39	20,8	0.82	1 1/2

See pages H9-11 for o-ring information.

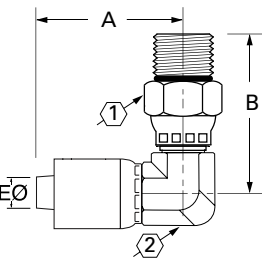
Male Straight Thread
O-ring Swivel



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		Ø
			mm	in	mm	in	mm	in	
04Z-R04	7/16-20	-04	64,0	2.52	40,3	1.59	4,3	0.17	3/4
06Z-R06	9/16-18	-06	69,1	2.72	43,9	1.73	6,6	0.26	7/8
06Z-R08	3/4-16	-08	67,6	2.66	42,4	1.67	6,6	0.26	7/8
08Z-R08	3/4-16	-08	76,5	3.01	46,7	1.84	9,6	0.38	1
08Z-R10	7/8-14	-08	77,0	3.03	47,2	1.86	9,6	0.38	1
08Z-R12	1 1/16-12	-08	88,6	3.49	58,9	2.32	9,6	0.38	1 7/16
10Z-R08	3/4-16	-10	76,7	3.02	47,2	1.86	12,7	0.5	1
12Z-R10	7/8-14	-12	87,1	3.43	56,9	2.24	15,5	0.61	1 7/16

Includes o-ring. See pages H9-11 for o-ring information.

Male Straight Thread
O-ring Swivel 90° Elbow



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		Ø	Ø	B
			mm	in	mm	in	mm	in			
04Z-R66	9/16-18	-04	55,4	2.18	32,0	1.26	4,3	0.17	3/4	7/8	1,87
06Z-R66	9/16-18	-06	59,2	2.33	33,7	1.33	6,6	0.26	3/4	7/8	1,87
06Z-R68	3/4-16	-06	59,2	2.33	33,7	1.33	6,6	0.26	3/4	1	1,93
06Z-R70	7/8-14	-06	59,2	2.33	33,7	1.33	6,6	0.26	3/4	1	1,95
08Z-R68	3/4-16	-08	68,1	2.68	38,3	1.51	9,7	0.38	3/4	1	1,93
08Z-R70	7/8-14	-08	68,1	2.68	38,3	1.51	9,7	0.38	3/4	1	1,97
08Z-R72	1 1/16-12	-08	79,2	3.12	49,5	1.95	9,7	0.38	1 1/16	1 7/16	2,43
12Z-R72	1 1/16-12	-12	94,5	3.72	64,2	2.53	15,5	0.61	32	1 7/16	2,65

Includes o-ring. See page H9-11 for replacement o-rings.

Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

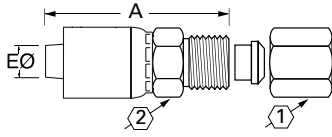
See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

Fittings for use with hose: 3130 (-04 to -16),
3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

**Flareless Tube Rigid
Ermeto 7000 Series**

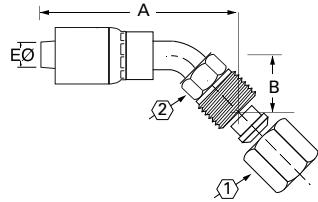
(With Nut and Sleeve)



Z Series Part No.	Thd.	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②	①
				mm	in	mm	in	mm	in	in	in
04Z-754	7/16-20	1/4	-04	41,9	1.65	21,8	0.86	4,3	0.17	9/16	9/16
04Z-755	1/2-20	5/16	-04	40,1	1.58	20,3	0.80	4,3	0.17	9/16	5/8
06Z-754	7/16-20	1/4	-06	46,0	1.81	24,6	0.97	6,6	0.26	11/16	9/16
06Z-755	1/2-20	5/16	-06	46,0	1.81	24,6	0.97	5,8	0.23	11/16	5/8
06Z-756	9/16-18	3/8	-06	46,2	1.82	25,2	0.99	6,6	0.26	11/16	11/16
08Z-758	3/4-16	1/2	-08	54,6	2.15	29,5	1.16	9,7	0.38	13/16	7/8
08Z-760	7/8-14	5/8	-08	53,8	2.12	28,5	1.12	9,7	0.38	15/16	1
12Z-762	1 1/16-12	3/4	-12	61,0	2.40	34,0	1.34	15,5	0.61	1 1/8	1 1/4
16Z-766	1 5/16-12	1	-16	96,5	3.80	37,6	1.48	20,6	0.81	1 3/8	1 1/2

**Flareless 45° Tube
Elbow 7000
Ermeto Series**

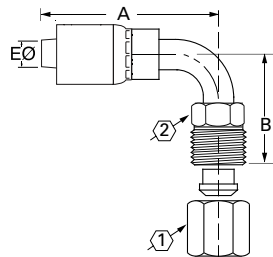
(With Nut and Sleeve)



Z Series Part No.	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①	②	B
				mm	in	mm	in	mm	in	in	in	
06Z-956	9/16-18	3/8	-06	62,0	2.44	39,6	1.56	6,6	.26	11/16	5/8	0.83

**Flareless 90° Tube
Elbow 7000
Ermeto Series**

(With Nut and Sleeve)



Z Series Part No.	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②	①	B
				mm	in	mm	in	mm	in	in	in	
06Z-976	9/16-18	3/8	-06	52,1	2.05	30,9	1.22	6,6	0.26	5/8	11/16	1.46

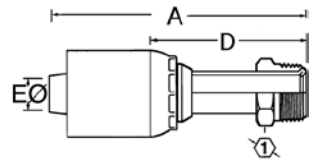
Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

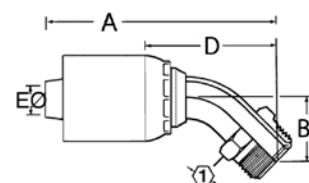
Fittings for use with hose: 3130 (-04 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

Inverted Male Swivel Straight



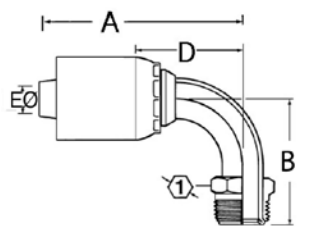
Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		Ø
			mm	in	mm	in	mm	in	
04Z-B03	3/8-24	-04	76,2	3.00	55,9	2.20	2,5	0.10	3/8
04Z-B04	7/16-24	-04	60,7	2.39	37,1	1.46	4,3	0.17	7/16
04Z-B05	1/2-20	-04	60,7	2.39	37,1	1.46	4,3	0.17	1/2
06Z-B04	7/16-24	-06	64,3	2.53	38,9	1.53	4,3	0.17	7/16
06Z-B05	1/2-20	-06	66,0	2.60	40,9	1.61	6,1	0.24	1/2
06Z-B06	5/8-18	-06	66,0	2.60	40,9	1.61	6,6	0.26	5/8
06Z-B07	11/16-18	-06	62,2	2.45	40,6	1.60	6,6	0.26	11/16
08Z-B08	3/4-18	-08	70,9	2.79	41,4	1.62	9,7	0.38	3/4
08Z-B10	7/8-18	-08	74,7	2.94	49,0	1.93	9,7	0.38	7/8

Inverted Male Swivel 45° Tube Elbow



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		B		Ø
			mm	in	mm	in	mm	in	mm	in	
04Z-B43	3/8-24	-04	69,9	2.75	49,8	1.96	2,5	0.10	17,5	0.69	3/8
04Z-B44	7/16-24	-04	67,8	2.67	44,5	1.75	4,3	0.17	24,4	0.96	7/16
04Z-B45	1/2-20	-04	64,5	2.54	44,5	1.75	4,3	0.17	24,4	0.96	1/2
06Z-B45	1/2-20	-06	69,1	2.72	48,0	1.89	6,1	0.24	24,4	0.96	1/2
06Z-B46	5/8-18	-06	73,2	2.88	48,0	1.89	6,6	0.26	24,4	0.96	5/8
06Z-B47	11/16-18	-06	69,3	2.73	48,0	1.89	6,6	0.26	24,4	0.96	11/16
08Z-B48	3/4-18	-08	78,0	3.07	48,3	1.90	9,7	0.38	23,6	0.93	3/4

Inverted Male Swivel 90° Tube Elbow



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		B		Ø
			mm	in	mm	in	mm	in	mm	in	
04Z-B63	3/8-24	-04	53,8	2.12	33,5	1.32	2,5	0.10	27,9	1.06	3/8
04Z-B64	7/16-24	-04	58,2	2.29	34,8	1.37	4,3	0.17	42,3	1.69	7/16
04Z-B65	1/2-20	-04	55,1	2.17	34,8	1.37	4,3	0.17	43,9	1.73	1/2
06Z-B64	7/16-24	-06	57,8	2.28	36,6	1.44	4,3	0.17	42,3	1.69	7/16
06Z-B65	1/2-20	-06	63,8	2.51	38,4	1.51	6,1	0.24	43,9	1.73	1/2
06Z-B66	5/8-18	-06	63,8	2.51	38,4	1.51	6,6	0.26	43,9	1.73	5/8
06Z-B67	11/16-18	-06	62,0	2.44	40,9	1.61	6,6	0.26	43,9	1.73	11/16
08Z-B68	3/4-18	-08	69,3	2.73	39,6	1.56	9,7	0.38	44,5	1.75	3/4

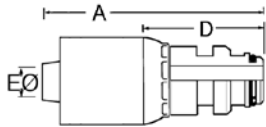
Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

Fittings for use with hose: 3130 (-04 to -16),
3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

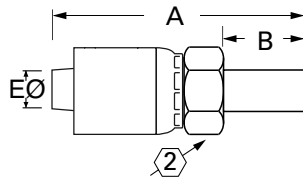
READY-LOK®
Male Connector



Z Series Part No.	Connect. Size	Hose Size	A		Hose Cut-Off Factor (D)		EØ	
			mm	in	mm	in	mm	in
04Z-04S	1/4	-04	55,4	2.18	32,0	1.26	4,3	0.17
06Z-06S	3/8	-06	58,4	2.30	33,0	1.30	6,6	0.26
06Z-08S	1/2	-06	58,4	2.30	33,0	1.30	6,6	0.26
08Z-08S	1/2	-08	64,0	2.52	34,3	1.35	9,7	0.38
12Z-12S	3/4	-12	65,0	2.56	34,8	1.37	15,5	0.61
16Z-16S	1	-16	74,9	2.95	40,6	1.60	20,6	0.81

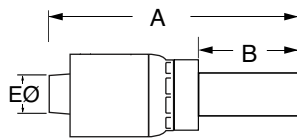
(O-ring and backup ring included.)

Standpipe Straight Tube



Z Series Part No.	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		2	B	
			mm	in	mm	in	mm	in		mm	in
04Z-T04	1/4	-04	55,6	2.19	35,56	1.40	4,3	0.17	9/16	25,4	1.00
06Z-T06	3/8	-06	59,7	2.35	38,61	1.52	6,6	0.26	11/16	25,4	1.00
08Z-T08	1/2	-08	68,3	2.69	43,18	1.70	9,7	0.38	13/16	27,9	1.10
12Z-T12	3/4	-12	73,7	2.90	46,74	1.84	15,5	0.61	1 1/8	30,2	1.19
16Z-T16	1	-16	87,1	3.43	53,59	2.11	20,6	0.81	1 3/8	33,5	1.32

Metric Standpipe Straight Tube



Z Series Part No.	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		B	
			mm	in	mm	in	mm	in	mm	in
04Z-38T	8	-04	56,4	2.22	33,0	1.30	4,1	0.16	23	0.91
04Z-40T	10	-04	56,4	2.22	33,0	1.30	4,3	0.17	23	0.91
06Z-40T	10	-06	59,4	2.34	34,3	1.35	6,6	0.26	23	0.91
06Z-42T	12	-06	60,5	2.38	35,0	1.38	6,6	0.26	24	0.95
06Z-44T	14	-06	61,5	2.42	36,1	1.42	6,6	0.26	25	0.98
08Z-45T	15	-08	66,8	2.63	37,1	1.46	9,7	0.38	25	0.98
08Z-46T	16	-08	68,1	2.68	38,4	1.51	9,7	0.38	26	1.02
12Z-52T	22	-12	71,1	2.80	40,9	1.61	15,5	0.61	28	1.10
12Z-55T	25	-12	70,1	2.76	39,9	1.57	15,5	0.61	27	1.06
16Z-58T	28	-16	75,7	2.98	41,4	1.63	20,6	0.81	28	1.10
16Z-60T	30	-16	75,9	2.99	41,7	1.64	20,6	0.81	28	1.10

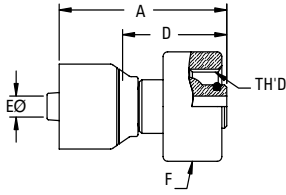
Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

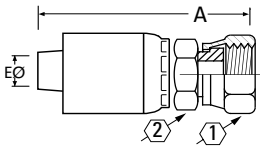
Fittings for use with hose: 3130 (-04 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

Pressure Washer Connection



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		F Dia.	
			mm	in	mm	in	mm	in	mm	in
04Z-6PW	M22x1.5	-04	55,4	2.18	35,3	1.39	4,2	0.17	34,9	1.38
06Z-6PW	M22x1.5	-06	56,1	2.21	34,9	1.38	6,7	0.26	34,9	1.38

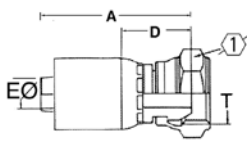
BSPP Flat Face Female Swivel



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		2	1
			mm	in	mm	in	mm	in	in	in
06Z-06PA	G 3/8-19	-06	57,2	2.25	36,7	1.42	6,6	0.26	11/16	3/4
06Z-08PA	G 1/2-14	-06	58,7	2.31	37,6	1.48	6,6	0.26	3/4	11/16
08Z-08PA	G 1/2-14	-08	66,8	2.63	41,7	1.64	9,2	0.36	13/16	11/16
08Z-12PA	G 3/4-14	-08	67,1	2.64	41,9	1.65	9,7	0.38	1	11/4
12Z-12PA	G 3/4-14	-12	71,1	2.80	44,2	1.74	15,5	0.61	11/8	11/4

* G as part of thread size is ISO Designation for parallel thread.

British Standard (BSPP) 60° Cone Female Swivel Straight



Z Series Part No.	Thd. T	Hose Size	A		Hose Cut-Off Factor (D)		EØ		1	
			mm	in	mm	in	mm	in	mm	in
04Z-354	G 1/4-19*	-04	42,3	1.66	18,9	0.74	4,2	0.16	19,0	0.75
04Z-356	G 3/8-19*	-04	45,5	1.79	22,1	0.87	4,3	0.17	22,0	0.87
06Z-356	G 3/8-19*	-06	46,4	1.83	21,1	0.83	6,7	0.26	22,0	0.87
06Z-358	G 1/2-14*	-06	47,9	1.88	22,6	0.89	6,7	0.26	27,0	1.06
08Z-358	G 1/2-14*	-08	53,5	2.11	23,8	0.94	9,6	0.38	27,0	1.06
08Z-360	G 5/8-14*	-08	56,4	2.22	26,7	1.05	9,6	0.38	30,0	1.18
12Z-362	G 3/4-14*	-12	55,5	2.18	25,3	1.00	15,5	0.61	32,0	1.26
16Z-366	G 1-11*	-16	62,0	2.44	27,6	1.09	20,7	0.81	41,0	1.61

* G as part of thread size is ISO Designation for parallel thread.

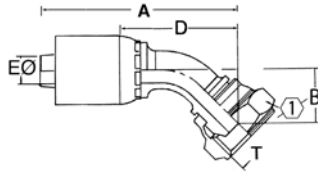
Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

Fittings for use with hose: 3130 (-04 to -16),
3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

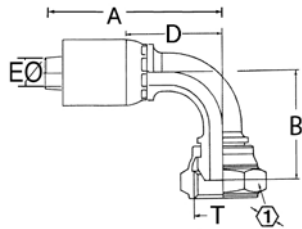
British Standard (BSPP)
60° Cone Female
45° Tube Elbow



Z Series Part No.	Thd. T	Hose Size	A		Hose Cut-Off Factor (D)		EØ		B		①	
			mm	in	mm	in	mm	in	mm	in	mm	in
04Z-44P	G 1/4 -19*	-04	65,3	2.57	41,9	1.65	4,2	0.16	16,5	0.65	19,0	0.75
06Z-46P	G 3/8 -19*	-06	73,8	2.90	48,5	1.91	6,7	0.26	19,0	0.75	22,0	0.87
08Z-48P	G 1/2 -14*	-08	91,5	3.60	61,8	2.43	9,6	0.38	24,8	0.98	27,0	1.06
12Z-52P	G 3/4 -14*	-12	108,8	4.28	78,6	3.09	15,5	0.61	29,4	1.16	32,0	1.26
16Z-56P	G 1 -11*	-16	126,8	4.99	92,4	3.09	20,7	0.81	33,2	1.31	41,0	1.61

* G as part of thread size is ISO Designation for parallel thread.

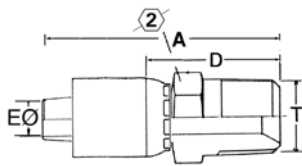
British Standard (BSPP)
60° Cone Female
90° Tube Elbow



Z Series Part No.	Thd. T	Hose Size	A		Hose Cut-Off Factor (D)		EØ		B		①	
			mm	in	mm	in	mm	in	mm	in	mm	in
04Z-74P	G 1/4 -19*	-04	45,8	1.80	22,4	0.88	4,2	0.16	24,8	0.98	17,0	0.67
06Z-76P	G 3/8 -19*	-06	58,9	2.32	33,6	1.32	6,7	0.26	35,0	1.38	22,0	0.87
06Z-78P	G 1/2 -14*	-06	75,7	2.98	50,4	1.98	6,7	0.26	47,8	1.88	27,0	1.06
08Z-78P	G 1/2 -14*	-08	64,0	2.52	34,3	1.35	9,6	0.38	37,6	1.48	27,0	1.06
08Z-80P	G 5/8 -14*	-08	90,7	3.57	61,0	2.40	9,6	0.38	56,3	2.22	27,0	1.06
12Z-82P	G 3/4 -14*	-12	82,2	3.24	52,0	2.05	15,5	0.61	47,5	1.87	32,0	1.26
16Z-86P	G 1 -11*	-16	118,2	4.65	83,8	3.30	20,7	0.81	71,5	2.81	41,0	1.61

* G as part of thread size is ISO Designation for parallel thread.

British Standard (BSPT)
Tapered Male Rigid



Z Series Part No.	Thd. T	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②	
			mm	in	mm	in	mm	in	mm	in
04Z-154	R 1/4 -19*	-04	50,6	1.99	27,2	1.07	4,2	0.16	14,0	0.55
06Z-156	R 3/8 -19*	-06	54,9	2.16	29,6	1.16	6,7	0.26	19,0	0.75
08Z-158	R 1/2 -14*	-08	66,2	2.61	36,5	1.44	9,6	0.38	22,0	0.87
12Z-162	R 3/4 -14*	-12	71,1	2.80	40,9	1.61	15,5	0.61	30,0	1.18
16Z-166	R 1 -11*	-16	81,2	3.20	46,8	1.84	20,7	0.81	36,0	1.42

* R as part of thread size is ISO Designation for tapered thread.

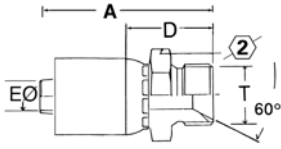
Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

Fittings for use with hose: 3130 (-04 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

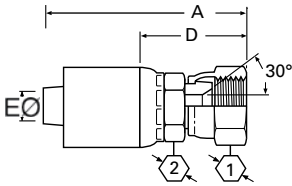
British Standard (BSPP)
60° Cone Male Rigid



Z Series Part No.	Thd. T	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②	
			mm	in	mm	in	mm	in	mm	in
04Z-P54	G 1/4-19*	-04	44,3	1.74	20,9	0.82	4,2	0.16	19,0	0.75
06Z-P56	G 3/8-19*	-06	48,4	1.90	23,1	0.91	6,7	0.26	22,0	0.87
08Z-P56	G 3/8-19*	-08	55,9	2.20	26,4	1.04	9,6	0.38	22,0	0.87
06Z-P58	G 1/2-14*	-06	52,4	2.06	27,1	1.07	6,7	0.26	27,0	1.06
08Z-P58	G 1/2-14*	-08	58,0	2.28	28,3	1.11	9,6	0.38	27,0	1.06
12Z-P62	G 3/4-14*	-12	63,1	2.48	32,9	1.29	15,5	0.61	32,0	1.26
16Z-P66	G 1-11*	-16	70,9	2.79	36,5	1.44	20,7	0.81	41,0	1.61

* G as part of thread size is ISO Designation for parallel thread.

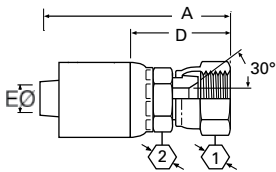
Female JIS 30° Flare Swivel Straight



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①		②	
			mm	in	mm	in	mm	in	mm	in	mm	in
04Z-04L	G 1/4-19*	-04	53,2	2.09	29,8	1.17	4,2	0.16	19,0	0.75	19,0	0.75
06Z-06L	G 3/8-19*	-06	59,2	2.33	33,9	1.33	6,7	0.26	22,0	0.87	22,0	0.87
08Z-08L	G 1/2-14*	-08	66,3	2.61	36,6	1.44	9,6	0.38	27,0	1.06	27,0	1.06
12Z-12L	G 3/4-14*	-12	73,3	2.88	43,1	1.70	15,5	0.61	32,0	1.26	36,0	1.42
16Z-16L	G 1-11*	-16	83,6	3.29	49,2	1.94	20,7	0.81	41,0	1.61	41,0	1.61

* G as part of thread size is ISO Designation for parallel thread.

Female Swivel 30° Flare (Komatsu, Linkbelt)



Z Series Part No.	Thd.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①		②	
			mm	in	mm	in	mm	in	mm	in	mm	in
04Z-14K	M14 x 1.5	-04	56,1	2.21	32,7	1.29	42,2	1.66	19,0	0.75	19,0	0.75
06Z-18K	M18 x 1.5	-06	60,4	2.38	35,1	1.38	6,7	0.26	24,0	0.94	22,0	0.87
08Z-22K	M22 x 1.5	-08	69,5	2.74	39,8	1.57	9,6	0.38	27,0	1.06	27,0	1.06
12Z-30K	M30 x 1.5	-12	81,5	3.21	51,3	2.02	15,5	0.61	36,0	1.42	36,0	1.42
16Z-33K	M33 x 1.5	-16	91,4	3.60	57,0	2.24	20,7	0.81	41,0	1.61	41,0	1.61

Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

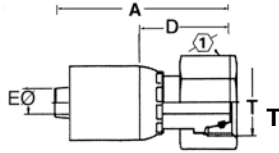
See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

Fittings for use with hose: 3130 (-04 to -16),
3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

Female Swivel
DIN 24° Seat

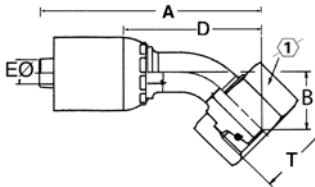
I.Rh DKO (Light)



Z Series Part No.	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①	
				mm	in	mm	in	mm	in	mm	in
04Z-06C	M12 x 1.5	6	-04	48,0	1.89	24,6	0.97	4,2	0.16	17,0	0.67
04Z-08C	M14 x 1.5	8	-04	46,0	1.81	22,6	0.89	4,2	0.16	17,0	0.67
04Z-10C	M16 x 1.5	10	-04	48,3	1.90	24,9	0.98	4,3	0.17	19,0	0.75
06Z-10C	M16 x 1.5	10	-06	56,9	2.24	31,6	1.24	6,7	0.26	19,0	0.75
06Z-12C	M18 x 1.5	12	-06	51,2	2.01	25,9	1.02	6,7	0.26	22,0	0.87
08Z-15C	M22 x 1.5	15	-08	58,3	2.29	28,6	1.12	9,6	0.38	27,0	1.06
12Z-22C	M30 x 2.0	22	-12	62,5	2.46	32,3	1.27	15,5	0.61	36,0	1.42
16Z-28C	M36 x 2.0	28	-16	68,2	2.68	33,8	1.33	20,7	0.81	41,0	1.61

Female Swivel DIN 24°
Seat 45° Tube Elbow

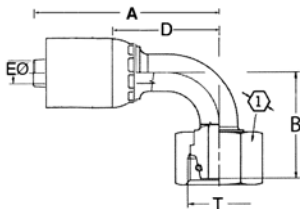
I. Rh. (Light)



Z Series Part No.	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		B		①	
				mm	in	mm	in	mm	in	mm	in	mm	in
04Z-08D	M14 X 1.5	8	-04	6,2	2.46	3,9	1.54	0,4	0.17	17,5	0.69	17,0	0.67
04Z-10D	M16 X 1.5	10	-04	6,5	2.55	4,1	1.63	0,4	0.17	18,4	0.72	19,0	0.75
06Z-10D	M16 X 1.5	10	-06	6,7	2.63	4,1	1.63	0,7	0.26	19,0	0.75	19,0	0.75
06Z-12D	M18 X 1.5	12	-06	7,0	2.76	4,5	1.76	0,7	0.26	17,6	0.69	22,0	0.87
08Z-15D	M22 X 1.5	15	-08	8,3	3.27	5,3	2.10	1,0	0.38	20,5	0.81	27,0	1.06
12Z-22D	M30 X 2.0	22	-12	10,1	3.97	7,1	2.78	1,5	0.61	24,3	0.96	36,0	1.42
16Z-28D	M36 X 2.0	28	-16	10,3	4.06	6,9	2.70	2,1	0.81	26,6	1.05	41,0	1.61

Female Swivel DIN 24°
Seat 90° Tube Elbow

I. Rh. (Light)



Z Series Part No.	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		B		①	
				mm	in	mm	in	mm	in	mm	in	mm	in
04Z-58D	M14 x 1.5	8	-04	51,1	2.01	27,7	1.09	4,3	0.17	31,5	1.24	17,0	0.67
04Z-60D	M16 x 1.5	10	-04	55,4	2.18	32,0	1.26	4,3	0.17	35,5	1.40	19,0	0.75
06Z-60D	M16 x 1.5	10	-06	58,4	2.30	33,5	1.32	6,6	0.26	33,5	1.32	19,0	0.75
06Z-62D	M18 x 1.5	12	-06	59,7	2.35	34,5	1.36	6,6	0.26	34,2	1.35	22,0	0.87
08Z-65D	M22 x 1.5	15	-08	75,2	2.96	45,7	1.80	9,7	0.38	40,0	1.57	27,0	1.06
12Z-72D	M30 x 2.0	22	-12	92,5	3.64	62,2	2.45	15,5	0.61	50,7	2.00	36,0	1.42
16Z-78D	M36 x 2.0	28	-16	100,1	3.94	65,5	2.58	20,6	0.81	61,0	2.40	41,0	1.61

Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

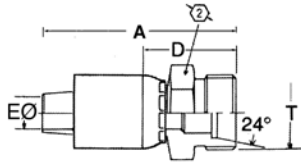
See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

Fittings for use with hose: 3130 (-04 to -16),
3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

Male DIN 24° Seat

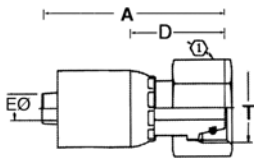
l.Rh (Light)



Z Series Part No.	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②	
				mm	in	mm	in	mm	in	mm	in
04Z-06A	M12 x 1.5	6	-04	44,7	1.76	21,3	0.84	4,2	0.16	12,0	0.47
04Z-08A	M14 x 1.5	8	-04	44,5	1.75	21,1	0.83	4,2	0.16	14,0	0.55
04Z-10A	M16 X 1.5	10	-04	46,0	1.81	22,6	0.89	4,3	0.17	17,0	0.67
06Z-10A	M16 x 1.5	10	-06	52,0	2.05	26,7	1.05	6,7	0.26	17,0	0.67
06Z-12A	M18 x 1.5	12	-06	49,0	1.93	23,7	0.93	6,7	0.26	19,0	0.75
08Z-15A	M22 x 1.5	15	-08	56,0	2.20	26,3	1.03	9,6	0.38	24,0	0.94
12Z-22A	M30 x 2.0	22	-12	62,0	2.44	31,8	1.25	15,5	0.61	32,0	1.26
16Z-28A	M36 x 2.0	28	-16	66,0	2.60	31,6	1.24	20,7	0.81	41,0	1.61

Female Swivel DIN 24° Seat

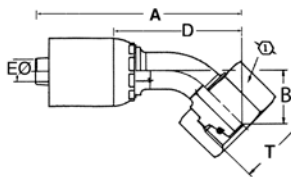
s.Rh DKO (Heavy)



Z Series Part No.	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		①	
				mm	in	mm	in	mm	in	mm	in
04Z-58C	M16 x 1.5	8	-04	49,6	1.95	26,2	1.03	4,2	0.16	19,0	0.75
04Z-60C	M18 x 1.5	10	-04	50,8	2.00	27,4	1.08	4,2	0.16	22,0	0.87
04Z-62C	M20 X 1.5	12	-04	50,8	2.00	27,4	1.08	4,3	0.17	24,0	0.94
06Z-60C	M18 X 1.5	10	-06	52,8	2.08	27,7	1.09	6,6	0.26	27,0	1.06
06Z-62C	M20 x 1.5	12	-06	53,8	2.12	28,5	1.12	6,7	0.26	24,0	0.94
06Z-64C	M22 x 1.5	14	-06	56,9	2.24	31,6	1.24	6,7	0.26	27,0	1.06
08Z-64C	M22 x 1.5	14	-08	55,2	2.17	25,5	1.00	9,6	0.38	27,0	1.06
08Z-66C	M24 x 1.5	16	-08	62,4	2.46	32,7	1.29	9,6	0.38	30,0	1.18
12Z-75C	M36 x 2.0	25	-12	72,0	2.83	41,8	1.64	15,5	0.61	46,0	1.81
12Z-70C	M30 X 2.0	20	-12	60,2	2.37	30,2	1.19	14,0	0.55	36,0	1.42
16Z-80C	M42 x 2.0	30	-16	78,5	3.09	44,1	1.44	20,7	0.81	50,0	1.97

Female Swivel DIN 24° Seat 45° Tube Elbow

s.Rh (Heavy)



Z Series Part No.	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		B		①	
				mm	in	mm	in	mm	in	mm	in	mm	in
04Z-10E	M18 x 1.5	10	-04	61,4	2.42	38,0	1.50	4,2	0.16	17,0	0.67	22,0	0.87
06Z-12E	M20 x 1.5	12	-06	68,3	2.69	43,0	1.69	6,7	0.26	19,0	0.75	24,0	0.94
06Z-14E	M22 x 1.5	14	-06	68,8	2.71	43,5	1.71	6,7	0.26	20,0	0.79	27,0	1.06
08Z-16E	M24 x 1.5	16	-08	79,7	3.14	50,0	1.97	9,6	0.38	23,0	0.90	30,0	1.18
12Z-25E	M36 x 2.0	25	-12	107,4	4.23	77,2	3.04	15,5	0.61	32,5	1.28	46,0	1.81
16Z-30E	M42 x 2.0	30	-16	121,4	4.78	87,0	3.42	20,7	0.81	37,5	1.48	55,0	2.16

Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

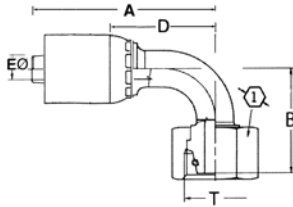
See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

GENERAL INFORMATION
HYDRAULIC HOSE
AIR & WATER HOSE & TUBING
TRUCK HOSE
AEROCOUP/POLYON FITTINGS
AEROCOUP/TTC FITTINGS
SYNFLEX FITTINGS
WEATHERHEAD (U & Z SERIES) FITTINGS
ASSEMBLY EQUIPMENT & INFORMATION
TECHNICAL DATA

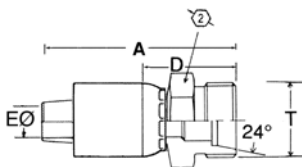
Fittings for use with hose: 3130 (-04 to -16),
3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

Female Swivel DIN 24°
Seat 90° Tube Elbow
s.Rh DKO (Heavy)



Z Series Part No.	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		B		①
				mm	in	mm	in	mm	in	mm	in	mm
04Z-58E	M16 x 1.5	10	-04	54,0	2.13	30,6	1.20	4,2	0.16	28,6	1.13	19,0 0.75
04Z-60E	M18 x 1.5	10	-04	54,5	2.14	31,0	1.22	4,2	0.16	33,5	1.32	22,0 0.87
06Z-62E	M20 x 1.5	12	-06	60,3	2.37	35,0	1.38	6,7	0.26	35,0	1.38	24,0 0.94
06Z-64E	M22 x 1.5	14	-06	63,8	2.51	38,5	1.51	6,7	0.26	42,0	1.65	27,0 1.06
08Z-66E	M24 x 1.5	16	-08	73,7	2.90	44,0	1.73	9,6	0.38	49,0	1.93	30,0 1.18
12Z-75E	M36 x 2.0	25	-12	93,0	3.66	62,8	2.47	15,5	0.61	64,5	2.54	46,0 1.81
16Z-80E	M42 x 2.0	30	-16	104,0	4.09	69,6	2.74	20,7	0.81	74,0	2.91	50,0 1.97

Male DIN 24° Seat
s.Rh (Heavy)



Z Series Part No.	Thd. T	Tube O.D.	Hose Size	A		Hose Cut-Off Factor (D)		EØ		②
				mm	in	mm	in	mm	in	mm
04Z-08F	M16 x 1.5	8	-04	47,5	1.87	24,1	0.95	4,2	0.16	17,0 0.67
04Z-10F	M18 x 1.5	10	-04	40,7	1.60	23,6	0.93	4,2	0.16	19,0 0.75
06Z-10F	M18 X 1.5	10	-06	49,5	1.95	24,1	0.95	6,7	0.26	19,0 0.75
06Z-12F	M20 x 1.5	12	-06	50,3	1.98	25,0	0.98	6,7	0.26	22,0 0.87
06Z-14F	M22 x 1.5	14	-06	52,6	2.07	27,3	1.07	6,7	0.26	24,0 0.94
08Z-16F	M24 x 1.5	16	-08	58,0	2.28	28,3	1.11	9,6	0.38	27,0 1.06
12Z-20F	M30 X 2.0	20	-12	57,7	2.27	30,7	1.21	15,5	0.61	32,0 1.26
12Z-25F	M36 x 2.0	25	-12	65,5	2.58	35,3	1.39	15,5	0.61	41,0 1.61
16Z-30F	M42 x 2.0	30	-16	72,3	2.85	37,9	1.49	20,7	0.81	46,0 1.81

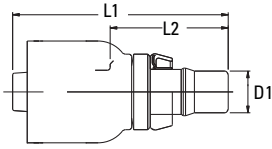
Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

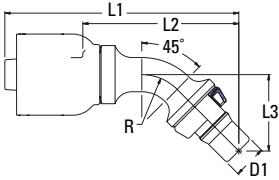
Fittings for use with hose: 3130 (-04 to -16), 3R80 (-06 to -16), 3E80 (-06 to -16), 3740 (-12 to -16)

STC Male Straight



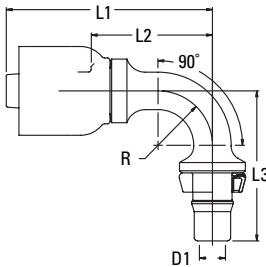
Z Series Part No.	D1		L1		L2	
	mm	in	mm	in	mm	in
04Z-BC04	4,2	0.17	49,9	1.97	26,5	1.04
04Z-BC06	4,2	0.17	52,4	2.06	29,0	1.14
06Z-BC06	6,7	0.26	55,5	2.19	30,2	1.19
06Z-BC08	6,7	0.26	60,6	2.39	35,4	1.39
08Z-BC08	9,6	0.38	66,3	2.61	36,6	1.44
12Z-BC12	15,5	0.61	74,6	2.94	44,4	1.75
16Z-BC16	0,7	0.82	83,7	3.30	49,3	1.94

STC Male 45° Tube Elbow



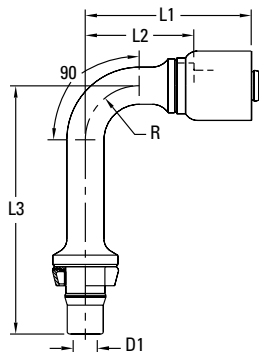
Z Series Part No.	D1		L1		L2		L3		R	
	mm	in	mm	in	mm	in	mm	in	mm	in
04Z-BC46	4,2	0.17	69,8	2.75	46,4	1.83	22,2	0.86	14,0	0.55
06Z-BC46	6,7	0.26	72,9	2.87	47,6	1.87	22,2	0.87	14,0	0.55
08Z-BC48	8,8	0.35	89,9	3.54	60,2	2.37	29,6	1.17	19,0	0.75
12Z-BC52	13,9	0.55	110,2	4.34	80,0	3.15	40,7	1.60	31,0	1.22

STC Male 90° Tube Elbow



Z Series Part No.	D1		L1		L2		L3		R	
	mm	in	mm	in	mm	in	mm	in	mm	in
04Z-BC64	4,2	0.17	53,1	2.09	29,6	1.17	36,1	1.42	13,0	0.51
06Z-BC66	6,7	0.26	59,3	2.33	34,0	1.34	39,6	1.56	14,0	0.55
06Z-BC68	6,7	0.26	66,4	2.61	41,1	1.62	53,0	2.09	19,0	0.75
08Z-BC68	8,8	0.35	72,0	2.83	42,3	1.67	53,0	2.09	19,0	0.75
12Z-BC72	13,9	0.55	88,7	3.49	58,5	2.30	75,7	2.98	31,0	1.22
16Z-BC76	19,9	0.78	107,3	4.22	72,9	2.87	90,0	3.54	38,0	1.50

STC Male 90° Long Drop Elbow



Z Series Part No.	D1		L1		L2		L3		R	
	mm	in	mm	in	mm	in	mm	in	mm	in
06Z-BC86	6,4	0.25	59,3	2.33	34,0	1.34	70,6	2.78	14,0	0.55
08Z-BC88	9,1	0.36	72,0	2.84	42,3	1.67	88,1	3.46	19,0	0.75
12Z-BC92	13,9	0.55	88,7	3.49	58,5	2.30	123,7	4.87	31,0	1.22

Z Series Fittings must be crimped with the corresponding sleeve and are not approved for use without sleeve. See page G24 for sleeve information.

See pages H12-15 for die, pusher, and cage information.

Weatherhead fittings for Weatherhead customers only.

Assembly Equipment

Synflex Swaging Machine, Tools and Accessories	H2-3
Eaton Crimping Machine	H4-5
Hose Accessories	H5-8
O-Rings	H9-11
Crimp Die Charts	H12-15
Selection, Installation, and Maintenance.	H16-17
Assembly Instructions	H18-22



Synflex Swaging Machines

SST and Mark IX

Designed to Attach Synflex Permanent Fittings to Synflex Hose

- Synflex swaging equipment produces smooth, uniform fitting surfaces, without raised edges or ridges common in other fitting methods.
- Complete range of fitting swaging pushers and dies up to -16 size are ordered separately.



SST Portable Hand Swager

Part No.: 4530-01002

- Portable hand operated machine for field assembly
- Frame can be attached to bench vise or directly to a table with separate mounting bracket
- Weight: 3.6 kgs (8 lbs)



SST Portable Hand Swager Carrying Case

Part No.: 45J0-05600



Mark IX Swager

Part No.: 45J0-05600

- Fully automatic - opens dies to release completed assembly
- Fast actuation - capable of five-second cycle time
- Three power supply options for a broad range of production needs
- For heavy duty, continuous high-speed production needs the Mark IX can be equipped with a high capacity power unit (see option three below)
- Weight: 59.4 kgs (131 lbs)

Option 1 (Part No.: 4530-009S0)

1HP, 60Hz, 115/208/230V single-phase motor; medium duty

Option 2 (Part No.: 4530-009S1)

1HP, 60 Hz, 230/460V three-phase motor; medium duty

Option 3 - A & B (Part No.: 453C-00020 and Part No.: 4530-009S4)

- (A) Mark IX machine without standard power supply. Part No.: 4530-009S4
- (B) Commercial-duty hydraulic power unit with 5HP, three-phase 230/460V motor, five-gallon reservoir, 4.1 GPM displacement. Part No.: 453C-00020



Pushers

Pusher selection is based on fitting end design chosen from assembly. Pusher part numbers are listed in the fitting tables on pages H12-15.

Example:

To attach a -06 (3/8-inch) hose to a -06 female JIC/SAE 37° swivel fitting (90306-065500), use pusher part number 4599-FP015.



Dies

Swaging dies are applied in paired sets. Die selection is based on hose series and size. Die part numbers are listed in hose selection chart, page H12-15.

Example:

To attach fitting 90306-065500 to a 3130-06 hose, die part number 4540-306 is utilized.



Die and Pusher Storage Rack

Part No.: 45J0-03401

- Rack holds twelve pushers and eight dies
- 16-gauge welded steel frame
- Wall mount or bench top
- Dimensions: 19 inches wide; 22-1/2 inches high; extends 3 inches from mounting surface

Crimping Machines

FT 1380 and T-420

Aeroquip FT1380



The ProCrimp 1380 crimp machine from Eaton crimps all your hose needs up to and including -20 SAE100R12 hose styles and the popular MatchMate Plus hose and fittings program (shown with optional die holder kit FT1380-2-4). The ProCrimp 1380 is electronically controlled to give fast, accurate crimps the first time and every time you need a hose assembly. The electronic keypad is easy to adjust, with up to 10 programmable crimp settings. For hose styles and sizes used less frequently simply enter the 3 digit code of that hose.

Ordering Instructions

See page H12-15 for tooling information.

FT1380-115 115V crimp machine 50/60 Hz

FT1380-2-3 FT1330 to FT1380 Die Cage conversion kit — back plate, bolts and instructions necessary to convert an FT1330 die cage to an FT1380 die cage. Simply remove the FT1330 back plate and replace it with the new FT1380 back plate.

FT1380-2-4 Optional die holder kit — Kit includes 4 die holder plates each of which will hold 2 die cages. Holes are pre-drilled on base of ProCrimp machine to accept these 4 plates.

FT1380-4 Optional fitting backstop-kit includes backstop and 5/32" hex wrench. The backstop allows the 1380 to crimp PTFE hose and be utilized for a fitting locator to increase efficiency.

Electrical Requirements

USA: FT1380-115 standard machine uses 115V, 50/60 Hz, 1.5 hp

Brazil: FT1380-1-2 standard machine uses 230V, 50/60 Hz, 1.5 hp

Australia: FT1380-230 standard machine uses 230V, 50/60 Hz, 1.5 hp

Weatherhead T-420



The Coll-O-Crimp Super I is a versatile machine ideal for your shop, factory, construction, and mine locations. Big capacity combined with lever-activated crimping gives you wide coverage and a quick and simple way to make factory-quality hose assemblies.

Capacity

3/16" I.D. 1 fiber braid through 1-1/4" 6 spiral hose*; for hose other than 4 and 6 spiral, conversion tooling is required.

*Will not crimp 4SP/6SP ends

Mounting

Bench or C-40X cabinet.

Size

22" high, 10" wide, 20-1/2" deep

Weight

210 lbs.

CAUTION

The Coll-O-Crimp power source has the pressure relief valve set at 4000 to 4200 PSI. Damage to the press will result if higher pressures are used and warranty will be voided.

T-420 • Coll-O-Crimp Super I Packages for Z Series

-4 thru -16 (no -10), one-wire and two-wire

Package Number	ET420-002	ET420-003
Power Source	220V	110V
Contents Press	T-420-1	T-420-1
Hose Assembly	T-410-22	T-410-22
Pump	T-421U	T-421U-110
Adapter Ring	T-420-25	T-420-25

Ordering Instructions

See page H12-15 for tooling information.

Consult Product Advisor for complete crimp die and proper spacer ring information. Contact Eaton for additional assembly machine options.

Hose Accessories

Overall Spring Guards and T-420 Continued

T-420-N • Coll-O-Crimp Super I - 220V Package T-420N-110 • Coll-O-Crimp Super I - 110V Package

Includes one each of the following (with respective pump):

Catalog Number	Description
T-420-1	Coll-O-Crimp Super I Press and T-420-M Instructions
T-421U or T-421U-110	220v or 110V Electric Pump
T-400-2C	'U' Series Collet – 1/4"
T-400-3C	'U' Series Collet – 3/8"
T-400-4C	'U' Series Collet – 1/2"
T-400-5C	'U' Series Collet – 3/4"
T-400-6C	'U' Series Collet – 1"
T-400-10	Spacer Ring – Black
T-400-11	Spacer Ring – Silver
T-400-62	Spacer Ring Yellow
T-410-22	36" Pump to Press Hose Assembly
T-420-25	Adapter Ring for T-400 Series Collets
T-420-4CN	430 'U' Series Collet – 1/2"
T-420-5CN	430 'U' Series Collet – 3/4"
T-420-6CN	430 'U' Series Collet – 1"

ET420-004 • Coll-O-Crimp I - 220V Package ET420-005 • Coll-O-Crimp I - 110V Package

Both Packages include the following (with respective pump):

Catalog Number	Description
T-420-1	Coll-O-Crimp Super I
T-421U or T-421U-110	220v or 110V Electric Pump
ET400DC-M150S	'Z' Series Collet – 1/4"
ET400DC-M195S	'Z' Series Collet – 3/8"
ET400DC-M230S	'Z' Series Collet – 1/2"
T-420-85C	'Z' Series Collet – 5/8"
T-420-86C	'Z' Series Collet – 3/4"
ET420DC-M380S	'Z' Series Collet – 1"
T-400-10	Spacer Ring – Black
T-400-62	Spacer Ring – Yellow
T-420-80R	Spacer Ring – Black/White
ET1000SR-M190D	Spacer Ring – Light Green
ET420SR-M255A	Spacer Ring – Black/Grey
ET420SR-M495A	Spacer Ring – Brown
T-410-22	36" Pump to Press Hose Assembly
T-420-25	Adapter Ring for T-400 Series Collets
T-420-4CN	430 'U' Series Collet – 1/2"
T-420-5CN	430 'U' Series Collet – 3/4"
T-420-6CN	430 'U' Series Collet – 1"
T-420-7CN	430 'U' Series Collet – 1-1/4"

Overall Spring Guards

- Abrasion protection and support
- Protects hose from kinking
- Order in multiples of 7.6 m (25 ft) lengths



Hose Part Number	Standard Length ft	Type 2 Part No.	Type 3 Part No.
3800-03, 3R30-03, 3130-03, 37AL-03	25	4521-50000	-
3800-04, 3R30-04, 3440-04, 3130-04, 3V10-03, 37AL-04, 30CT-04	25	4521-51000	4521-02000
3800-06, 3440-06, 34PW-06, 3130-06, 3130-05, 37AL-05, 37AL-06, 30CT-05, 30CT-06	25	4521-53000	4521-04000
3800-08, 3R30-08, 3440-08, 34PW-08, 3130-08, 37AL-08, 30CT-08	25	4521-54000	4521-05000
34PW-10, 3440-10, 3130-12	25	4521-88000	-
3R80-03	25	4521-83000	-
3V10-04, 3130-05	25	4521-84000	-
3R80-06	25	4521-58000	-
3R80-08	25	4521-59000	4521-10000
3R80-12	25	4521-60000	-
3R80-16	10	4521-61000	-
3R80-04	25	4521-57000	-

Hose Accessories

Hose Guards/Bend Restricters, Protective Sleeving

Hose and Spring Guards



- Fitting-to-hose interface protection
- Made from high-grade, spring steel wire
- Guards provide protection against hose kinking at fittings
- Spring-type guards hand screw to the fitting shell to form a single unit assembly

Hose Part Number	Part Number
3R30-04, 3800-04, 3130-04, 37AL-04, 30CT-04	4521-91005
3130-05, 37AL-05, 30CT-05	4521-90005
3R30-06, 3R80-04	4521-92005
3R30-03, 3800-03, 3130-03, 37AL-03	4521-AG004
3800-06, 3130-06, 37AL-06	4521-94005
30CT-06, 3R80-06	4521-AA005

Plastic Protective Coil Sleeve



- Fitting-to-hose interface protection
- A convenient and economical way to protect hose and tubing lines
- Can be installed after hose assembly is made
- Lightweight
- Order in multiples of 20-ft (6m) lengths.

Hose Part Number	Part Number
3130-02	4554-04000
3R30-03, 3800-03, 3130-03, 3630-03, 37AL-03	4554-06000
3R30-04, 3130-04, 3630-03, 37AL-04, 30CT-04	4554-07000
3R30-06, 3800-04, 3440-04, 34PW-04, 3130-05, 3R80-03, 37AL-05, 30CT-05	4554-08000
3440-06, 34PW-06, 3130-06, 3R80-04, 37AL-06, 30CT-06	4554-10000
3R30-08, 3800-06, 3130-08, 3R80-06, 37AL-08, 30CT-08	4554-12000
3800-08, 3440-08, 34PW-08, 3R80-08	4554-14000
3130-12, 3R80-12, 3440-10, 34PW-10, 3630-12	4554-16000
3440-12, 34PW-12	4554-19000
3R80-16, 3440-16, 34PW-16	4554-22000

Hose Accessories

Hose Guards/Bend Restricters (continued)

Vinyl Hose Guards

- Assembly abrasion protection and support
- Use when a non-metallic guard is required. Guard assembly may require the use of lubricant on the hose
- Available in 15.2m (50-ft) lengths
- Note: 4513-05 30m (100-ft) lengths



Hose Part Number	Part Number	Guard I.D.	Guard O.D.
3R30-04, 3440-04, 34PW-04, 3130-04, 3R80-03, 37AL-04, 30CT-04	4513-04000	9/16	13/16
3R30-06, 3440-06, 34PW-06, 3130-06, 3R80-04, 37AL-06, 30CT-06	4513-05000	11/16	1-1/16
3R80-06	4513-06000	15/16	1-13/14
3R80-08, 3800-08	4513-10000	15/16	1-5/16
3130-12, 3R80-12	4513-11000	1-3/16	1-11/16

Molded Black PVC Hose Guards

- Assembly abrasion protection and support
- Protects against wear when a stiffer, non-metal guard is preferred
- Hand-held use, keeps hose from kinking at fitting



Hose Part Number	Part Number	Guard I.D. A	Length L
30CT-04, 3R30-04, 3630-04, 3130-04, 3580-04, 3R80-03, 3800-04, 37AL-04	45J0-04801	.55	6.0
30CT-06, 3R30-06, 3630-06, 3130-06, 3580-06, 3R80-04, 3800-06, 37AL-06	45J0-04802	.69	7.0

Clamps

Plastic-covered clamps to secure hose



Hose Part Number	Part Number	bolt hose Size (in)
3130-02	45J0-00201	13/32
3130-03, 3630-03, 3800-03, 37AL-03	45J0-00202	13/32
3130-04, 3630-04, 3800-04, 37AL-04, 30CT-04	45J0-00204	13/32
3R80-03, 3130-05, 37AL-05, 30CT-05	45J0-00203	13/32
3R80-04	45J0-00205	13/32
3130-06, 3630-06, 3800-06, 37AL-06, 30CT-06	45J0-00206	13/32
3R80-06, 3130-08, 3630-08, 3800-08, 37AL-08, 30CT-08	45J0-00207	13/32
3R80-08	45J0-00208	13/32
3130-12	45J0-00209	13/32
3R80-12, 3630-12	45J0-00210	17/32
3R80-16	45J0-00212	17/32

GENERAL INFORMATION

HYDRAULIC HOSE

AIR & WATER HOSE & TUBING

TRUCK HOSE

AERQUIP/POLYON FITTINGS

AERQUIP/TTC FITTINGS

SYNFLEX FITTINGS

WEATHERHEAD (U & Z SERIES) FITTINGS

ASSEMBLY EQUIPMENT & INFORMATION

TECHNICAL DATA

Hose Assembly

Tools & Accessories

Hand-Held Hose Cutter

Part No. 4523-04006

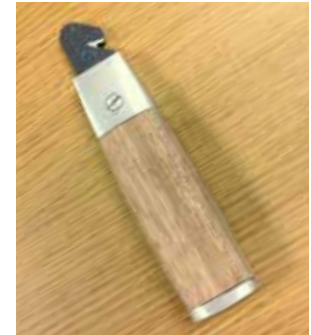
- Handy tool for cutting Synflex hose 1/8-inch to 1/2-inch in diameter. Blades are replaceable. Vinyl cushioned grips.



Multi-Line Hose Separation Tool

Part No. 4573-00000

- Designed for Separation of tri-, quad- and five-line hose.



Replacement Blade

Part No. 4523-04005

Swage Lubricant

Part No. 4545-01001

- Lubricant for use in the assembly of Synflex reusable and permanently attached stainless steel fittings.



Vise Blocks

Part No. 4504-00000

- 3/16-inch through 1/2-inch hose



Part No. 4504-01000

- 3/4-inch and 1-inch hose. Used in making assemblies.

Twin-Line Hose Separation Tool

Part No. 4574-01000

- Designed for separating Twin-Line hose



Insertion Depth Marker

Part No. 45J0-04603



Dies

Part No. 4574-03000-XXX

Synflex De-Twiner Die Reference Chart (4574-03000-xxx)

Hose Product	Die* No.
3R30-03	027
3R30-04	003
3R30-06	010
3R30-08	013
3130-02	001
3130-03	002
3130-04	004
3130-05	008
3130-06	011
3130-08	013
3160-03	002
3160-04	004
3160-05	008
3160-06	011
3160-08	013

Hose Product	Die* No.
37AL-03	002
37AL-04	003
37AL-05	007
37AL-06	010
37AL-08	013
30CT-04	003
30CT-05	022
30CT-06	011
30CT-08	014
3360-03	002
3360-04	004
3360-05	023
3360-06	024
3360-08	025

Hose Product	Die* No.
3R80-04	009
3R80-06	012
3R80-08	015
3E80-04	009
3E80-06	012
3E80-08	015
3V10-03	005
3V10-04	016
3V10-06	017
3VE0-03	005
3VE0-04	016
3VE0-06	017

Hose Product	Die* No.
3840-03	018
3840-04	019
3840-06	020
3840-08	021
35NG-03	004
35NG-04	026
35NG-06	012
35NG-08	015
3V20-04	016
3V20-06	017
3251-08	006
31DW-04	005

O-Rings Seal Kit

FF16087-01

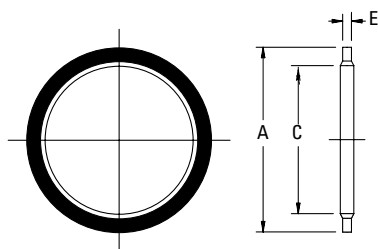
Includes metal box, o-rings for ORS -04 through -16, o-rings boss -04 through -16, 24 packages with twelve 90 durometer nitrile o-rings per package. Packages can be ordered individually by part number listed.



Connection	Size	12 O-ring Package Part No.	Individual O-Ring Part No.
ORS*	-04	FF10266-01-11	FF9446-11
ORS*	-06	FF10266-01-12	FF9446-12
ORS*	-08	FF10266-01-14	FF9446-14
ORS*	-10	FF10266-01-16	FF9446-16
ORS*	-12	FF10266-01-18	FF9446-18
ORS*	-16	FF10266-01-21	FF9446-21
O-Ring Boss	-04	FF10273-01-04	22617-4
O-Ring Boss	-05	FF10273-01-05	22617-5
O-Ring Boss	-06	FF10273-01-06	22617-6
O-Ring Boss	-08	FF10273-01-08	22617-8
O-Ring Boss	-10	FF10273-01-10	22617-10
O-Ring Boss	-12	FF10273-01-12	22617-12
O-Ring Boss	-16	FF10273-01-16	22617-16
O-Ring Boss	-32	FF10273-01-32	22617-32
Split Flange	-32	FF10266-01-228	FF9446-228

*For ORS o-ring kit order part number: FF10265-01, only includes ORS o-rings.

BSPP Bonded Seal for DIN 3852-2 Ports



Bonded Seal Part Number	BSPP Thread Size	A Ref Inch	C Ref Inch	E Ref Inch
FF9895-02	1/8 - 28	0.625	0.403	0.080
FF9895-04	1/4 - 19	0.810	0.536	0.080
FF9895-06	3/8 - 19	0.937	0.675	0.080
FF9895-08	1/2 - 14	1.125	0.843	0.097
FF9895-10	5/8 - 14	1.250	0.920	0.097
FF9895-12	3/4 - 14	1.375	1.060	0.097
FF9895-16	1-11	1.685	1.329	0.133
FF9895-24	1 1/2 - 11	2.307	1.902	0.133
FF9895-32	2-11	2.875	2.380	0.133

Material: Steel with bonded Nitrile (Buna-N) seal.

GENERAL INFORMATION

HYDRAULIC HOSE

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AEROQUIP/POLYON FITTINGS

AEROQUIP/TTC FITTINGS

SYNFLEX FITTINGS

WEATHERHEAD (U & Z SERIES) FITTINGS

ASSEMBLY EQUIPMENT & INFORMATION

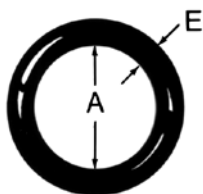
TECHNICAL DATA

Hose Accessories

Aeroquip O-Rings (continued)

Designating Separate SAE Boss O-Rings

To order Eaton o-rings separately without fittings specify the size and material by using the o-ring base number and dash size. The charts below offer a simple method to assure the correct o-ring for your application.

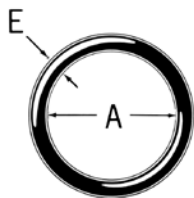


O-Ring Base No.	Material	Operating Temperature Range
22617 (Standard)	90 Durometer Buna-N Nitrile Rubber	-34°C to +121°C (-30°F to +250°F)
22033	EPR Ethylene Propylene Rubber	-55°C to +100°C (-65°F to +212°F)
22068	Viton* Fluoroelastomer	-25°C to +205°C (-15°F to +400°F)
22012	Buna-N, Low Temperature Nitrile Rubber	-55°C to +107°C (-65°F to +225°F)

O-Ring Dash Size	Tube Size	A		E	
		mm	in	mm	in
-4	-04 (1/4)	8,9	0.351	1,8	0.072
-6	-06 (3/8)	11,9	0.468	2,0	0.078
-8	-08 (1/2)	16,3	0.644	2,3	0.087
-10	-10 (5/8)	19,3	0.755	2,5	0.097
-12	-12 (3/4)	23,4	0.924	3,0	0.116
-16	-16 (1)	29,7	1.171	3,0	0.116

Designating Separate ORS O-Rings for Aeroquip

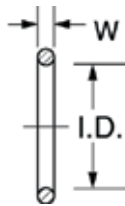
To order Eaton o-rings separately without fittings specify the size and material by using the o-ring designator and o-ring base number. The charts to the right offer a simple method to assure the correct o-ring for your application.



O-Ring Base No.	Material	Operating Temperature Range
22617 (Standard)	90 Durometer Buna-N Nitrile Rubber	-34°C to +121°C (-30°F to +250°F)
22033	EPR Ethylene Propylene Rubber	-55°C to +100°C (-65°F to +212°F)
22068	Viton* Fluoroelastomer	-25°C to +205°C (-15°F to +400°F)
22012	Buna-N, Low Temperature Nitrile Rubber	-55°C to +107°C (-65°F to +225°F)

O-Ring Size Designation	ORS Tube Size	A		E	
		mm	in	mm	in
-11	-04	7,6	0.301	1,8	0.07
-12	-06	9,2	0.364	1,8	0.07
-14	-08	12,4	0.489	1,8	0.07
-16	-10	15,6	0.614	1,8	0.07
-18	-12	18,8	0.739	1,8	0.07
-21	-16	23,5	0.926	1,8	0.07

O-ring, FOR-SEAL® Fittings



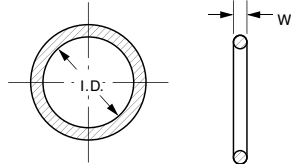
Material:
Buna N, 90 Durometer

Temperature Range:
-40°C to +121°C
(-40°F to +250°F)

Standard o-ring complies with SAE specification SAE J515 Type CH

Tube O.D.	Part Number	W	I.D.
1/4	4629x4	.070 ± .005	.301 ± .005
3/8	4629x6	.070 ± .005	.364 ± .005
1/2	4629x8	.070 ± .005	.489 ± .005
5/8	4629x10	.070 ± .005	.614 ± .005
3/4	4629x12	.070 ± .005	.739 ± .005
1	4629x16	.070 ± .006	.926 ± .006

Straight Thread O-ring



Material:
Buna N, 90 Duromete

Temperature Range:
-40°C to +121°C
(-40°F to +250°F)

Standard O-ring complies with SAE specification SAE J515 Type CH

Port Size	Part Number	W	I.D.
1/16	7629x1	.058	.185
1/8	7629x2	.064	.239
3/16	7629x3	.064	.301
1/4	7629x4	.072	.351
5/16	7629x5	.072	.414
3/8	7629x6	.078	.468
7/16	7629x7	.082	.530
1/2	7629x8	.087	.644
5/8	7629x10	.097	.755
3/4	7629x12	.116	.924
7/8	7629x14	.116	1.048
1	7629x16	.116	1.171

Crimp Die Chart

Aeroquip and Synflex

	Old Hose P/N	Old Fitting	Old Tooling	New Hose P/N	Qualified Fitting	Recommended Tooling
100R7	FC372-02	Polyon Fitting	-M090	3130-02	Polyon / FC5810	-M090
	FC372-03		-M120	3130-03	Polyon / FC5810	-M120
				3130-03	903 Series	-M120
	FC372-04		-M120	3130-04	Polyon / FC5810	-M120
				3130-04	903 Series	-M120
				3130-04	Global TTC	-M150
	FC372-05		-M150	3130-05	Polyon / FC5810	-M150
				3130-05	903 Series	-M150
	FC372-06		-M180	3130-06	Polyon / FC5810	-M180
				3130-06	903 Series	-M150
				3130-06	Global TTC	-M195
	FC372-08		M210	3130-08	Polyon / FC5810	-M210
				3130-08	903 Series	-M210
				3130-08	Global TTC	-M240
	FC372-12		-M280	3130-12	Polyon / FC5810	-M280
				3130-12	903 Series	-M240
				3130-12	Global TTC	-M295
	FC372-16		-M320	3130-16	Polyon / FC5810	-M320
				3130-16	Global TTC	-M390
	FC373-02		-M090	FC373-02	Polyon	-M090
FC373-03	-M120	37AL-03	Polyon / FC5810	-M120		
		37AL-03	903 Series	-M120		
FC373-04	-M120	37AL-04	Polyon / FC5810	-M120		
		37AL-04	903 Series	-M120		
FC373-05	-M150	37AL-05	Polyon / FC5810	-M150		
		37AL-05	903 Series	-M150		
FC373-06	-M180	37AL-06	Polyon / FC5810	-M180		
		37AL-06	903 Series	-M150		

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Crimp Die Chart

Aeroquip and Synflex (continued)

	Old Hose P/N	Old Fitting	Old Tooling	New Hose P/N	Qualified Fitting	Recommended Tooling
100R7	FC373-08	Polyon Fitting	-M210	37AL-08	Polyon / FC5810	-M210
				37AL-08	903 Series	-M210
	FC373-12		-M280	3740-12	Polyon / FC5810	-M280
				3740-12	903 Series	-M240
				3740-12	Global TTC	-M320
	FC373-16		-M320	3740-16	Polyon / FC5810	-M320
3740-16		Global TTC		-M370		
100R8	FC374-03	Polyon Fitting	-M120	3R80-03	90H Series	-M120
				3800-03	903 Series	-M120
	FC374-04		-M120	3R80-04	90H Series	-M150
				3800-04	903 Series	-M120
	FC374-06		-M180	3R80-06	90H Series	-M180
				3R80-06	Global TTC	-M180
				3800-06	903 Series	-M150
	FC374-08		-M210	3R80-08	90H Series	-M210
				3R80-08	Global TTC	-M240
				3800-08	903 Series	-M210
	FC374-12		-M280	3R80-12	90H Series	-M280
				3R80-12	Global TTC	-M320
				3R80-16	Global TTC	-M370
	FC375-03		-M120	3E80-03	90H Series	-M120
	FC375-04		-M120	3E80-04	90H Series	-M150
	FC375-06		-M180	3E80-06	90H Series	-M180
				3E80-06	Global TTC	-M180
	FC375-08		-M210	3E80-08	90H Series	-M210
				3E80-08	Global TTC	-M240
	FC375-12		-M280	3E80-12	90H Series	-M280
3E80-12		Global TTC		-M320		
				3E80-16	Global TTC	-M370

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	Old Hose P/N	Old Fitting	Old Fitting Tooling	Old Fitting Spacer Ring	New Hose P/N	Qualified Fitting	New Tooling*	Spacer Ring*
100R7	H43603	"E"Series	T-400-113C	Black	3130-03	903 Series	M095S	Lt Green FSU
	H43604		T-400-31C	Black	3130-04	U Series	T-400-2C	Purple FSU
					3130-04	903 Series	T-400-2C	Black FSD
	H43605		T-400-32C	Black	3130-04	Z Series w/ Sleeve	T-400-121C	Yellow FSU
					3130-05	903 Series	M150S	Black FSD
	H43606		T-400-33C	Black	3130-05	903 Series	M150S	Black FSD
					3130-06	U Series	T-400-3C	Red FSU
	H43608		T-400-34C	Black	3130-06	903 Series	M150S	Lt Green FSU
					3130-06	Z Series w/ Sleeve	T-400-110C	Yellow FSU
	H43612		T-400-35C	Black	3130-08	U Series	T-400-4C	Purple FSU
					3130-08	903 Series	T-400-123C	Purple FSU
	H43616		T-400-36C	Black	3130-08	Z Series w/ Sleeve	T-400-42C	Black/Tan FSU
					3130-12	U Series	T-400-5C	Red FSU
	H43503		T-400-113C	Black	3130-12	903 Series	T-420-185C	Brown FSU
					3130-12	Z Series w/ Sleeve	M295S	Yellow FSU
	H43504		T-400-31C	Black	3130-16	Z Series w/ Sleeve	M390S	Black/Magenta FSU
	H43505		T-400-113C	Black	37AL-03	903 Series	M095S	Lt Green FSU
	H43506		T-400-31C	Black	37AL-04	903 Series	T-400-2C	Tan
					37AL-05	903 Series	M150S	Black/Tan FSD
	H43508		T-400-32C	Black	37AL-06	U Series	T-400-3C	Red FSU
37AL-06		903 Series			M150S	Lt Green FSU		
H43512	T-400-33C	Black	37AL-08	U Series	T-400-4C	Green FSU		
			37AL-08	903 Series	T-400-123C	Purple FSU		
H43516	T-400-34C	Black	3740-12	U Series	T-400-5C	Green FSU		
			3740-12	903 Series	T-440-85C	Brown FSU		
H43512	T-400-35C	Black	3740-12	Z Series w/ Sleeve	M295S	Yellow FSU		
			3740-16	U-Series	T-400-6C	Red FSU		
H43516	T-400-36C	Black	3740-16	Z Series w/ Sleeve	M390S	Black/Magenta FSU		

*Consult Product Advisor for complete crimp die and proper spacer ring information.

Crimp Die Chart

Weatherhead and Synflex (continued)

	Old Hose P/N	Old Fitting	Old Fitting Tooling	Old Fitting Spacer Ring	New Hose P/N	Qualified Fitting	New Tooling*	Spacer Ring*
100R8	H33603	336E Fitting	T-400-120C	Black	3R80-03	336E / 90H Series	T-400-2C	Green
					3R80-03	903 Series	M095S	Lt. Green
	H33604		T-400-121C	Black	3R80-04	336E / 90H Series	M150S	Yellow
					3800-04	903 Series	T-400-121C	Magenta
	H33606		T-400-122C	Black	3R80-06	336E / 90H Series	M195S	Purple
					3R80-06	Z Series w/ Sleeve	M195S	Tan
					3R80-06	903 Series	M150S	Black
	H33608		T-400-123C	Black	3R80-08	336E / 90H Series	T-400-123C	Black
					3R80-08	Z Series w/ Sleeve	T-400-42C	Black/Tan
					3800-08	903 Series	T-400-41C	Yellow
	H33612		T-420-15C	N/A	3R80-12	336E / 90H Series	T-440-85C	Black/Orange
					3R80-12	Z Series w/ Sleeve	T-440-86C	Black/Magenta
	H33616		T-420-16C	N/A	3R80-16	Z Series w/ Sleeve	M380S	Black/Magenta
	H335-03		T-400-120C	Black	3E80-03	336E / 90H Series	T-400-2C	Green
	H335-04		T-400-121C	Black	3E80-04	336E / 90H Series	M150S	Yellow
	H335-06		T-400-122C	Black	3E80-06	336E / 90H Series	M195S	Purple
					3E80-06	Z Series w/ Sleeve	M195S	Tan
	H335-08		T-400-123C	Black	3E80-08	336E / 90H Series	T-400-123C	Black
					3E80-08	Z Series w/ Sleeve	T-400-42C	Black/Tan
	H335-12		T-420-15C	X	3E80-12	336E / 90H Series	T-440-85C	Black/Orange
3E80-12		Z Series w/ Sleeve			T-440-86C	Black/Magenta		
H335-16	T-420-16C	X	3E80-16	Z Series w/ Sleeve	M380S	Black/Magenta		

*Consult Product Advisor for complete crimp die and proper spacer ring information.

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Selection, Installation and Maintenance of Synflex Hose and Assemblies

Proper hose selection, installation and maintenance practices should be followed to ensure that hose and hose assemblies have long life and operate safely. Failure to consider these practices could result in unplanned down-time, damage or injury. The general industry practices assembled below are provided as a guide for hose selection, installation and maintenance. Careful consideration for applying these practices is recommended.

Pressure

Determine the maximum operating system pressure and select a hose that will have a maximum working pressure equal to or in excess of the operation system's maximum pressure. It is very important to take into account surge pressures that may be higher than normal operating pressures.

Temperature

Determine the maximum and minimum operating temperatures and select a hose that is designed for use within this temperature range. Consider transient thermal conditions resulting from startup, heat build up from idling, etc. Special protection from hot equipment may be required.

Chemical and Environmental Resistance

Determine the type and concentration of the fluids and chemicals that will come in contact with the hose core tube I.D. and hose cover. Refer to the hose and tubing sections with product descriptions to identify the types of polymers used to form the core tube and cover. With this information, locate the compatibility rating of the combination of chemicals and/or fluids with the polymer type described in the Chemical Resistance data on pages I12-13. Contact Eaton technical support to request data for chemicals and conditions not listed.

Size

Select the proper I.D. based on system requirements such as fluid flow rate or velocity. The hose selection nomograph on page I4 can help determine the hose I.D.

Electrical Conductivity

Each hose application should be evaluated for the importance of selecting a hose designed to prevent flow of electrical current (e.g. aerial hydraulics) or a hose designed to sufficiently conduct static electricity to safe ground connections. The conducting hose design requires special conducting fittings which should be selected along with the hose.

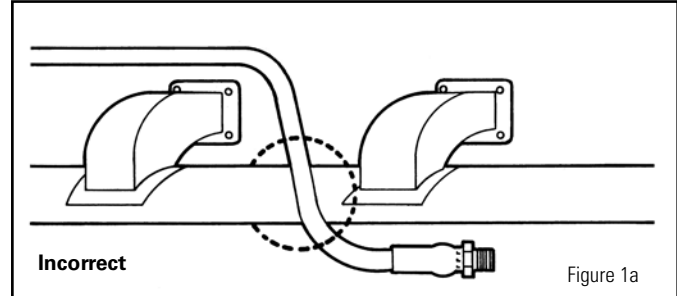


Figure 1a

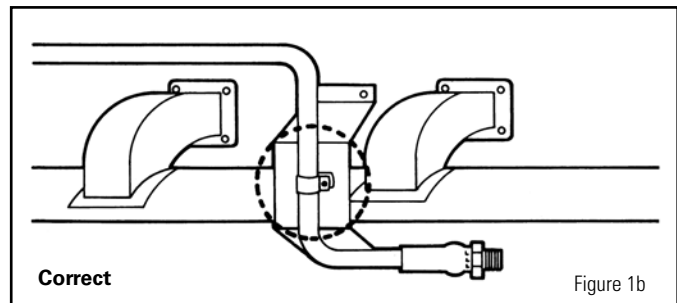


Figure 1b

Component Inspection

Prior to installation, inspect hose for I.D. obstruction or damage such as blisters, looseness or cracks in the hose cover and evidence of having been kinked. Check fittings for thread damage or bent fitting components.

Routing

Many problems can be avoided by installing hose and hose assemblies away from hot equipment such as exhaust manifolds. Insulating heat shields may be necessary in some cases (Figure 1).

Selection, Installation and Maintenance of Synflex Hose and Assemblies

Minimum Bend Radius

Tight bends (Figure 2) that exceed the hose minimum bend radius should be avoided. Spring guards or stress relief sleeves may be required to protect against exceeding prescribed minimum bend radii.

Torsional Flexing

When equipment parts exhibit relative motion, hose connections should be located so hoses bend instead of twist.

Fitting Connections

Follow the fitting installation instructions provided in this catalog or enclosed with assembly equipment and described in product standards. Attach only the fittings specified for each hose design and do not mix components that are produced by different manufacturers. Proper fitting end selection is very important to eliminate twists and kinks in installed assemblies when connecting fittings to port connections. Swivel fittings are designed to allow for the hex rotation during tightening and bent tube or elbow fittings can eliminate kinks (Figure 3).

Torque Wrench Application

Use torque values where specified when tightening fitting connections to prevent leakage and damage.

Final Check Out

After components are assembled, purge entrapped air and pressurize system to maximum operating pressure. Inspect for leaks and proper function. Perform electrical conductivity tests on designs serving as static electricity discharge paths.

It is important that designers and users consider hose and hose assemblies as having a finite life. Therefore maintenance and replacement is usually necessary at specific intervals.

Maintenance Interval

Frequency of maintenance inspection should be determined by the system designer as well as user feedback based on the severity of the application, including service life data and risk potential.

Maintenance Program

Recommended maintenance should include the following steps as minimum practice:

Leakage

Turn off equipment and bleed down pressures prior to inspection to minimize risk to personnel. Inspect the full length of the hose and fitting connections for leaks.

Damage

Inspect hose for cuts, abrasion, cracks, blisters, kinked or crushed areas, heat degradation or cover looseness at the port or hose connection. Inspect hose guards for damage.

Electrical Continuity

In applications requiring the hose assembly to conduct static electricity to a ground connection, test hose assemblies using a megohmmeter in accordance with recommended procedures described on the permanently attached tag.

Replacement

Hose and/or assembly replacement should be considered at specific intervals under normal conditions. If leakage, loss of conductivity (when required), fitting separation and/or signs of damage are detected, the hose assembly should be replaced immediately.

Hose Routing

Under pressure, a hose may change in length. Always provide some slack in the hose to allow for this shortening or elongation. However, excessive slack in hose lines may cause poor appearance (Figure 4).

Figure 2

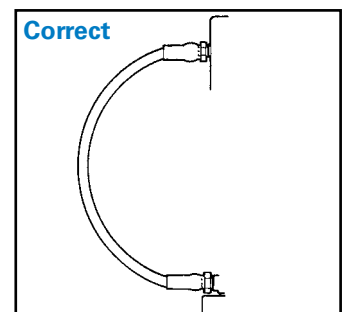
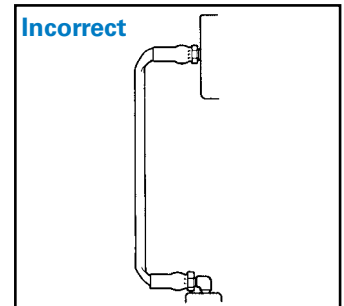


Figure 3

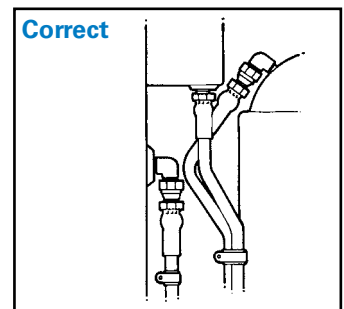
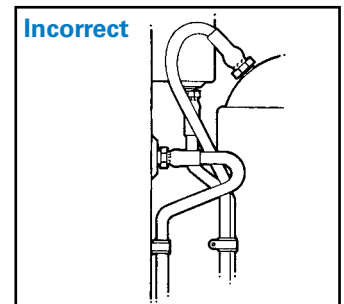
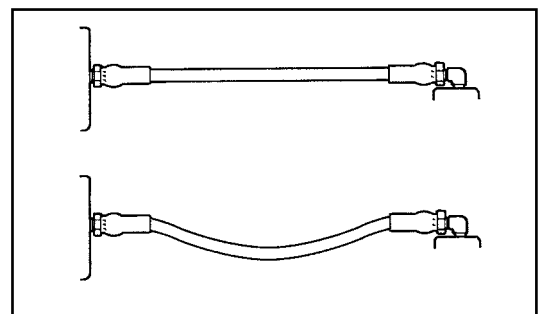
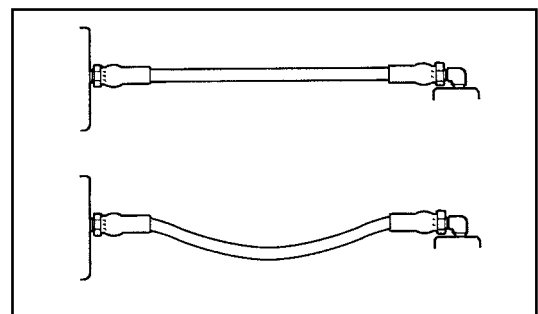


Figure 4

Incorrect



Correct



How to Assemble Permanent Hose Fittings

Synflex Mark IX Swaging Machine

Permanent Fitting Chart Insertion Depth Table

Hose I.D. (in)	Fitting Series Insertion Depth (in)	
	903, 90H, 90L, 90A, 90N	906
1/8	9/16	-
3/16	25/32	-
1/4	1-1/16	7/8
5/16	1-1/8	-
3/8	1-1/4	1-1/4
1/2	1-1/2	1-1/2
5/8	1-9/16	-
3/4	1-11/16	-
1	2-1/16	-



1. Cut hose squarely with hand-held hose cutter 4523-04006 or bench-mounted hose cutter 4523-04007.



2. Mark hose for proper insertion depth into fitting. Use insertion depth chart or use insertion depth marker 45J0-04603.



3. Oil inside hose diameter with SAE 20 oil.

Consult Eaton's Technical Support for oxygen system special assembly recommendations.



4. Insert hose into fitting to depth mark. (Use vise block 4504-00000 or 4504-01000 and rubber mallet to ease assembly.)



5. Insert the specified die and pusher into the swaging machine.



6. Lubricate die swaging surface with SAE 90 gear oil. For stainless steel fittings use swage lubricant 4545-01001.



7. Insert hose end into the pusher.



8. Pull control lever and guide fitting into the die until the pusher bottom is against the top of the die surface.



9. Push control lever to retract pusher and open die halves. Remove swaged hose assembly.

How to Assemble Permanent Hose Fittings

Synflex SST Swaging Tool

Permanent Fitting Chart Insertion Depth Table

Hose I.D. (in)	Fitting Series Insertion Depth (in)	
	903, 90A, 90H, 90L, 90N	906
1/8	9/16	-
3/16	25/32	-
1/4	1-1/16	7/8
5/16	1-1/8	-
3/8	1-1/4	1-1/4
1/2	1-1/2	-
5/8	1-9/16	-
3/4	1-11/16	-
1	2-1/16	-



1. Cut hose squarely with hand-held hose cutter 4523-04006 or bench-mounted hose cutter 4523-04007.



2. Mark hose for proper insertion depth into fitting. Use insertion depth chart or use insertion depth marker 45J0-04603.



3. Lubricate inside hose diameter with SAE 20 oil.

Consult Eaton's Technical Support for oxygen system special assembly recommendations.



4. Insert hose into fitting to depth mark. (Use vise block 4504-00000 or 4504-01000 and rubber mallet to ease assembly.)



5. Insert the specified pusher with the pusher retainer in the raised position. Fingertighten retaining screw to hold pusher firmly in place. Pusher must be allowed to rotate freely.



6. Place one die half into the base plate. **Lightly oil the inner surface of both die halves with SAE 90 gear oil. For stainless steel fittings use swage lubricant 4545-01001.**



7. Insert the assembled hose and fitting through the base plate and firmly into the pusher cavity. Place the other die half in base and lock into place by swinging clamps down firmly against top of dies. Rotate ball screw until fitting reaches the die.



8. With handle provided or 1-1/8 socket and ratchet, rotate screw clockwise until pusher bottom contacts top of die. Maintain pressure on ball screw and release die clamps. Slowly release pressure and rotate ball screw counterclockwise until it is clear of the die. Remove swaged assembly.

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How to Assemble Reusable Hose Fittings

Synflex 3R80, 3E80, 37AL

* Consult Eaton Training for oxygen system assembly recommendations.

Reusable Fitting Chart Insertion Depth Table

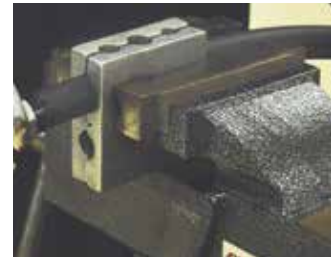
Hose I.D. (in)	Fitting Series Insertion Depth (in)	
	902, 904, 908	
1/8	21/32	-
3/16	27/32	27/32
1/4	1	7/8
5/16	1-3/32	1-1/8
3/8	1-3/16	1-1/4
1/2	1-5/16	1-1/2
3/4	1-1/4	1-11/16
1	1-11/16	-



1. Cut hose squarely with hand-held hose cutter 4523-04006 or bench-mounted hose Cutter 4523-04007.



2. Use the table (to the right) to establish the length of hose that is inserted into the fitting socket. Use a rule for measurement and mark the hose with a colored pencil.



3. Insert hose into vise blocks (4504-0000 or 4504-01000) and tighten to hold hose firmly in place.



4. Lightly lubricate the outer surface of the hose to make it easier to push the fitting over the hose. For mild steel fittings and standard hose, use SAE 20 motor oil. For stainless steel fittings use swage lubricant 4545-01001*.



5. Push fitting socket over the lubricated hose and screw socket on by hand counterclockwise until the socket end is even with the depth mark. The end of the hose should be 3/32 inch to 1/16 inch from the inner shoulder of the fitting socket. It should NOT be bottomed against the shoulder. Do not over-tighten.



6. Remove hose and fitting assembly from vise block.
7. Place fitting socket in the vise and lubricate the mating fitting threads.



8. Screw the fitting insert clockwise into the socket with a wrench until the bottom of the inserted hex contacts the socket shoulder. Do not over-tighten.

How to Separate Twin Line & Multi-Line Hose

Synflex De-Twiner Die Reference Chart (4574-03000-xxx)

Hose Product	Die* No.	Hose Product	Die* No.	Hose Product	Die* No.
3R30-03	027	37AL-08	013	3VEO-03	005
3R30-04	003	30CT-04	003	3VEO-04	016
3R30-06	010	30CT-05	022	3VEO-06	017
3R30-08	013	30CT-06	011		
		30CT-08	014	3840-03	018
3130-02	001			3840-04	019
3130-03	002	3360-03	002	3840-06	020
3130-04	004	3360-04	004	3840-08	021
3130-05	008	3360-05	023		
3130-06	011	3360-06	024	35NG-03	004
3130-08	013	3360-08	025	35NG-04	026
				35NG-06	012
3160-03	002	3R80-04	009	35NG-08	015
3160-04	004	3R80-06	012		
3160-05	008	3R80-08	015	3V20-04	016
3160-06	011	3E80-04	009	3V20-06	017
3160-08	013	3E80-06	012		
		3E80-08	015	3251-08	006
37AL-03	002				
37AL-04	003	3V10-03	005	31DW-04	005
37AL-05	007	3V10-04	016		
37AL-06	010	3V10-06	017		

*Die number stamped on end.

Instructions for using the Twin-Line Hose Separation Tool

CAUTION: Tool Contains a Sharp Blade. Do Not Put Your Hands or Objects Inside the Tool.



- The De-Twiner tool 4574-01000 is designed to split twinned hose without any damage to the hose. Selecting the proper die is critical to operating this tool safely. The proper die can be selected from the provided chart. Customer service can assist in proper die selection. The hose should fit snugly in the die without extra play.
- To insert the die into the tool, first remove the retainer pin. This pin should also fit snugly to prevent the die from moving. **DO NOT REACH INTO THE TOOL OR PUSH ANYTHING THROUGH THE TOOL TO REMOVE THE DIE!** The die extends out one side of the tool to allow ease of removal. Set the tool on its side with the long end of the die pointing up. Remove the die. Insert the new die from the same side and reset the pin.
- Insert the assembled tool with die into a proper holding fixture (vise or other) and set stop at appropriate distance. The tool is cutting 2" before the exit end of the tool.
- Apply a water soluble lubricant to the end of the first piece of product to be cut and slide it through the tool to the appropriate stop. Apply a few drops of lubricant to the end of each hose to be cut just before cutting. This will ease the cutting force and prolong blade life.

Blade Replacement



- Replacement blades are available from Eaton performance plastics.
- Use proper protective gear (cut resistant gloves) when replacing the blade. This blade is very sharp.
- Remove blade retainer nut and slide out blade retainer bolt. Tip tool over and the blade should fall out from the top. **DO NOT TRY TO REMOVE IT FROM THE SLOT, THE MATERIAL SLIDES THROUGH.**
- Insert new blade, bolt and nut. Tighten the locking nut only to the point that the bolt rotates as the product is cut. If it is too tight the blade and bolt will wear out prematurely.
- The blade will last for thousands of cuts if properly installed and the operating procedures are followed correctly.

How to Separate Twin Line & Multi-Line Hose

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Instructions for using the Twin-Line Hose Separation Tool



1. Remove the hose separation knife (4573-00000) from the handle and place in a vise at a 45° angle to the top of the vise. Fasten securely in the vise jaws.



2. Measure and mark the distance to be separated.



3. Lightly lubricate the hoses on both sides at the connecting web with a soap solution or lubricating oil. This step reduces friction between the knife blade and hose cover surfaces, plus keeps the knife centered during the cutting step.



4. Push the hose into the "V" notch on the knife blade using a rocking motion to start the hoses into the blade.

How to Separate Twin Line & Multi-Line Hose

(continued)



5. Hold the hoses together and aligned with the blade while first pushing then pulling them to the mark, taking care not to cut the hose covers.



6. Wipe lubricant from the hose.



7. Examine the hose cover material where the hoses were attached to ensure they have not been cut, or the reinforcement fiber exposed. If the hose covers shows signs of damage, the hose assembly should not be placed in service. If no damage is apparent, proceed with normal hose assembly.

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Chemical Resistance Data

This chart is intended to serve as a guide and does not guarantee suitability of hose material with the chemicals listed.

Final selection of materials is dependent on many factors including variations in temperature, pressure and duration of exposure.

Hose Material Key

N = Nylon	H = Polyester
P = Polyolefin	U = Polyurethane
V = PVC - Polyvinyl Chloride	

Resistance Rating Key

G = Good	P = Poor
L = Limited	NT = Not Tested

	N	H	P	U	V		N	H	P	U	V		N	H	P	U	V
Acetaldehyde	G	G	L	G	P	Carbon Bisulfide	G	L	P	L	P	†Ethylene Glycol	G	G	G	L	G
Acetic Acid	L	L	G	L	G	Carbon Disulfide	G	L	P	L	P	Ethylene Oxide	G	L	L	L	NT
Acetic Anhydride	L	L	G	L	P	Carbon Monoxide	G	G	G	G	G	Fatty Acid	G	G	P	G	G
Acetone	G	L	L	P	P	Carbon Tetrachloride	G	P	P	P	L	Ferric Chloride	L	NT	G	NT	G
Acetyl Bromide	P	P	P	P	P	Carbonic Acid	G	L	G	L	G	Ferric Sulphate	G	G	G	G	G
Acetyl Chloride	P	P	P	P	P	Castor Oil	G	L	G	L	G	Fluoboric Acid	NT	P	G	P	GL
Acetylene	G	G	G	G	NT	Caustic Potash (>20%)	L	L	G	L	L	Fluorine	P	P	P	P	L
Air	G	G	G	G	G	Caustic Potash (<20%)	G	L	G	L	G	Fluorosilicic	NT	NT	G	P	GL
*Alcohols	G	L	G	L	G	Caustic Soda (>20%)	L	L	G	L	L	Formaldehyde	G	L	G	L	G
Aluminum Chloride	P	NT	G	NT	G	Caustic Soda (<20%)	G	L	G	L	G	Formic Acid	P	P	GL	P	GL
Aluminum Sulphate	G	NT	G	NT	G	Cellusolves Union Carbide	G	P	P	P	P	Freon	G	L	L	L	L
Alums	P	NT	G	NT	G	Cellulubes Celanese (Hydraulic Fluid, Phosphate Ester Base)	G	P	P	P	P	*Fruit Juices	G	G	G	G	G
Ammonia Gas	P	P	P	P	P	Chloracetic Acid	P	P	L	P	P	Fuel Oil (Aromatic Gas)					
Ammonium Chloride	G	G	G	G	G	Chloroform	G	P	P	P	P	100 Octane	G	G	L	G	L
Ammonium Hydroxide	P	P	P	P	P	Chlordane	G	G	G	G	L	Fuel Oil	G	G	LP	G	L
Ammonium Nitrate	G	L	G	G	G	Chlorinated Solvents	G	P	L	P	P	Furfuryl Alcohol	G	G	G	G	G
Ammonium Phosphate	G	L	G	G	G	Chlorine (Dry)	P	P	P	P	L	Galic Acid (<20%)	G	L	G	L	G
Ammonium Sulphate	G	L	G	G	G	Chlorine (Water) (<20%)	L	P	G	L	G	** Gas (Natural)	G	G	G	G	G
Amyl Acetate	G	L	P	L	P	Chromic Acid	P	P	GL	P	L	Gas Oil	G	GL	P	G	L
Amyl Alcohol	G	G	G	G	G	Chromium Salts	G	G	G	G	G	Gasoline	G	G	LP	G	L
Anethole	G	NT	NT	NT	NT	*Cider	G	G	G	G	G	Gasoline (Aromatic)	G	G	LP	G	L
Aniline	L	P	P	P	L	Citric Acid	G	L	G	L	G	Gasoline (Non-Aromatic)	G	G	LP	G	G
Animal Oils	G	G	P	G	G	Coal Gas	G	G	G	G	G	Gelatin	G	G	G	G	G
Antimony Salts	G	G	G	G	G	Copper Chloride	L	G	G	G	G	Glucose	G	G	G	G	G
Apoclor Monsanto (Chlorinated Hydrocarbon Hydraulic Fluid)	G	L	L	L	L	Copper Sulphate	G	G	G	G	G	Glue (Depends on type)	G	G	G	G	G
Aromatic Hydrocarbons	G	L	P	L	P	*Corn Oil	G	G	G	G	G	†Glycerine	G	G	G	G	G
Arsenic Salts	G	G	G	G	G	Cottonseed Oil	G	G	G	G	G	†Glycol	G	G	G	L	G
Asphalt	G	G	G	G	G	Creosote	P	P	L	P	L	Greases	G	G	L	G	G
Auto Transmission Fluid	G	G	G	G	G	Cresols	P	P	L	P	L	Heavy Water (D2O)	G	G	NT	NT	NT
Barium Chloride	G	G	G	G	G	Cresylic Acid	P	P	L	P	L	Hexane	G	G	P	G	L
Barium Salts	G	G	G	G	G	Crude Petroleum Oil	G	L	P	G	G	†Houghto Safe Houghton 600 Series (Hyd. Fluid Water Glycol Base)	G	L	P	L	P
Basic Copper Arsenate	G	G	G	G	G	Cupric Sulphate	L	L	G	L	G	†Houghto Safe Houghton 1000 Series (Phosphate Ester Base)	G	L	P	L	P
Benzaldehyde	G	G	L	G	P	Cyclohexane	G	G	NT	G	NT	Hydraulic Fluid Petroleum Base	G	G	P	G	P
Benzene	G	L	P	L	P	Cyclohexanone	G	G	P	G	P	†Hydraulic Fluid Water Glycol Base	G	G	G	G	G
Benzoic Acid	G	P	G	P	G	Decalin	G	NT	NT	NT	NT	†Hydraulic Fluid Phosphate Ester	G	L	P	L	P
Benzol (Benzene)	G	L	P	L	P	Diacetone Alcohol	G	L	G	L	P	Hydraulic Fluid Petroleum Base	G	G	P	G	P
Benzyl Alcohol	L	L	L	L	L	Diammonium Phosphate	G	L	G	P	G	†Hydraulic Fluid Water Glycol Base	G	G	G	G	G
Borax	G	G	G	G	L	Dibutyl Phthalate	G	L	L	L	NT	Hydrochloric Acid (10%)	G	P	G	L	G
Bordeaux Mixture	G	G	G	G	G	Diesel Fuel	G	G	L	G	L	Hydrocyanic Acid	P	NT	G	NT	G
Boric Acids	G	G	G	G	G	Diethanolamine (20% conc.)	G	L	NT	L	NT	Hydrofluoric Acid	P	P	L	P	L
Boric Copper Sulphate	G	G	G	G	G	Diethyl Ether	G	L	G	L	L	Hydrogen Gas	G	G	G	G	G
Bromine	P	P	P	P	L	Diethyl Phosphate	G	L	P	L	P	Hydrogen Peroxide (dil.)	G	G	G	G	G
Butanol	G	G	G	G	G	Diethylphthalate	G	L	P	L	P	Hydrogen Peroxide (conc.)	P	P	G	P	L
* Butter	G	G	G	G	G	Enamels	G	G	G	G	G	Hydrogen Sulphide	L	L	G	NT	G
Butyl Acetate	G	L	P	L	P	Essential Oils	G	G	L	G	G	†Hydrolube Union Carbide— (Hydraulic Fluid Water Glycol Base)	G	L	G	G	G
Calcium Arsenate	G	G	G	G	G	* Ethanol	G	L	L	L	L						
Calcium Bisulphide	G	G	G	G	L	Ether	G	L	G	L	L						
Calcium Chloride	G	G	G	G	G	Ethyl Acetate	G	L	G	L	P						
Calcium Hydroxide (<20%)	G	L	G	L	G	* Ethyl Alcohol	G	L	G	L	L						
Calcium Hypochlorite	G	L	G	L	G	Ethyl Chloride	G	P	P	P	P						
Calcium Salts	G	G	G	G	G	Ethylene Chlorhydrin	P	P	NT	P	P						
Carbolic Acid	P	P	G	P	P	Ethylene Dichloride	G	P	L	P	P						

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	N	H	P	U	V		N	H	P	U	V		N	H	P	U	V	
†Irus Shell 902 Hydraulic Fluid (Water-Oil Emulsion)	G	G	L	G	G	Oleic Acid	G	G	P	G	L	Sodium Sulphate	G	G	G	G	G	
Isocyanates	G	G	G	G	NT	OS 45 Monsanto Hydraulic Fluid (Silicate Ester Base)	G	L	P	L	NT	Sodium Sulphide	G	G	G	G	G	
Isopropyl Acetate	G	L	L	L	P	Oxalic Acid (-30%)	G	L	G	L	G	Sodium Thiosulphate	G	G	G	G	G	
Kerosene	G	G	LP	G	L	Oxygen	Refer to Factory					Solutions/Emulsions 2-4D						
Ketones	G	L	G	L	P	Ozone	G	G	P	G	G	DDT Preparation Hydroxy	G	NT	NT	NT	G	
Lacquer Solvents	G	L	G	L	P	Paint (Oil Base)	G	G	L	G	L	Stannous Chloride	L	G	G	G	G	
Lactic Acid	G	NT	L	NT	G	Paint Solvents (Oil Base)	G	L	L	L	L	Steam	P	P	P	P	P	
Lard	G	G	G	G	G	Palmitic Acid	G	G	G	G	G	Stearic Acid	G	G	G	G	G	
Lead Arsenate	G	G	G	G	G	Pentane	G	G	P	G	L	Stearin	G	G	NT	G	NT	
Lead Sulphate	G	G	G	G	G	Perchloric Acid	P	P	G	P	L	Stoddard Solvent	G	P	L	P	L	
Lead Tetramethyl	G	G	NT	G	NT	Perchloroethylene	G	P	P	P	L	Styrene	G	L	NT	L	NT	
Lime	G	G	G	G	G	Petroleum Oils (Sour)	G	L	L	G	G	Sulphur	G	G	G	G	G	
Linseed Cake	G	G	P	G	G	Petroleum Oils (Refined)	G	G	L	G	G	Sulphur Dioxide	P	P	G	P	L	
Linseed Oil	G	G	P	G	G	Phenolates	L	L	L	G	L	Sulphur Trioxide	L	P	G	P	G	
Lubricating Oils, Petroleum Base	G	G	L	G	G	Phenols	P	P	G	P	L	Sulphuric Acid (dil.)	L	LP	L	LP	G	
†Lubricating Oils, Diester Base	G	L	P	L	NT	Phosphoric Acid	G	P	G	P	G	Sulphuric Acid (conc.)	P	P	L	P	P	
Magnesium Chloride	G	G	G	G	G	Picric Acid	L	P	G	P	G	Sulphurous Acid	P	LP	L	LP	L	
Magnesium Hydroxide (<20%)	G	L	G	L	G	Potash (Potassium Hydroxide)	L	P	G	P	L	Tannic Acid	G	L	G	L	G	
Magnesium Sulphate	G	G	G	G	G	Potassium Chloride	G	G	G	G	G	Tar Oil	G	G	G	G	G	
Maleic Acid	G	L	G	L	G	Potassium Hydroxide (50% conc.)	L	P	G	P	L	Tartaric Acid	G	G	G	G	G	
Mercuric Chloride	G	G	G	G	L	Potassium Nitrate	G	G	G	G	G	Toluene	G	L	P	L	P	
Mercury	G	G	G	G	G	Potassium Permanganate						Toluol	G	L	P	L	P	
**Methane	G	G	NT	G	P	(5% conc.)	P	P	P	P	G	Tributyl Phosphate	G	L	P	L	P	
Methanol	G	L	G	L	P	Potassium Sulphate	G	G	G	G	G	Tricesylphosphate	G	L	P	L	P	
Methyl Acetate	G	L	G	L	P	Propane	G	G	G	G	G	Trichloroacetic Acid	P	P	GL	P	L	
Methyl Bromide	L	P	P	P	P	†Pydraul (Stauffer) F-9, 150, 600, 625	G	L	P	L	P	Trichloroethylene	G	P	P	P	L	
Methyl Chloride	G	P	P	P	P	Pyrethrum	G	G	G	G	G	†Trisodium Phosphate Solution	G	L	NT	L	G	
Methyl Sulphate	G	G	NT	G	NT	Pyridine	L	L	G	G	P	Turpentine	G	G	P	G	G	
Methylethylketone (MEK)	G	L	G	L	P	†Sea Water	G	G	G	G	G	†Ucon Union Carbide (Hydraulic Fluid Water Glycol Base)	G	L	G	G	G	
Methylisobutylketone (MIBK)	G	L	G	L	P	†Skydrol Monsanto 500, 7000	G	P	P	P	P	Urea	G	L	G	L	G	
*Milk	G	G	G	G	G	†Soap Solution (conc.)	G	G	L	G	G	Uric Acid	G	P	G	P	G	
Mineral Oil	G	G	LP	G	G	* † Soda Water	G	G	G	G	G	Varnish	G	G	L	G	P	
Molasses	G	G	G	G	G	Sodium Bicarbonate	G	G	G	G	G	Vinegar	G	L	G	L	G	
Mustard	G	G	NT	G	NT	Sodium Bisulfite	G	G	G	G	G	† Water (150°F)	G	G	G	G	G	
Naphtha	G	L	P	L	P	Sodium Borate	G	G	G	G	G	White & Bagley No. 2190 Cutting Oil	G	NT	NT	NT	NT	
Naphthalene	G	L	P	L	P	Sodium Carbonate	G	G	G	G	G	*Wine	G	G	G	G	G	
Nickel Chloride	P	P	G	NT	P	Sodium Chloride	G	G	G	G	G	Wool Oil	G	G	G	G	G	
Nicotine	G	G	G	G	G	Sodium Cyanide	G	G	G	G	G	Xylol	G	L	P	L	P	
Nitric Acid (<20%)	L	L	G	L	G	Sodium Hydroxide (<20%)	G	L	G	L	G	Xylene	G	L	P	L	P	
Nitric Acid (>20%)	L	P	L	P	G	Sodium Hypochlorite	L	L	G	L	G	Zinc Chloride	G	G	G	G	G	
Nitrobenzene	G	P	P	P	P	Sodium Nitrate	G	G	G	G	G	Zinc Hydrate	P	L	G	L	G	
* Nitrous Oxide	G	G	LP	G	G	†Sodium Phosphate Solution	G	G	G	G	G	Zinc Sulphate	P	L	G	L	G	
Oil	G	G	L	G	L	Sodium Silicate	G	G	G	G	G							
* Oil of Turpentine	G	G	L	G	G													

Hose Material Reference Chart

- * Does not imply NSF or FDA compliance
- † Recommended operating temperature not to exceed +150°F (+66°C)
- ** Does not imply AGA or UL compliance
- % Recommended operating temperature not to exceed +100°F (+37.8°C)

Series	Core	Cover	Series	Core	Cover	Series	Core	Cover
25CT	Polyester	Polyester	37AL	Polyester	Polyurethane	3VE0	Nylon-Lined	Polyurethane
3630	PVC	PVC	3440	Polyolefin	Polyurethane	34BA	Polyester-Lined	PVC
3R30	Nylon-Lined	Polyurethane	3R80	Nylon	Polyurethane	34PW	Polyolefin	Polyurethane
3130	Nylon-Lined ⁽¹⁾	Polyurethane	3E80	Nylon	Polyurethane	30CT	Polyester	Polyester
3580	Polyester	Polyurethane	3800	Nylon	Polyurethane			
3740	Nylon	Polyurethane	3V10	Nylon-Lined	Polyurethane			

(1) -02 size is a nylon, single-wall design

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How to Select the Correct Hose Size

The hose I.D. may be determined if the fluid flow rate and velocity are known by using the nomograph.

Nomograph data is based on the formula:

$$\text{Area} = \frac{\text{Flow Rate} \times 0.3208}{\text{Velocity}}$$

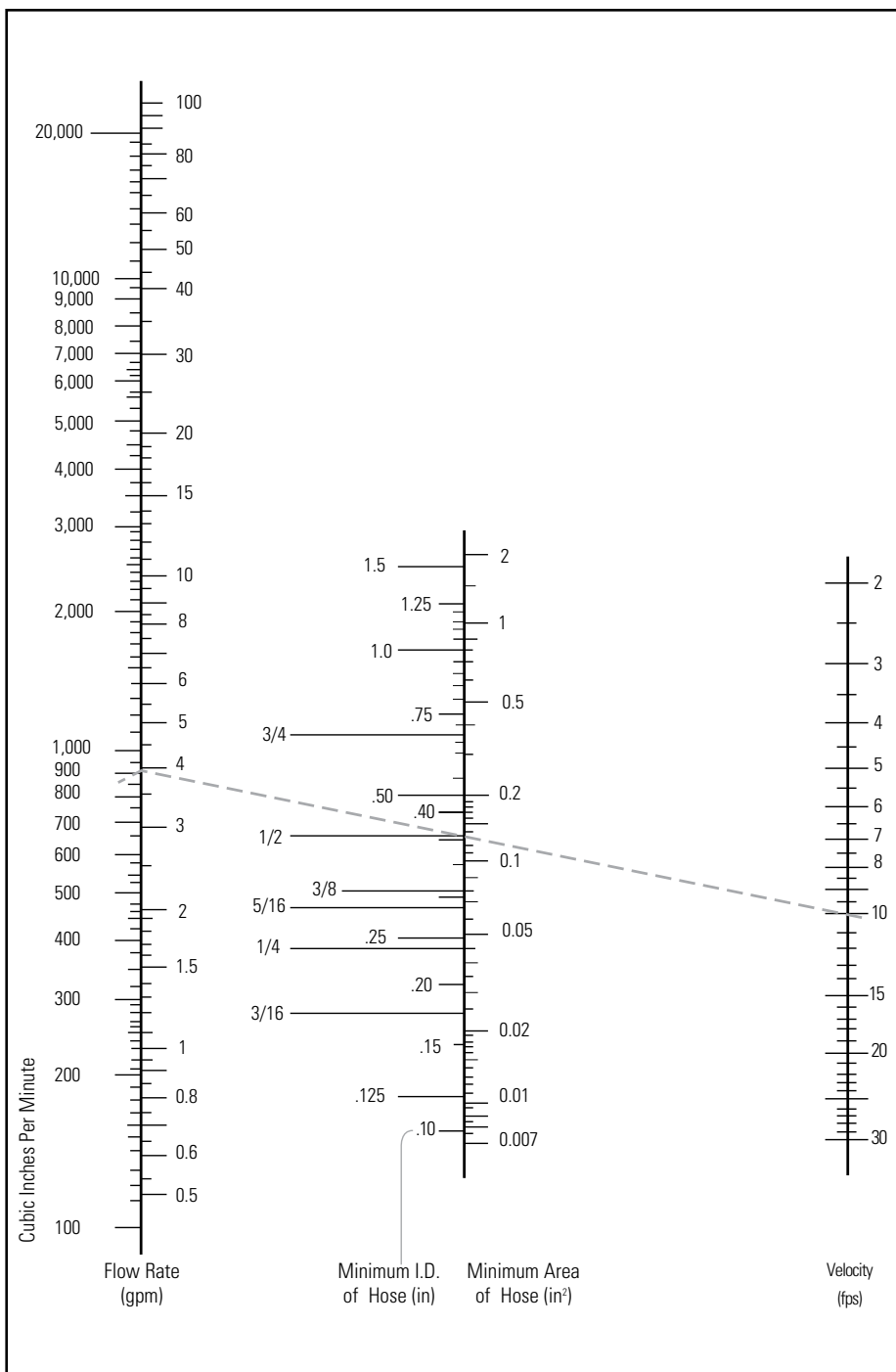
How to Use the Nomograph

1. Find the two known values.
2. Lay a straight edge to connect the known values.
3. The intersection point on the third vertical line identifies the point for that factor.

Example

A pump has a flow rate of 4 gpm. The necessary velocity is 10 fps. What hose size is required?

With a straight edge placed on 4 gpm and 10 fps, the answer is 1/2 inch hose I.D.



Volumetric Expansion Data

The following charts are based on a limited testing of each hose size according to SAE J343.

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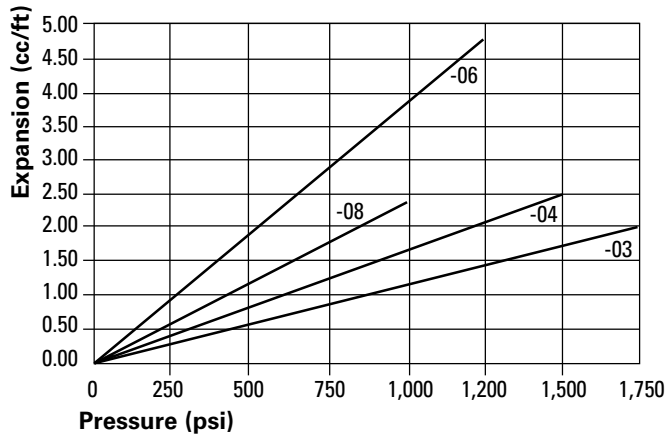
SYNFLEX FITTINGS

WEATHERHEAD (U & Z SERIES) FITTINGS

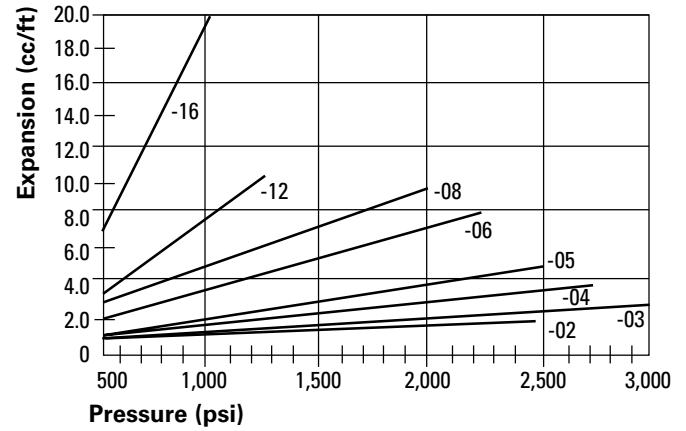
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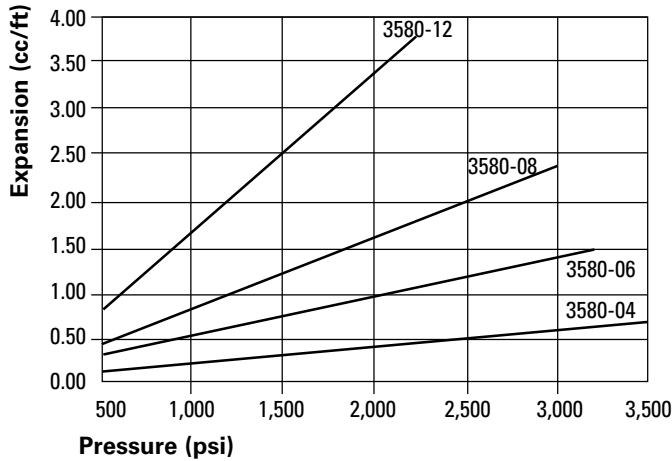
3R30 Series



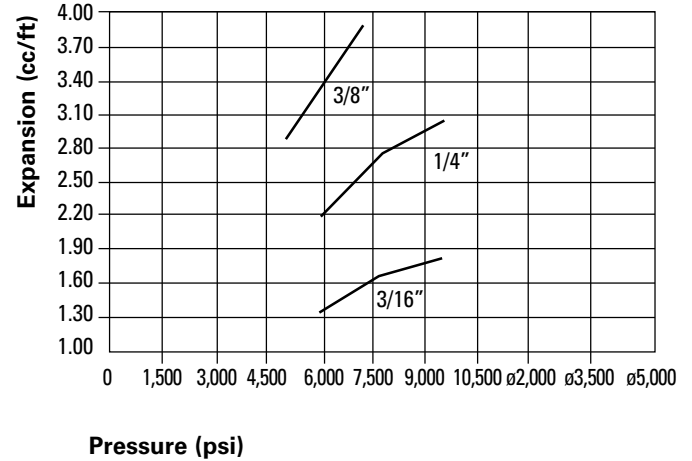
3130 Series



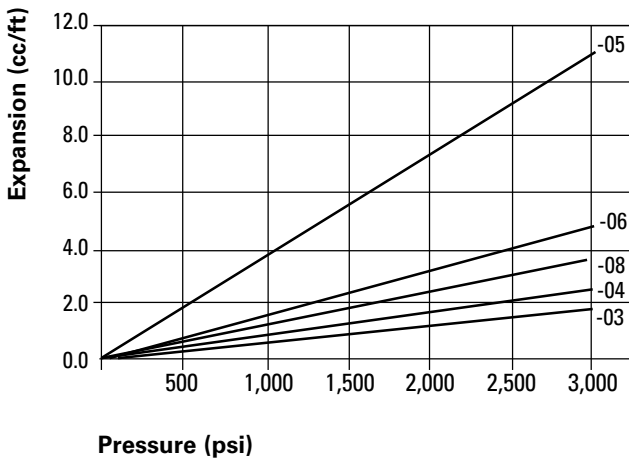
3580 Series



3V10/3VEO Series



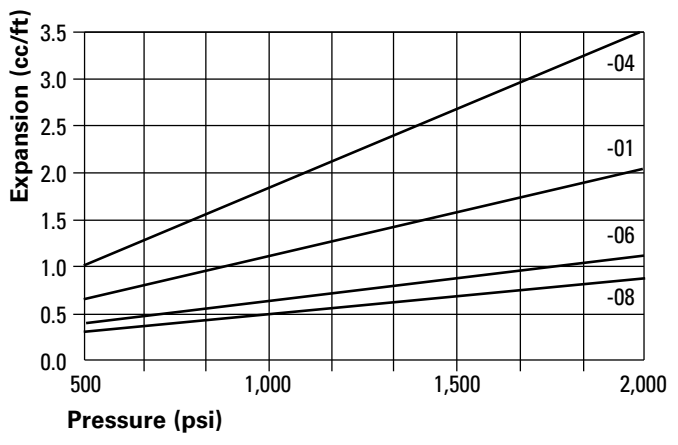
37AL/3750 Series



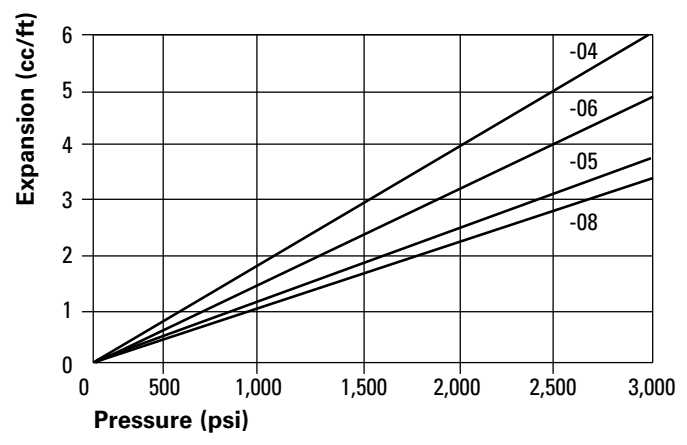
Volumetric Expansion Data

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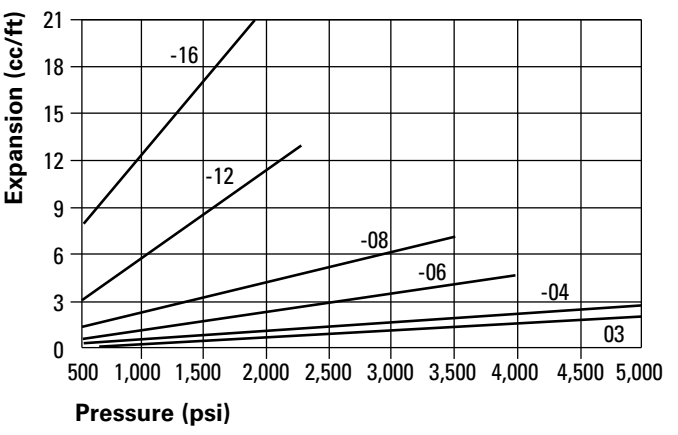
31N0 Series



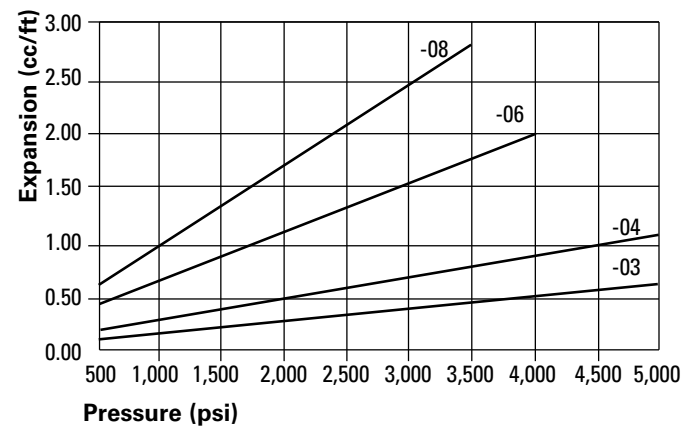
30CT Series



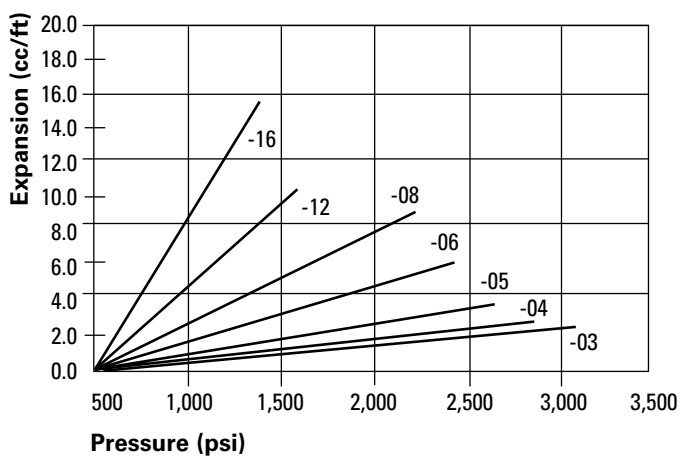
3R80/3E80 Series



3800/3840 Series



3740 Series



How to Use Conversion Tables

- Locate known unit symbol in left vertical column - FROM
- Locate the desired unit in top horizontal row - TO
- The factor at the intersection of the FROM row and TO column is multiplied by the known unit quantity to calculate the desired unit quantity

Example:

- Convert 3,000 PSI (psi) of a hydraulic pressure to kPa.
- Locate lb/in² row and kPa column in the Pressure Conversion Table; the factor is 6.895
- Calculation:
6.895 x 3,000 PSI = 20,685 kPa.

Pressure Conversions

FROM	TO								
	MMHG	IN HG	IN H ₂ O	FT H ₂ O	ATM	PSI	KG/CM ²	KPA	BAR
mmHg	1	0.03937	0.5353	0.044610	0.00132	0.01934	0.00136	0.1333	0.0013
inHg	25.40	1	13.6	1.133	0.03342	0.4912	0.03453	3.387	0.0339
inH ₂ O	1.868	0.07355	1	0.08333	0.00246	0.03612	0.00254	0.249	0.0025
ftH ₂ O	22.42	0.8826	12	1	0.02950	0.4334	0.03048	2.988	0.0299
atm	760	29.92	406.8	33.9	1	14.7	1.033	101.3	1.013
PSI	51.71	2.036	27.69	2.307	0.06805	1	0.07031	6.895	0.0689
Kg/cm ²	735.6	28.96	393.7	32.81	0.9678	14.22	1	98.05	0.981
kPa	7.5	0.2953	4.016	0.3347	0.00987	0.1451	0.0102	1	0.01
bar	750	29.53	401.6	33.47	0.987	14.51	1.02	100	1

Flow Rate Conversions

From	TO					
	L/SEC	GAL/MIN	FT ³ /SEC	FT ³ /MIN	BBL/HR	BBL/DAY
l/sec	1	15.85	0.3532	2.119	22.66	543.8
gal/min	0.06309	1	0.00223	0.1337	1.429	34.3
ft ³ /sec	28.32	448.8	1	60	641.1	1.54x10 ⁴
ft ³ /min	0.4719	7.481	0.01667	1	10.69	256.5
bbl/hr	0.04415	0.6997	0.00156	0.09359	1	24
bbl/day	0.00184	0.02917	6.50x10 ⁻⁵	0.0039	0.04167	1

Length Conversions

From	TO					
	Feet	Inches	Kilometers	Meters	mm	miles
feet	1	12	0.000305	0.3048	304.8	0.0001894
inches	0.08333	1	0.0000254	0.0254	25.4	0.00001578
kilometers	3281	39372	1	1000	1000000	0.6214
meters	3.281	39.37	0.001	1	1000	0.000621
millimeters	0.003281	0.03937	0.000001	0.001	1	-
miles	5280	6360	1.609	1609	-	1

Weight Conversions

From	TO			
	G	KG	OZ	LB
g	1	0.001	0.03527	0.0022
kg	1000	1	35.27	2.205
oz	28.35	0.02835	1	0.0625
lb	453.6	0.4536	16	1

Temperature Conversions

°C = (°F - 32) x .555
°F = (°C x 1.8) + 32

Look up the value in the middle column. If in degrees Centigrade, read the Fahrenheit equivalent in right-hand column; if in Fahrenheit degrees, read the Centigrade equivalent in left-hand column.

C	F/C	F	C	F/C	F	C	F/C	F
-73.0	-100	-148.0	5.0	41	105.8	33.3	92	197.6
-68.0	-90	-130.0	5.6	42	107.6	33.9	93	199.4
-62.0	-80	-112.0	6.1	43	109.4	34.4	94	201.2
-57.0	-70	-94.0	6.7	44	111.2	34.0	95	203.0
-51.0	-60	-76.0	7.2	45	113.0	35.6	96	204.8
-46.0	-50	-58.0	7.8	46	114.8	36.1	97	206.6
-40.0	-40	-40.0	8.3	47	116.6	36.7	98	208.4
-34.0	-30	-22.0	8.9	48	118.4	37.2	99	210.2
-29.0	-20	-4.0	9.4	49	120.2	37.8	100	212.0
-23.0	-10	14.0	10.0	50	122.0	43.0	110	230.0
-17.8	0	32.0	10.6	51	123.8	49.0	120	248.0
-17.2	1	33.8	11.1	52	125.6	54.0	130	266.0
-16.7	2	35.6	11.7	53	127.4	60.0	140	284.0
-16.1	3	37.4	12.2	54	129.2	66.0	150	302.0
-15.6	4	39.2	12.8	55	131.0	71.0	160	320.0
-15.0	5	41.0	13.3	56	132.8	77.0	170	338.0
-14.4	6	42.8	13.9	57	134.6	82.0	180	356.0
-13.9	7	44.6	14.4	58	136.4	88.0	190	374.0
-13.3	8	46.4	15.0	59	138.2	93.0	200	392.0
-12.8	9	48.2	15.6	60	140.0	99.0	210	410.0
-12.2	10	50.0	16.1	61	141.8	100.0	212	413.6
-11.7	11	51.8	16.7	62	143.6	104.0	220	428.0
-11.1	12	53.6	17.2	63	145.4	110.0	230	446.0
-10.6	13	55.4	17.8	64	147.2	116.0	240	464.0
-10.1	14	57.2	18.3	65	149.0	121.0	250	482.0
-9.4	15	59.0	18.9	66	150.8	127.0	260	500.0
-8.9	16	60.8	19.4	67	152.6	132.0	270	518.0
-8.3	17	62.6	20.0	68	154.4	138.0	280	536.0
-7.8	18	64.4	20.6	69	156.2	143.0	290	554.0
-7.2	19	66.2	21.1	70	158.0	149.0	300	572.0
-6.7	20	68.0	21.7	71	159.8	154.0	310	590.0
-6.1	21	69.8	22.2	72	161.6	160.0	320	608.0
-5.6	22	71.6	22.8	73	163.4	166.0	330	626.0
-5.0	23	73.4	23.3	74	165.2	170.0	338	640.0
-4.4	24	75.2	23.9	75	167.0	171.0	340	644.0
-3.9	25	77.0	24.4	76	168.8	177.0	350	662.0
-3.3	26	78.8	25.0	77	170.6	182.0	360	680.0
-2.8	27	80.6	25.6	78	172.4	186.0	366	691.0
-2.2	28	82.4	26.1	79	174.2	188.0	370	698.0
-1.7	29	84.2	26.7	80	176.0	193.0	380	716.0
-1.1	30	86.0	27.2	81	177.8	198.0	388	730.0
-0.6	31	87.8	27.8	82	179.6	199.0	390	734.0
0.0	32	89.6	28.3	83	181.4	204.0	400	752.0
0.6	33	91.4	29.8	84	183.2	208.0	406	763.0
1.1	34	93.2	29.4	85	185.0	210.0	410	770.0
1.7	35	95.0	30.0	86	186.8	216.0	420	788.0
2.2	36	96.8	30.6	87	188.6	221.0	430	806.0
2.8	37	98.6	31.1	88	190.4	227.0	440	824.0
3.3	38	100.4	31.7	89	192.2	232.0	450	842.0
3.9	39	102.2	32.2	90	194.0	238.0	460	860.0
4.4	40	104.0	32.8	91	195.8	243.0	470	878.0

Thread Chart

Dash Number	O.D. Tube Size	AN 37°	JIC 37°	SAE 45°	NPTF (Male)
- 2	1/8	5/16-34	5/16-24	5/16-24	1/8-27
- 3	3/16	3/8-24	3/8-24	3/8-24	
- 4	1/4	7/16-20	7/16-20	7/16-20	1/4-18
- 5	5/16	1/2-20	1/2-20	1/2-20	
- 6	3/8	9/16-18	9/16-18	5/8-18	3/8-18
- 8	1/2	3/4-16	3/4-16	3/4-16	1/2-14
- 10	5/8	7/8-14	7/8-14	7/8-14	
- 12	3/4	1 1/16-12	1 1/16-12	1 1/16-14	3/4-14
- 16	1	1 5/16-12	1 5/16-12	1 3/8-12	1-11-1/2

Decimal Equivalents of Inch Fractions

1/64	0.015625	17/64	0.265625	33/64	0.51563	49/64	0.765625
1/32	0.03125	9/32	0.28125	17/32	0.53125	25/32	0.78125
3/64	0.046875	19/64	0.296875	35/64	0.54688	51/64	0.796875
1/16	0.0625	5/16	0.3125	9/16	0.5625	13/16	0.8125
5/64	0.078125	21/64	0.328125	37/64	0.57813	53/64	0.828125
3/32	0.09375	11/32	0.34375	19/32	0.59375	27/32	0.84375
7/64	0.109375	23/64	0.359375	39/64	0.60938	55/64	0.859375
1/8	0.125	3/8	0.375	5/8	0.625	7/8	0.875
9/64	0.140625	25/64	0.390625	41/64	0.64063	57/64	0.890625
5/32	0.15625	13/32	0.40625	21/32	0.66625	29/32	0.90625
11/64	0.171875	27/64	0.421875	43/64	0.67188	59/64	0.921875
3/16	0.1875	7/16	0.4375	11/16	0.6875	15/16	0.9375
13/64	0.203125	29/64	0.453125	45/64	0.70313	61/64	0.953125
7/32	0.21875	15/32	0.46875	23/32	0.71875	31/32	0.96875
15/64	0.234375	31/64	0.484375	47/64	0.73438	63/64	0.984375
1/4	0.25	1/2	0.5	3/4	0.75	1	1.00000

Conversion Table - Inches to Millimeters

in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
1/64	0.3969	13/64	5.1594	25/64	9.9219	37/64	14.68	49/64	19.4469	61/64	24.2094	1 9/32	32.544	12 1/32	42.0688
1/32	0.7937	7/32	5.5562	13/32	10.3187	19/32	15.08	25/32	19.8437	31/32	24.6062	1 5/16	33.338	1 11/16	42.8626
3/64	1.1906	15/64	5.9531	27/64	10.7156	39/64	15.48	51/64	20.2406	63/64	25.0031	1 11/32	34.131	1 23/32	43.6563
1/16	1.5875	1/4	6.3500	7/16	11.1125	5/8	15.88	13/16	20.6375	1	25.4001	1 3/8	34.925	1 3/4	44.4501
5/64	1.9844	17/64	6.7469	29/64	11.5094	41/64	16.27	53/64	21.0344	1 1/32	26.1938	1 13/32	35.719	1 25/32	45.2438
3/32	2.3812	9/32	7.1437	15/32	11.9062	21/32	16.67	27/32	21.4312	1 1/16	26.9876	1 7/16	36.513	1 13/16	46.0376
7/64	2.7781	19/64	7.5406	31/64	12.3031	43/64	17.07	55/64	21.8281	1 3/32	27.7813	1 15/32	37.306	1 27/32	46.8313
1/8	3.1750	5/16	7.9375	1/2	12.7000	11/16	17.46	7/8	22.2250	1 1/8	28.5751	1 1/2	38.100	1 7/8	47.6251
9/64	3.5719	21/64	8.3344	33/64	13.0969	45/64	17.86	57/64	22.6219	1 5/32	29.3688	1 17/32	38.894	1 29/32	48.4188
5/32	3.9687	11/32	8.7312	17/32	13.4937	23/32	18.26	29/32	23.0187	1 3/16	30.1626	1 9/16	39.688	1 15/16	49.2126
11/64	4.3656	23/64	9.1281	35/64	13.8906	47/64	18.65	59/64	23.4156	1 7/32	30.9563	1 19/32	40.481	1 31/32	50.0063
3/16	4.7625	3/8	9.5250	9/16	14.2875	3/4	19.05	15/16	23.8125	1 1/4	31.7501	1 5/8	41.275	2	50.800

Conversion Table - Millimeters to Inches

in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
1	0.0394	8	0.3150	15	0.5905	22	0.866	29	1.1417	36	1.4173	43	1.6929	50	1.9685
2	0.0787	9	0.3543	16	0.6299	23	0.906	30	1.1811	37	1.4567	44	1.7323	51	2.0079
3	0.1181	10	0.3937	17	0.6693	24	0.945	31	1.2205	38	1.4961	45	1.7716		
4	0.1575	11	0.4331	18	0.7087	25	0.984	32	1.2598	39	1.5354	46	1.8810		
5	0.1968	12	0.4724	19	0.748	26	1.0236	33	1.2992	40	1.5748	47	1.8504		
6	0.2362	13	0.5118	20	0.787	27	1.0630	34	1.3386	41	1.6142	48	1.8898		
7	0.2756	14	0.5512	21	0.827	28	1.1024	35	1.3779	42	1.6535	49	1.9291		

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