

EATON

Hydraulics

STC® Connectors



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Patents:
#5,226,682, #5,553,895,
#5,570,910, #6,494,494 and
#6,592,151
Other patents pending

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Eaton Hydraulics warranty policy is located at www.hydraulics.eaton.com/warranty

Markets, Applications, and Equipment



Markets

- Agricultural
- Construction
- Forestry
- Transportation
- Utility
- Lawn and turf

Applications

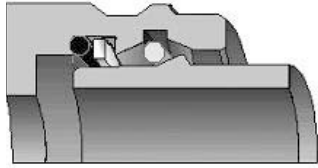
- Hydraulic
 - Power Steering
 - Auxiliary Hydraulics
 - Power Brakes
 - Turbochargers
 - Fuel Injection Systems
 - Hydraulic Work Circuits
- Air Conditioning, Refrigeration and Truck and Bus
 - Refrigerant Supply Lines
 - Compressor Discharge
 - Power Steering
 - Oil Cooler
- Pneumatic
 - Brakes
 - Air Supply Lines
- Cooling
 - Transmission
 - Oil Coolers
 - Heat Exchangers

Equipment

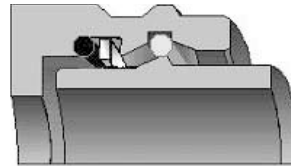
- Tractors
 - Ag and Utility
- Loaders
 - Backhoe and Skid-Steer
- Engines
 - Truck, Marine, Construction
- Snow plows
- Trucks
 - Lift, Utility Bucket
- Crawlers
- Compressors
- Trailers
- Reel and Deck Mowers
- Asphalt and Concrete Pavers
- Trenchers
- Lift Platforms
- Hydraulic Attachments

How to Use STC Connectors

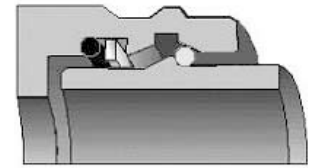
STC Assembly Action



The male connector is inserted into the female connector. The male shoulder spreads the latch ring open.



When the latch ring is in its open position, the male shoulder can slide past the latch ring.

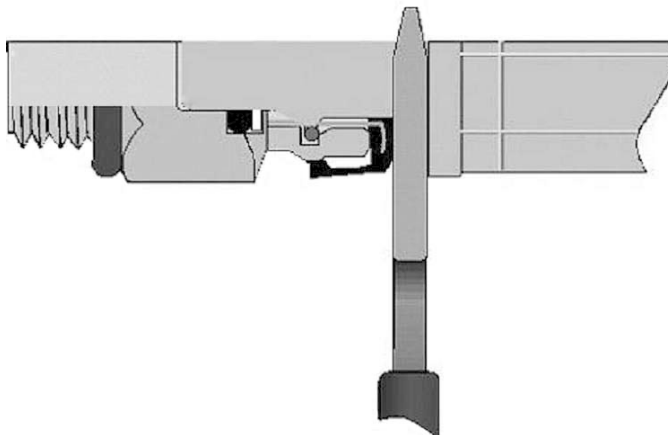


The male and female are locked into place. As fluid pressure is applied, the latch ring is wedged between the male shoulder and the female angle.

Note:

Always remember to verify that your STC connection has been made successfully by pulling on the connection.

STC Disassembly Action



As the STC tool is inserted behind the release sleeve, the steel insert pushes the latching ring forward into a groove in the female I.D., allowing the two halves to be pulled apart.

The thickness of the tool moves the sleeve forward far enough to make the disconnection, so prying sideways with the tool is unnecessary.

Note:

Do not use the disconnect tool to pry on the parts. Prying can result in damage. Insert the tool straight into the connection.

The proper connection and disconnection of STC parts is outlined in Bulletin JA535.

Aeroquip Bulletin JA535 Supplement A(2003)

Service Bulletin for STC Fittings

Female Port Connector **Male Hose Fitting** **Male Connector**

Assembly Components:

- 1. O-ring
- 2. Back-Up Ring
- 3. Release Sleeve

Disconnection

1. Insert the tool straight into the connection. Do not pry on the parts. Prying can result in damage. Insert the tool straight into the connection.
2. As the tool is inserted, the steel insert will push the latching ring forward into a groove in the female I.D., allowing the two halves to be pulled apart.
3. The thickness of the tool moves the sleeve forward far enough to make the disconnection, so prying sideways with the tool is unnecessary.

Inspection

1. STC fittings are designed to be connected and disconnected repeatedly without requiring the disassembly and reassembly of the fitting.
2. Inspect the O-ring for damage. If the O-ring is damaged, it must be replaced.
3. Check the Back-Up Ring (BUR) to ensure that it is in the proper position in the male fitting. If the BUR is damaged, it must be replaced.
4. Check the latching ring for damage. If the latching ring is damaged, it must be replaced.
5. Check the Back-Up Ring (BUR) to ensure that it is in the proper position in the male fitting. If the BUR is damaged, it must be replaced.

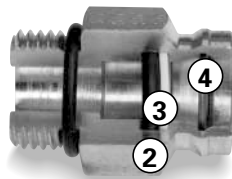
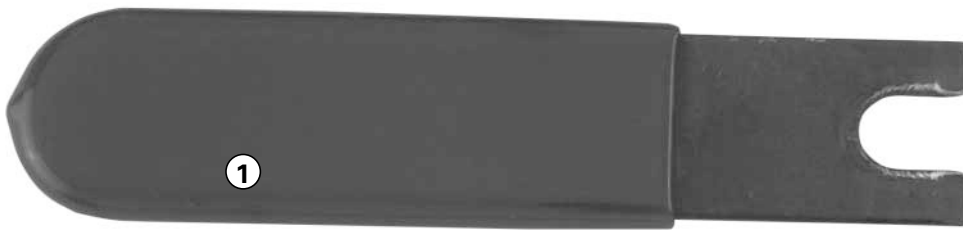
Warning: Do not use the disconnect tool to pry on the parts. Prying can result in damage. Insert the tool straight into the connection.

WARNING: Do NOT disconnect STC connection when under pressure. Failure to observe the foregoing may result in property damage or personal injury.

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Understanding STC Components



Female STC Connector



Male STC Connector

Component Terminology and Purpose

1. Disconnecting Tool

Used for disconnecting the two halves of an STC connection.

2. O-Ring

Buna-N (standard), fluorocarbon, EPR, or HNBR materials provide leakproof sealing for hydraulic, air, and refrigeration applications.

3. Back-Up Ring

PTFE back-up ring provides resistance to high pressure o-ring extrusion under critical impulsing applications.

4. Latch Ring

Stainless steel latch ring connects the two halves while under full pressure, impulsing applications.

5. Release Sleeve

A steel insert molded to an elastomeric dust-boot provides both the mechanism for disconnecting the mating STC halves and protection against contamination when the two halves are connected.

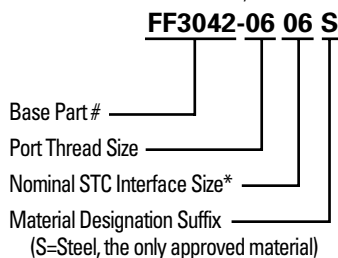
How to Order STC Connectors

When ordering STC connectors, follow these guidelines:

STC Adapters:

First, state the base part number, then thread size, then the nominal STC interface size.

(For adapters add a "0" prefix to interface and port thread sizes 6 and 8.)



List o-ring material designation suffix; omit the "S" suffix if ordering alternate o-ring materials.

Buna-N (nitrile) is STC standard; no suffix is needed for standard Buna-N.

EPR (Ethylene Propylene Rubber) = -212

Viton™ (Fluoroelastomer) = -213

Neoprene = -352

HNBR = -461

Example: **FF3042-0606-213**

Viton is a registered trademark of E.I. DuPont.

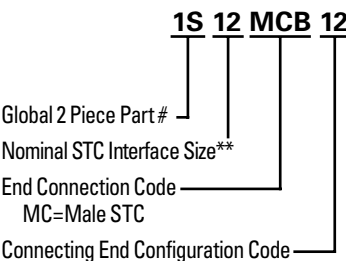
STC Global Hose Nipples:

Part numbers collapse to the shortest possible number of digits. It is assumed that a global fitting has a straight configuration unless a code is added to designate otherwise.

(Steel is the only available material.)

1S6MC6 has a straight configuration

1S6MCA6 has a 45 degree configuration



If nipple has a straight configuration, then this position collapses.

A=45

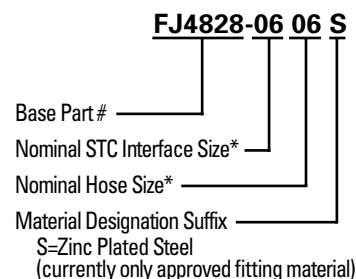
B=90 Standard or Medium Drop

C=90 Long Drop

Nominal Hose Size*

Standard Crimp Fittings:

Fittings are ordered as component parts. First, state the base part number, then the nominal STC interface size, then the hose size.



* The -04 STC connection is not available. However the -06 STC can jump down to a -04 hose size.

** When ordering interface sizes 6 or 8 or hose sizes 3, 4, 5, 6, or 8, the part number requires only single digits.

Seal Elastomer Data

SEAL ELASTOMER	APPLICATION SPECIFICATION	OPERATING TEMPERATURE RANGE
Buna-N/Nitrile	None	-40°F to +250°F (-40°C to +121°C)
EPR (Ethylene Propylene Rubber)	None	-65°F to +300°F (-55°C to +150°C)
Viton	MIL-R-25897	-15°F to +400°F (-25°C to +205°C)
Neoprene	None	-65°F to +300°F (-55°C to +150°C)
HNBR (Hydrogenated Nitrile Rubber)	None	-40°F to +300°F (-40°C to +150°C)

Note:

Even though the seal temperature range can go below -40°F (-40°C) and/or above +300°F (+150°C), the temperature range of STC is -40°F to +300°F (-40°C to +150°C).

Performance Characteristics

Leak-Free Connections in a Snap

Design Features

- Positive round-wire style latching mechanism
- Swivels for installation (in absence of pressure)
- Low profile; compact design
- Elastomeric o-ring seal – available in many materials
- Capable of direct porting into valve blocks or manifolds
- Dual purpose dust seal/release sleeve
- Simple stamped release tool for disconnecting

Benefits

- Fast reliable one-hand connections requiring no assembly tools
- Eliminates cross-threading, over or undertorquing, and hose twisting
- Installs easily in confined areas
- Virtually zero leak performance per SAE J1176
- Direct porting eliminates adapters to maximize cost savings
- Resists external contamination
- Allows easy disconnection with release tool

Operating Characteristics

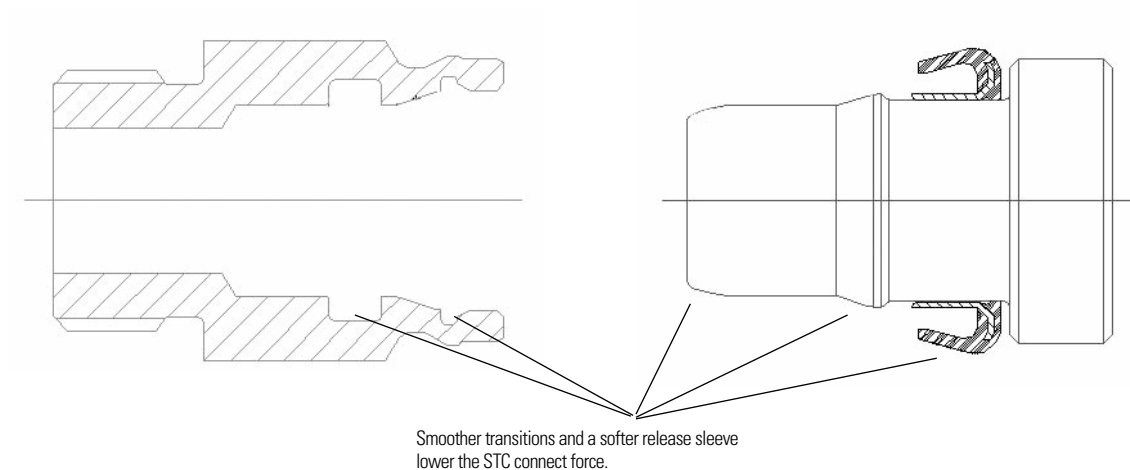
INTERFACE SIZE	MAXIMUM OPERATING PRESSURE		MINIMUM BURST PRESSURE		VACUUM	
	PSI	Bar	PSI	Bar	in./Hg.	mm/Hg.
3/8"	5,000	345	20,000	1,380	28	711
1/2"	4,250	295	17,000	1,175	28	711
5/8"	4,000	275	16,000	1,100	28	711
3/4"	4,000	275	16,000	1,100	28	711
1"	4,000	275	16,000	1,100	28	711

Technology Comparison

	THREADED FITTINGS	STC FITTINGS
Assembly tools required	•	
Torque sensitive	•	
Limited reusability	•	
Virtually zero leakage		•
Fast, reliable connections		•
Ease of installation in confined areas – improved ergonomics		•
Ease of orienting hose ends		•
Compact design, install and remove in limited access areas		•

STC Design Enhancements

STC Design Enhancements



The STC connection has proven its reliability over several years of practical application in the field. Eaton has now improved the ease of assembly of the STC connection to improve installation ease and assembly line throughput. These improvements are referred to as STC Design Enhancements.

The Eaton STC product line has been enhanced to provide the following benefits:

1. More forgiving to misalignment
2. Approximately 30% reduction of the average inline connect force
3. Increase of operating pressure of the -10 and -12 sizes to 4,000 psi operating pressure

4. Introduction of a new release sleeve to allow for direct porting
5. Overtravel has been added for a more tactile feel during connection
6. 100% interchangeable with any current STC type II+ connector in the field

STC Test Regimen

Product Qualification Testing

- One million cycle impulse test in excess of 133% of DIN2ST operating pressures with side load
 - Testing for fatigue of connection
 - Square wave fluid impulse with side load
 - Virtually zero leakage performance criteria per SAE J1176
- Burst pressures exceed 4 times DIN2ST operating pressures
 - Proves connection reliability at high pressures
- 28 Inches Hg Vacuum
 - Product tested at seal max. & min temperatures
 - Same product is then tested to twice the maximum operating pressure
 - Virtually zero leakage performance criteria per SAE J1176
- Exceeds 96 hour salt spray
 - Functional & corrosion resistance test
 - Per ASTM B117
- Connect/Disconnect (250 Times)
 - After 250 connects/disconnects, adapters leak tested at twice maximum operating pressure
 - Virtually zero leakage performance criteria per SAE J1176
 - Proves connection reliability and release sleeve integrity

Additional Application Testing

- Vibration (5-500 Hz)
 - Tested full vibration range for connector wear
 - Testing capability simulates application
- Extreme temperature test (-40° to +300°F)
 - Covers full range of applications
- Dust box and seal integrity testing
 - 48 hr, 4g vibration test in presence of fine, airborne dust particles (U.S. Silica-co-sil #106)
 - Tested effectiveness of dust seal in a heavily contaminated environment
 - Release sleeve sealing performance tested with connection in three (3) positions (up, down, and sideways)

NOTE : Application tests are size and o-ring specific and all tests may not apply to every connection size and o-ring. Please contact Eaton for more information regarding qualification and application tests.

What You Should Know About STC Connectors

1. The STC connection is not recommended for use in swivel applications. Rotation should be limited to assembly and disassembly when zero pressure is present.
2. The o-ring seal determines the temperature range and fluid compatibility of the STC connection except when exceeding the release sleeve operating temperature of 300°F.
3. Disconnection of the STC connection should be limited to situations where there is no pressure present.
4. Installation of the male STC connector must be made straight into the adapter and not at an angle. Misalignment during the connection results in a higher connect force.
5. If the release sleeve is damaged during the connection or disconnection of the STC connection, the male portion must be replaced – premature failure of the STC connection may result if the replacement is not made.
6. Do not use the rubber sleeve as leverage to push the male half into the female half of the STC connection.
7. Applications that involve vibration should be analyzed with the aid of Eaton prior to utilization.
8. After the STC connection is made, pull on the connection to make sure the male STC connector is properly inserted into the female STC connector.
9. The use of clamps is highly recommended for long hose assemblies that utilize STC connections; the clamp should be positioned close to the STC connection to prevent its rotation.
10. STC connection should not be used as a quick disconnect coupling.
11. Do not hold sleeve during assembly.



For your own safety, do not hold the release sleeve during assembly.

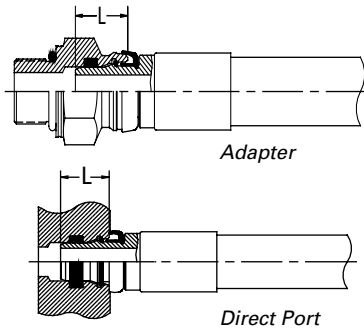
WARNING:

*Do **NOT** disconnect STC connection when under pressure. Failure to observe the foregoing may result in property damage or personal injury.*

STC Insertion Length and Connection Dimensions

Insertion Length/Length Loss

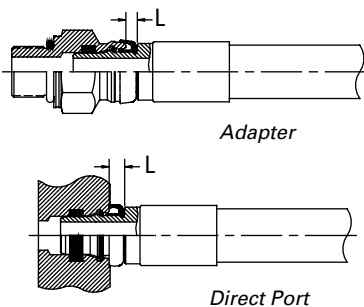
The insertion length is the length measured from the end of the inserted male STC nose to the outside face of the female STC half. This is the length of the STC male half that is inside of the female half after it is inserted. This insertion length (or length loss) should be taken into account when determining overall product assembly lengths.



DASH SIZE	AVG INSERTION LENGTH/ LENGTH LOSS OF STC W/ADAPTERS	AVG INSERTION LENGTH/ LENGTH LOSS OF STC DIRECT PORT
	mm (in.)	mm (in.)
-06	13.9 (0.55)	13.9 (0.55)
-08	18.4 (0.73)	18.4 (0.73)
-10	21.1 (0.83)	20.8 (0.82)
-12	25.4 (1.00)	25.1 (0.99)
-16	30.2 (1.19)	30.2 (1.19)

Engagement Length/Connection Dimension

The engagement length is measured on a connected STC assembly and extends from the face (or end) of the STC female half to the face of the hex/round stock behind the release sleeve on the male half.



DASH SIZE	ENGAGEMENT LENGTH/ CONNECTION DIMENSION OF STC W/ADAPTERS	ENGAGEMENT LENGTH/ CONNECTION DIMENSION OF STC DIRECT PORT
	mm (in.)	mm (in.)
-06	4.9 (0.19)	5.5 (0.22)
-08	5.3 (0.21)	6.4 (0.25)
-10	6.1 (0.24)	6.8 (0.27)
-12	6.1 (0.24)	6.8 (0.27)
-16	5.9 (0.23)	5.9 (0.23)

Assembly Method and Verification

Assembly Method

Align the STC fitting on the hose assembly with the STC connector. Push the hose fitting into the mating connector until you feel a definite snap and a solid stop.



Correct Method

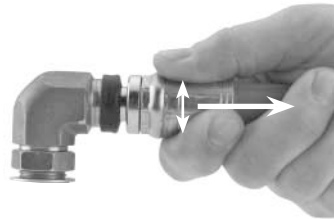


Incorrect Method

Do not hold sleeve during assembly

Assembly Verification

Verify that the STC connection has been made successfully by pulling on the connection to make sure that the male connector has been properly inserted into female connector. Be sure that the direction of pull is parallel to the axis of the STC connection.



Correct Method

Pulling parallel to the connections axis



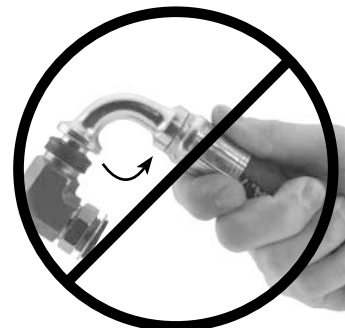
Incorrect Method

Pulling at an angle to connections axis



Correct Method

Pulling on the fitting such that the motion is parallel to the connections axis.



Incorrect Method

Subjecting the connection to a sideload by pulling on the hose.

Global Crimp Hose Nipples

For use with the following clamps and sockets:

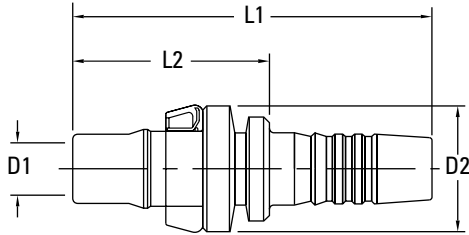
Clamp: 2661 (-12 thru -16), FC318 (-12 thru -16), FC619 (-12 thru -16)

Socket 1SA: 2681, FC194, FC211, FC310, FC510, FC639 (- 4 thru -8), GH194, GH663, GH681

Socket 1SB: 1529, 2766, 2781, FC195, FC212, FC372 (-4 thru -16), FC373 (-4 thru -16), FC466, FC498, FC579, FC639 (-10 thru -16), FC640, FC735, FC839B, FC849, FC849B, GH120, GH195, GH683 (-4 thru -6), GH781, GH793

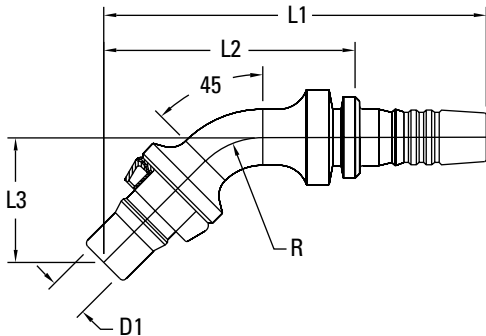
Male STC Nipples

Straight Nipple Assembly 1S_MC_



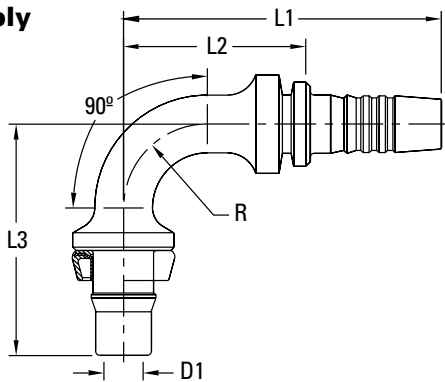
STRAIGHT PART NUMBER	D1	D2	L1	L2
	mm (in.)	mm (in.)	mm (in.)	mm (in.)
1S6MC4	4.2 (0.17)	18 (0.71)	52.4 (2.06)	29 (1.14)
1S6MC6	6.7 (0.26)	18 (0.71)	55.5 (2.19)	30.2 (1.19)
1S8MC6	6.7 (0.26)	23 (0.91)	60.6 (2.39)	35.4 (1.39)
1S8MC8	9.6 (0.38)	23 (0.91)	66.3 (2.61)	36.6 (1.44)
1S10MC10	12.8 (0.50)	24 (0.94)	69 (2.72)	39.6 (1.56)
1S12MC12	15.5 (0.61)	32 (1.26)	74.6 (2.94)	44.4 (1.75)
1S16MC16	20.7 (0.82)	38 (1.50)	83.7 (3.30)	49.3 (1.94)

45° Nipple Assembly 1S_MCA_



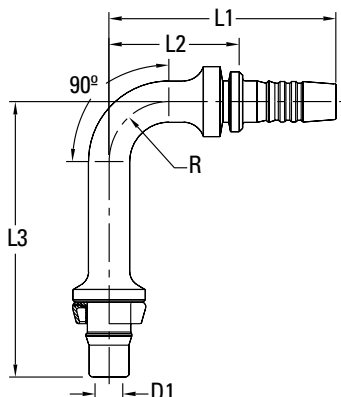
45° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
1S6MCA4	4.2 (0.17)	69.8 (2.75)	46.4 (1.83)	22.2 (0.86)	14 (0.55)
1S6MCA6	6.7 (0.26)	72.9 (2.87)	47.6 (1.87)	22.2 (0.87)	14 (0.55)
1S8MCA8	8.8 (0.35)	89.9 (3.54)	60.2 (2.37)	29.6 (1.17)	19 (0.75)
1S10MCA10	11.5 (0.45)	97.8 (3.85)	68.4 (2.69)	33.6 (1.32)	22 (0.87)
1S12MCA12	13.9 (0.55)	110.2 (4.34)	80 (3.15)	40.7 (1.60)	31 (1.22)
1S16MCA16	19.9 (0.78)	131.5 (5.18)	97.1 (3.82)	47.9 (1.89)	38 (1.50)

90° Nipple Assembly 1S_MCB_



90° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
1S6MCB4	4.2 (0.17)	56.2 (2.21)	32.8 (1.29)	39.6 (1.56)	14 (0.55)
1S6MCB6	6.7 (0.26)	59.3 (2.33)	34 (1.34)	39.6 (1.56)	14 (0.55)
1S8MCB6	6.7 (0.26)	66.4 (2.61)	41.1 (1.62)	53 (2.09)	19 (0.75)
1S8MCB8	8.8 (0.35)	72 (2.83)	42.3 (1.67)	53 (2.09)	19 (0.75)
1S10MCB10	11.5 (0.45)	77.9 (3.07)	48.5 (1.91)	60.4 (2.36)	22 (0.87)
1S12MCB12	13.9 (0.55)	88.7 (3.49)	58.5 (2.30)	75.7 (2.98)	31 (1.22)
1S16MCB16	19.9 (0.78)	107.3 (4.22)	72.9 (2.87)	90 (3.54)	38 (1.50)

Long Drop 90° Nipple Assembly 1S_MCC_



LONG DROP 90° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
1S6MCC6	6.4 (0.25)	59.3 (2.33)	34 (1.34)	70.6 (2.78)	14 (0.55)
1S8MCC8	9.1 (0.36)	72 (2.84)	42.3 (1.67)	88.1 (3.46)	19 (0.75)
1S10MCC10	11.5 (0.45)	77.9 (3.07)	48.5 (1.91)	98.4 (3.87)	22 (0.87)
1S12MCC12	13.9 (0.55)	88.7 (3.49)	58.5 (2.30)	123.7 (4.87)	31 (1.22)
1S16MCC16	19.9 (0.78)	107.3 (4.22)	72.9 (2.87)	148.2 (5.83)	38 (1.50)

Global Crimp Hose Nipples

For use with the following clamps and sockets:

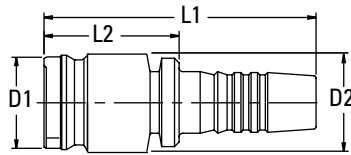
Clamp: 2661 (-12 thru -16), FC318 (-12 thru -16), FC619 (-12 thru -16)

Socket 1SA: 2681, FC194, FC211, FC310, FC510, FC639 (- 4 thru -8), GH194, GH663, GH681

Socket 1SB: 1529, 2766, 2781, FC195, FC212, FC372 (-4 thru -16), FC373 (-4 thru -16), FC466, FC498, FC579, FC639 (-10 thru -16), FC640, FC735, FC839B, FC849, FC849B, GH120, GH195, GH683 (-4 thru -6), GH781, GH793

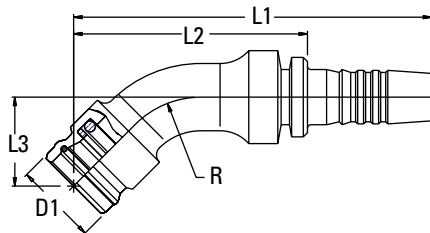
Female STC Nipples

Straight Nipple Assembly 1S_FC_



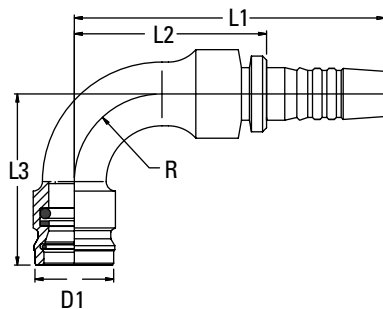
STRAIGHT PART NUMBER	D1	D2	L1	L2
	mm (in.)	mm (in.)	mm (in.)	mm (in.)
1S8 FC8	20.3 (0.80)	21.0 (0.83)	59.0 (2.32)	29.3 (1.15)
1S12 FC12	31.2 (1.23)	32.0 (1.26)	67.3 (2.65)	37.1 (1.46)

45° Nipple Assembly 1S_FCA_



45° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
1S8 FCA8	20.3 (0.80)	85.6 (3.37)	55.98 (2.20)	21.3 (0.84)	19.0 (0.75)
1S12 FCA12	31.2 (1.23)	111.6 (4.39)	81.4 (3.20)	32.8 (1.29)	38.1 (1.50)

90° Nipple Assembly 1S_FCB_



90° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
1S8 FCB8	20.3 (0.80)	78.0 (3.07)	48.2 (1.90)	43.0 (1.69)	22.2 (0.87)
1S12 FCB12	31.2 (1.23)	102.4 (4.03)	72.1 (2.84)	68.7 (2.70)	38 (1.50)

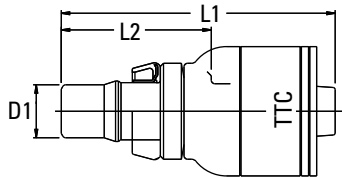
TTC Crimp Fittings

For use with TTC Fittings:

2661 (-12 and -16), FC211, FC212, FC310, FC318 (-12 and -16), FC414, FC510, FC579, FC611, FC619, FC639 (-4 thru -12), FC693, FC640, FC735, FC839B, FC849, FC849B, GH194, GH663, GH681-6, GH683, GH781, GH793

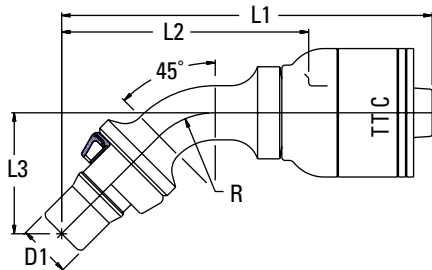
Male STC Fittings

Straight Fitting Assembly 1A_MC_



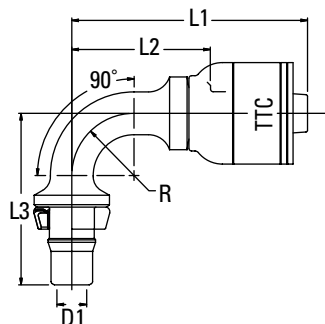
STRAIGHT PART NUMBER	D1	L1	L2
	mm (in.)	mm (in.)	mm (in.)
1A6MC4	6.7 (0.26)	55.5 (2.19)	30.2 (1.19)
1A8MC6	6.7 (0.26)	60.0 (2.39)	30.2 (1.39)
1A8MC8	9.6 (0.38)	66.3 (2.61)	36.6 (1.44)
1A10MC10	12.8 (0.50)	69 (2.72)	39.6 (1.56)
1A12MC12	15.5 (0.61)	74.6 (2.94)	44.4 (1.75)
1A16MC16	20.7 (0.82)	83.7 (3.30)	49.3 (1.94)

45° Fitting Assembly 1A_MCA_



45° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
1A6MCA6	6.7 (0.26)	72.6 (2.87)	47.3 (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 (0.75)
1A10MCA10	11.5 (0.45)	97.8 (3.85)	68.4 (2.69)	33.6 (1.32)	22.0 (0.87)
1A12MCA12	13.9 (0.55)	110.2 (4.34)	80.0 (3.15)	40.7 (1.60)	31.0 (1.22)
1A16MCA16	19.9 (0.78)	131.5 (5.18)	97.1 (3.82)	47.9 (1.89)	38 (1.50)

90° Fitting Assembly 1A_MCB_



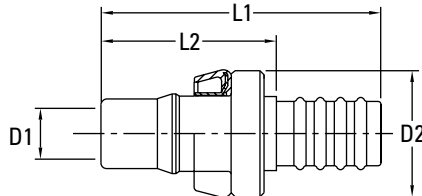
90° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
1A6MCB6	6.7 (0.26)	59.3 (2.33)	34 (1.34)	39.6 (1.56)	14 (0.55)
1A8MCB8	8.8 (0.35)	72 (2.83)	42.3 (1.67)	53 (2.09)	19 (0.75)
1A10MCB10	11.5 (0.45)	77.9 (3.07)	48.5 (1.91)	60.4 (2.36)	22 (0.87)
1A12MCB12	13.9 (0.55)	88.7 (3.49)	58.5 (2.30)	75.7 (2.98)	31 (1.22)
1A16MCB16	19.9 (0.78)	107.3 (4.22)	72.9 (2.87)	90 (3.54)	38 (1.50)

Crimp Nipples for FC699 Hose

Nipples for use with FW1097 Sockets and FC699 Hose

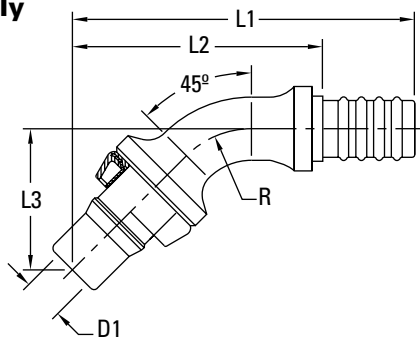
Male STC Nipples

Straight Nipple Assembly FJ4823



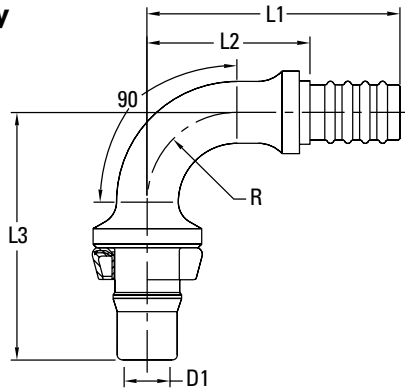
STRAIGHT PART NUMBER	D1	D2	L1	L2
	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ4823-0604S	4.4 (0.17)	18 (0.71)	41.6 (1.64)	25.6 (1.01)
FJ4823-0606S	6.6 (0.26)	18 (0.71)	43.2 (1.68)	26 (1.02)
FJ4823-0808S	9.6 (0.38)	23 (0.91)	51.6 (2.03)	32.3 (1.27)
FJ4823-1010S	12.3 (0.48)	24 (0.94)	55.5 (2.18)	35.4 (1.39)
FJ4823-1212S	15.5 (0.61)	32 (1.26)	60.4 (2.38)	39.8 (1.57)

45° Nipple Assembly FJ4822



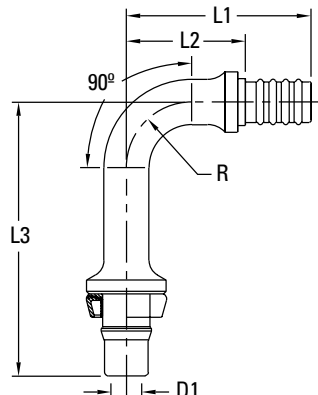
45° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ4822-0606S	6.7 (0.26)	57.8 (2.27)	40.7 (1.60)	22.2 (0.87)	14 (0.55)
FJ4822-0808S	9.1 (0.36)	71.2 (2.80)	52.2 (2.06)	29.2 (1.16)	19 (0.75)
FJ4822-1010S	11.5 (0.45)	80.4 (3.16)	60.3 (2.37)	33.6 (1.32)	22 (0.87)
FJ4822-1212S	13.9 (0.55)	92 (3.62)	71.4 (2.81)	40.7 (1.60)	31 (1.22)

90° Nipple Assembly FJ4824



90° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ4824-0606S	6.7 (0.26)	44.3 (1.74)	27.1 (1.07)	39.6 (1.56)	14 (0.55)
FJ4824-0808S	8.8 (0.35)	53.5 (2.10)	34.4 (1.36)	53 (2.09)	19 (0.75)
FJ4824-1010S	11.5 (0.45)	60.4 (2.38)	40.4 (1.59)	60.4 (2.38)	22 (0.87)
FJ4824-1212S	13.9 (0.55)	70.6 (2.78)	50 (1.97)	75.7 (2.98)	31 (1.22)

Long Drop 90° Nipple Assembly FJ2004



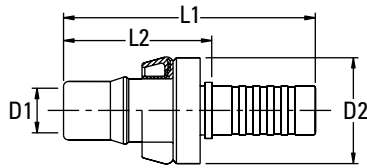
LONG DROP 90° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ2004-0606S	6.7 (0.26)	44.3 (1.74)	27.1 (1.07)	70.2 (2.76)	14 (0.55)
FJ2004-0808S	9.1 (0.36)	53.5 (2.10)	34.4 (1.36)	88 (3.46)	19 (0.75)
FJ2004-1010S	11.5 (0.45)	60.4 (2.38)	40.4 (1.59)	98.4 (3.87)	22 (0.87)
FJ2004-1212S	13.9 (0.55)	70.6 (2.78)	50 (1.97)	123.7 (4.87)	31 (1.22)

Crimp Nipples for PTFE Hose

PTFE Crimp Nipples for use with 2807, FC807 & FC465 Hose and Sockets FC3443 & FC3596

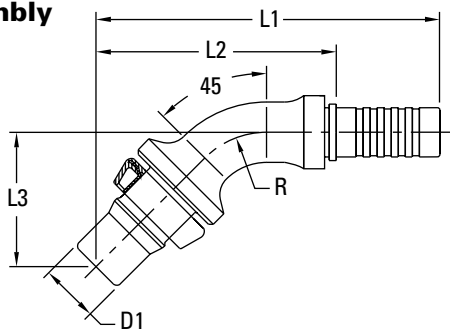
Male STC Nipples

Straight Nipple Assembly FJ4828



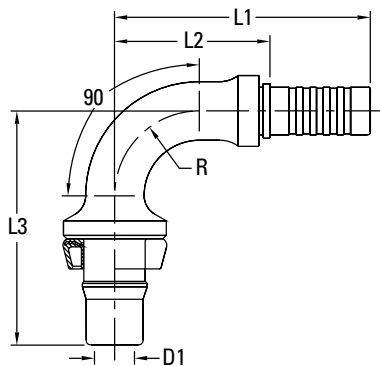
STRAIGHT PART NUMBER	D1	D2	L1	L2
	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ4828-0606S	6.3 (0.25)	18 (0.71)	40.1 (1.58)	27.7 (1.09)
FJ4828-0808S	8.8 (0.35)	23 (0.91)	55.3 (2.18)	32.8 (1.29)
FJ4828-1010S	11.1 (0.44)	24 (0.94)	58.1 (2.29)	35.6 (1.40)
FJ4828-1212S	14.3 (0.56)	32 (1.26)	62.5 (2.46)	40.0 (1.57)

45° Nipple Assembly FJ2015



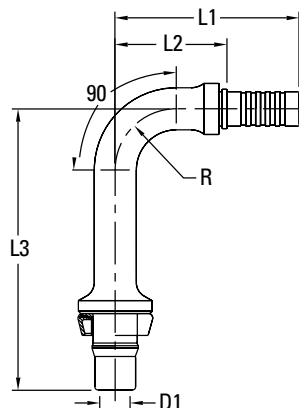
45° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ2015-0606S	6.3 (0.25)	53.7 (2.10)	41.1 (1.61)	21.1 (0.87)	14 (0.55)
FJ2015-0808S	8.8 (0.35)	75 (2.95)	52.6 (2.07)	29.6 (1.17)	19 (0.75)
FJ2015-1010S	11.1 (0.44)	83.1 (3.27)	60.6 (2.39)	33.6 (1.32)	22 (0.87)
FJ2015-1212S	13.9 (0.55)	94.2 (3.71)	71.7 (2.82)	40.7 (1.60)	31 (1.22)

90° Nipple Assembly FJ2036



90° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ2036-0606S	6.3 (0.25)	40 (1.58)	27.6 (1.09)	39.2 (1.56)	14 (0.55)
FJ2036-0808S	8.8 (0.35)	57.2 (2.25)	34.7 (1.37)	53 (2.09)	19 (0.75)
FJ2036-1010S	11.1 (0.44)	63.1 (2.49)	40.7 (1.60)	60.4 (2.38)	22 (0.87)
FJ2036-1212S	13.9 (0.55)	72.8 (2.87)	50.3 (1.98)	75.7 (2.98)	31 (1.22)

Long Drop 90° Nipple Assembly FJ4999



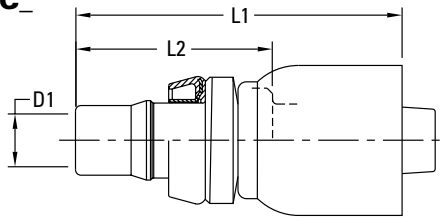
LONG DROP 90° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ4999-0606S	6.3 (0.25)	40 (1.58)	27.6 (1.09)	70.2 (2.76)	14 (0.55)
FJ4999-0808S	8.8 (0.35)	57.2 (2.25)	34.7 (1.37)	87.4 (3.44)	19 (0.75)
FJ4999-1010S	11.1 (0.44)	63.1 (2.49)	40.7 (1.60)	98.4 (3.87)	22 (0.87)
FJ4999-1212S	13.9 (0.55)	72.8 (2.86)	50.3 (1.93)	123.7 (4.87)	31 (1.22)

OTC Crimp Fittings

OTC Crimp Fittings for use with 2583, 2661, FC318, FC466, FC498, FC619, and FC699 Hose

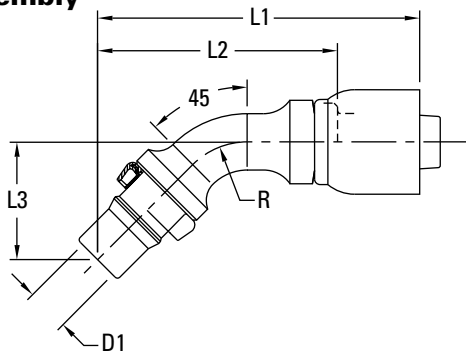
Male STC Fittings

Straight Fitting Assembly 1G_MC_



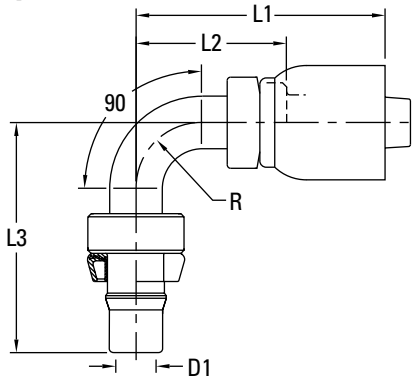
STRAIGHT PART NUMBER	D1	L1	L2
	mm (in.)	mm (in.)	mm (in.)
1G6MC4	4.2 (0.17)	48.1 (1.89)	29.2 (1.15)
1G6MC6	6.7 (0.26)	50.6 (1.99)	30.6 (1.20)
1G8MC8	9.6 (0.38)	60.3 (2.37)	36.6 (1.44)
1G10MC10	12.8 (0.50)	69 (2.72)	39.6 (1.56)
1G16MC16	20.7 (0.82)	83.7 (3.30)	49.3 (1.94)

45° Fitting Assembly 1G_MCA_



45° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
1G10MCA10	11.5 (0.45)	91.9 (3.62)	68.4 (2.69)	33.6 (1.32)	22 (0.87)

90° Fitting Assembly 1G_MCB_



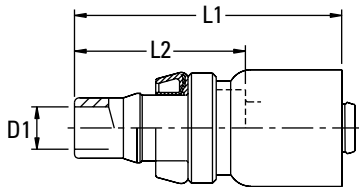
90° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
1G6MCB4	4.2 (0.17)	51.8 (2.04)	32.8 (1.29)	39.7 (1.56)	14 (0.55)
1G8MCB8	9.4 (0.37)	59.7 (2.35)	36 (1.42)	55.7 (2.19)	15.9 (0.63)
1G10MCB10	11.5 (0.45)	71.9 (2.83)	48.5 (1.91)	60.4 (2.38)	22 (0.87)
1G12MCB12	13.9 (0.55)	82.1 (3.23)	58.5 (2.30)	75.7 (2.98)	31 (1.22)

Crimp Fittings for SAE 100R5 Hose

Crimp Fittings for use with 1503, FC234, FC300, FC350, and FC355 Hose

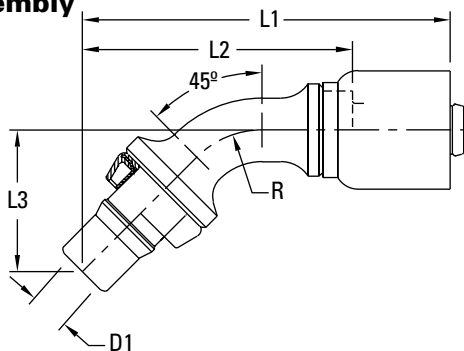
Male STC Fittings

Straight Fitting Assembly FJ3020



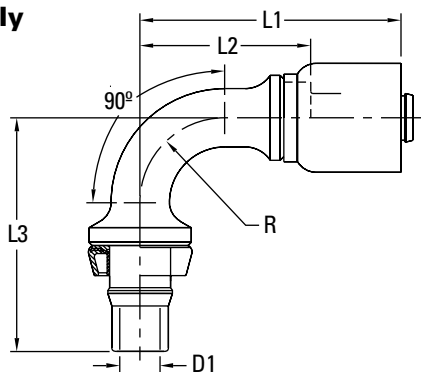
STRAIGHT PART NUMBER	D1	L1	L2
	mm (in.)	mm (in.)	mm (in.)
FJ3020-0606S	5.9 (0.23)	51 (2.01)	30.8 (1.21)
FJ3020-0808S	7.2 (0.28)	55.9 (2.20)	35.8 (1.41)
FJ3020-1010S	9.6 (0.38)	61.7 (2.43)	39.3 (1.55)
FJ3020-1212S	12.7 (0.50)	66.1 (2.60)	43.7 (1.72)

45° Fitting Assembly FJ3021



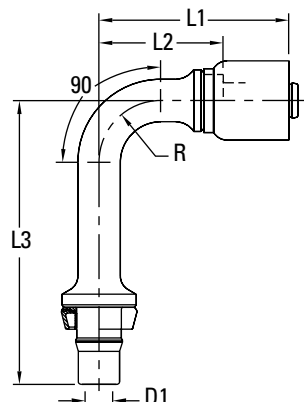
45° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ3021-0606S	5.9 (0.23)	64.5 (2.54)	44.4 (1.75)	21.9 (0.86)	14 (0.55)
FJ3021-0808S	7.2 (0.28)	75.9 (2.99)	55.6 (2.19)	29.2 (1.15)	19 (0.75)
FJ3021-1010S	9.6 (0.38)	86.7 (3.41)	64.3 (2.53)	33.6 (1.32)	22 (0.87)
FJ3021-1212S	12.7 (0.50)	97.8 (3.85)	75.4 (2.97)	40.7 (1.60)	31 (1.22)

90° Fitting Assembly FJ3022



90° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ3022-0606S	5.9 (0.23)	51.3 (2.02)	31.2 (1.23)	39.2 (1.54)	14 (0.55)
FJ3022-0808S	7.2 (0.28)	58.5 (2.30)	38.3 (1.51)	52.4 (2.06)	19 (0.75)
FJ3022-1010S	9.6 (0.38)	66.7 (2.63)	44.3 (1.74)	60.4 (2.38)	22 (0.87)
FJ3022-1212S	12.7 (0.50)	76.4 (3.01)	54 (2.12)	75.7 (2.98)	31 (1.22)

Long Drop 90° Fitting Assembly FJ3023



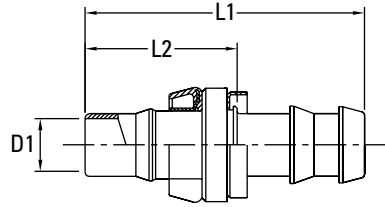
LONG DROP 90° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ3023-0606S	5.9 (0.23)	51.3 (2.02)	31.2 (1.23)	70.2 (2.76)	14 (0.55)
FJ3023-0808S	7.2 (0.28)	58.5 (2.30)	38.3 (1.51)	87.4 (3.44)	19 (0.75)
FJ3023-1010S	9.6 (0.38)	66.7 (2.63)	44.3 (1.74)	98.4 (3.87)	22 (0.87)
FJ3023-1212S	12.7 (0.50)	76.4 (3.01)	54 (2.12)	123.7 (4.87)	31 (1.22)

STC Socketless Fittings

For use with 2556, 2565, FC662, FC332, FC647 Hose

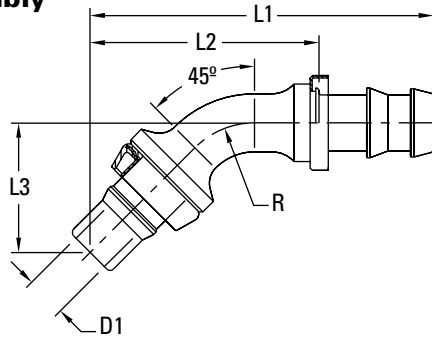
Male STC Fittings

Straight Fitting Assembly FJ5783



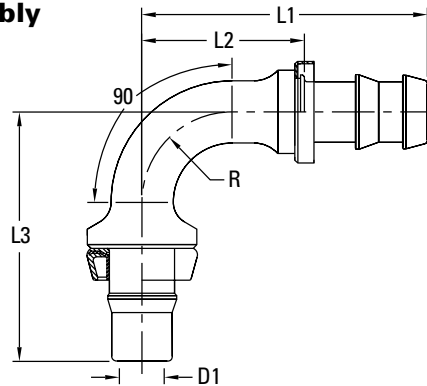
STRAIGHT PART NUMBER	D1	L1	L2
	mm (in.)	mm (in.)	mm (in.)
FJ5783-0606S	7.5 (0.30)	47.9 (1.89)	26 (1.02)
FJ5783-0608S	6.7 (0.26)	53 (2.09)	27.2 (1.07)
FJ5783-0808S	9.9 (0.39)	56.6 (2.23)	30.9 (1.22)
FJ5783-1010S	12.3 (0.48)	74.7 (2.94)	35.6 (1.40)
FJ5783-1212S	15.5 (0.61)	78.7 (3.10)	40.1 (1.58)

45° Fitting Assembly FJ3128



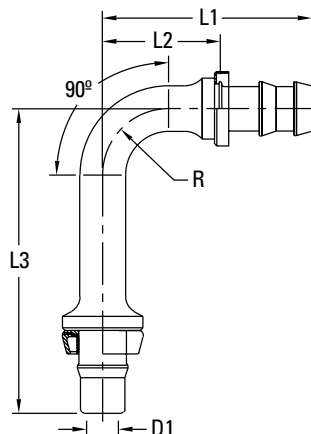
45° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ3128-0606S	6.7 (0.26)	62.3 (2.45)	40.3 (1.59)	21.9 (0.86)	14 (0.55)
FJ3128-0808S	9.1 (0.36)	77.4 (3.05)	51.6 (2.03)	29.2 (1.15)	19 (0.75)
FJ3128-1010S	11.5 (0.45)	99.2 (3.91)	60.1 (2.37)	33.6 (1.32)	22 (0.87)
FJ3128-1212S	13.9 (0.55)	109.8 (4.32)	71.2 (2.80)	40.7 (1.60)	31 (1.22)

90° Fitting Assembly FJ3031



90° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ3031-0606S	6.7 (0.26)	49.1 (1.93)	27.1 (1.07)	39.2 (1.54)	14 (0.55)
FJ3031-0808S	9.1 (0.36)	60 (2.36)	34.2 (1.35)	52.4 (2.06)	19 (0.75)
FJ3031-1010S	11.5 (0.45)	79.3 (3.12)	40.2 (1.58)	60.4 (2.38)	22 (0.87)
FJ3031-1212S	13.9 (0.55)	88.3 (3.48)	49.8 (1.96)	75.7 (2.98)	31 (1.22)

Long Drop 90° Fitting Assembly FJ3005

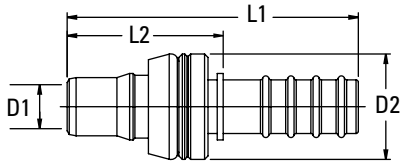


LONG DROP 90° PART NUMBER	D1	L1	L2	L3	R
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ3005-0606S	6.7 (0.26)	49.1 (1.93)	27.1 (1.07)	70.2 (2.76)	14 (0.55)
FJ3005-0808S	9.1 (0.36)	60 (2.36)	34.2 (1.35)	87.4 (3.44)	19 (0.75)
FJ3005-1010S	11.5 (0.45)	79.3 (3.12)	40.2 (1.58)	98.4 (3.87)	22 (0.87)
FJ3005-1212S	13.9 (0.55)	88.3 (3.48)	49.8 (1.96)	123.7 (4.87)	31 (1.22)

Crimp Nipple for FC629 Air Brake Hose

Crimp Nipple for use with
FC629 Hose and FW1184
Socket.

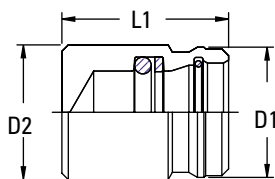
Straight Nipple Assembly FJ2144



STRAIGHT PART NUMBER	D1	D2	L1	L2
	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FJ2144-0808S	9.6 (0.38)	23 (0.91)	63.5 (2.50)	34 (1.34)

Female STC Cap and Male STC Plug

Female STC Cap

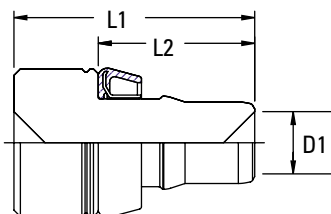


NOTE:

Female STC Cap can hold pressure equal to the operating pressure of the particular STC size.

PART NUMBER	D1	L1	D2
	mm (in.)	mm (in.)	mm (in.)
FF 90202-06S	17 (0.67)	18 (0.71)	21.1 (0.83)
FF 90202-08S	20.3 (0.80)	21 (0.83)	26.8 (1.06)
FF 90202-10S	24.4 (0.96)	25 (0.99)	33 (1.30)
FF 90202-12S	31.3 (1.24)	32 (1.26)	36.7 (1.45)
FF 90202-16S	39.0 (1.54)	50.9 (2.00)	41 (1.61)

Male STC Plug



NOTE:

Male STC Plug can hold pressure equal to the operating pressure of the particular STC size.

PART NUMBER	D1	L1	L2
	mm (in.)	mm (in.)	mm (in.)
FF 90384-06S	6.8 (0.27)	31.2 (1.23)	19.2 (0.76)
FF 90384-08S	9.7 (0.38)	37.5 (1.48)	24.4 (0.96)
FF 90384-10S	11.5 (0.45)	42.4 (1.68)	27.2 (1.08)
FF 90384-12S	15.6 (0.62)	46.8 (1.85)	31.6 (1.25)
FF 90384-16S	20.6 (0.81)	51.9 (2.05)	36.0 (1.42)

Brazed Male and Female STC on High Pressure Carbon Steel Tubing



Eaton offers high-pressure tubing with male STC and female STC end configurations. The male and female STC ends are attached to the high-pressure tubing using brazing techniques. The brazing process does not affect the performance characteristics of the STC connection, but the rated performance of the assembly will be at the lowest pressure rated component level.

OPERATING PRESSURE OF HIGH PRESSURE TUBING W/ BRAZED STC ENDS - MOST COMMON COMBINATIONS - (SAE J356, J524, J525, J526, J527)

Tube O.D.	Dash Size STC	Tubing Wall Thickness (IN.) and Pressure in PSI							
		.028	.035	.049	.065	.083	.095	.109	.120
.38	-06	2,000	2gh50	5,000	5,000	5,000	-	-	
.50	-08	-	1,850	2,700	3,650	4,250	4,250	4,250	4,250
.62	-10	-	1,500	2,100	2,850	3,750	4,000	4,000	4,000
.75	-12	-	1,200	1,750	2,350	3,050	3,550	4,000	4,000
1.00	-16	-	900	1,300	1,750	2,250	2,600	3,000	3,350

Characteristics

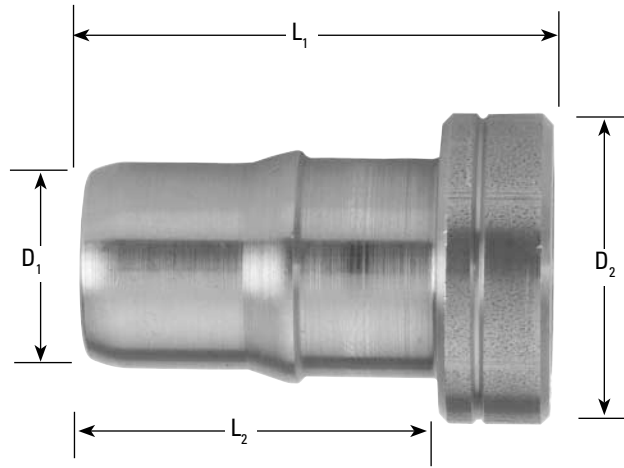
- Sizes available: -6 up to -16
- 4:1 safety factor
- Compatible with machined STC
- Can be used in conjunction with Eaton hose for hose/ tube combinations
- 28 in./Hg vacuum capable
- Temperature: -40°F to +300°F

Contact Eaton for availability and application information.



Braze-On Male and Female Spud for Tubes

Braze-on Male STC Spud



NOTES:

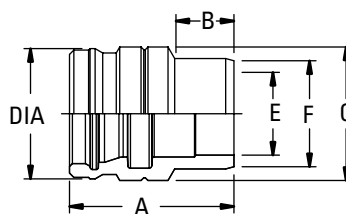
1. Release sleeve must be assembled after brazing. (See next page for release sleeve details.)
2. Dimensions given are for silver braze.
3. Following brazing, dimensions are not allowed to change.

STRAIGHT PART NUMBER	D1	D2	L1	L2
	mm (in.)	mm (in.)	mm (in.)	mm (in.)
1F40107-0606AB	6.7 (0.26)	9.6 (0.38)	25.6 (1.01)	19.2 (0.76)
1F40107-0808AB	9.1 (0.36)	12.8 (0.51)	33.9 (1.34)	24.4 (0.96)
1F40107-1008AB	9.1 (0.36)	16.0 (0.63)	33.9 (1.34)	24.4 (0.96)
1F40107-1010AB	11.5 (0.45)	16.0 (0.63)	35.9 (1.42)	27.2 (1.07)
1F40107-1212AB	13.9 (0.55)	19.1 (0.75)	41.1 (1.62)	31.6 (1.24)
1F40107-1612AB	13.9 (0.55)	25.5 (1.01)	41.1 (1.62)	31.6 (1.24)

Braze-on Female Spud Straight FF3059

NOTE:

O-ring, back-up ring, and retaining ring must be purchased separately and assembled after brazing. See page 42 for ring information.



90° PART NUMBER	A	B	DIA	E	F	G
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3059-0606S	23.2 (0.91)	7.4 (0.29)	17 (0.67)	9.6 (0.38)	16 (0.63)	18 (0.71)
FF3059-0808S	28.9 (1.14)	9.3 (0.37)	20.3 (0.80)	12.8 (0.50)	19 (0.75)	21 (0.83)
FF3059-1010S	31.6 (1.25)	9.3 (0.37)	24.4 (0.96)	16.0 (0.63)	23 (0.91)	25 (0.98)
FF3059-1212S	37.3 (1.47)	8.6 (0.34)	31.2 (1.23)	19.1 (0.75)	25.4 (1.00)	32 (1.26)

New STC Release Sleeve

New STC Release Sleeve

STC fittings utilize a new release sleeve design. The new release sleeve is manufactured out of a high temperature HNBR rubber and offers the following advantages over the traditional STC release sleeve:

Advantages of New Release Sleeve

1. STC fittings using the new release sleeve can be used in conjunction with direct port female STC.
2. STC fittings using the new release sleeve exhibit a lower force to connect than fittings using the former thermoplastic elastomer release sleeve.



Please note that the new STC release sleeve is not a field service item and can only be installed at the factory. Contact Eaton for further information.

FORCE TO CONNECT FOR STC PRODUCTS

Dash Size	Part Number	Average Connection Force (lbs.)
-06	FF90365-06	19
-08	FF90365-08	19
-10	FF90365-10	22
-12	FF90365-12	22
-16	FF90365-16	22

Formed Male STC Tubing (Carbon Steel)

Eaton offers low-pressure tubing with male STC end configurations for use with steel tubing that meets SAEJ525 specifications. The product design has been subjected to a full test regimen. Reusability has been proven by testing this product to many cycles of connection and disconnection.

Advantages

- Eliminates the braze joints and potential leak paths
- Reduced weight compared to standard STC connections
- Formed male is an integral part of the tubing
- Can be used with standard STC female connections
- Can be used in conjunction with formed nipples used with FC699 and FC498 hoses

NOTE:

Minimum straight tangent of the tube bends not to be below 2 x O.D. on all sizes measured from the front of the bead.

Characteristics

- Sizes available: -6, -8, -10, -12
- Maximum operating pressure of 500 psi
- 4:1 safety factor
- Use with hydraulic fluids, air, water, fuel, and refrigerants*
- 28 In./Hg vacuum capable
- Temperatures of: -40°F to +300°F*

** Check the o-ring seal material to ensure that the elastomer is compatible with your intended application.*

Tubing wall thicknesses are as follows:

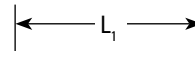
SIZE	TUBING THICKNESS
-6	0.035"
-8	0.035"
-10	0.049"
-12	0.049"

Distance from formed male nose to the front of the rear bead:

SIZE	L ₁
	mm (in.)
-6	18.9 (0.74)
-8	23.8 (0.94)
-10	27.2 (1.07)
-12	31.6 (1.24)



Contact Eaton for availability and application information.

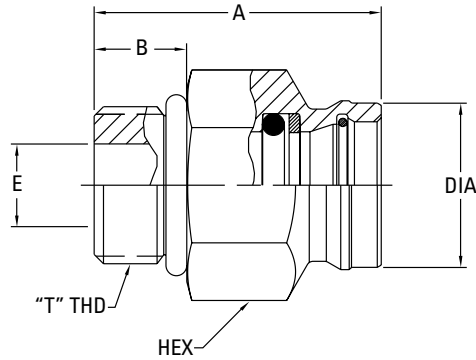


Adapters

STC adapters come standard with nitrile o-rings.
See page 7 for seal options.

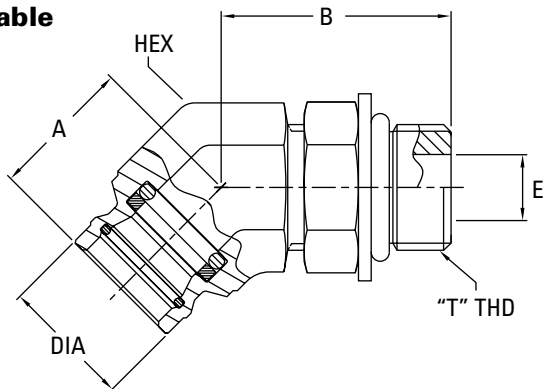
Male SAE O-Ring Boss to Female STC

Straight FF3042



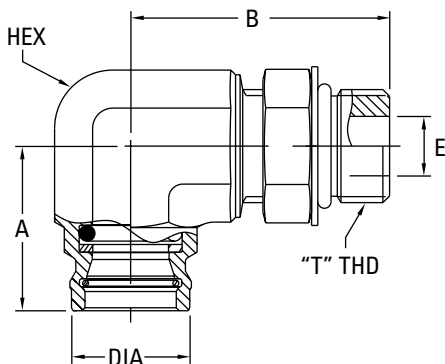
STRAIGHT PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3042-0406S	30 (1.18)	9.1 (0.36)	17 (0.67)	4.4 (0.17)	19 (0.75)	7/16- 20 2A
FF3042-0606S	28.7 (1.13)	9.9 (0.39)	17 (0.67)	7.5 (0.30)	19 (0.75)	9/16- 18 2A
FF3042-0608S	33.7 (1.33)	9.9 (0.39)	20.3 (0.80)	7.5 (0.30)	21 (0.83)	9/16- 18 2A
FF3042-0806S	29.9 (1.18)	11.1 (0.44)	17 (0.67)	9.9 (0.39)	25 (0.98)	3/4-16 2A
FF3042-0808S	34.5 (1.36)	11.1 (0.44)	20.3 (0.80)	9.9 (0.39)	24 (0.94)	3/4-16 2A
FF3042-0810S	36.5 (1.44)	11.1 (0.44)	24.4 (0.96)	10 (0.39)	25.4 (1.00)	3/4-16 2A
FF3042-1008S	35 (1.38)	12.7 (0.50)	20.3 (0.80)	12.3 (0.48)	27 (1.06)	7/8-14 2A
FF3042-1010S	38 (1.50)	12.7 (0.50)	24.4 (0.96)	12.3 (0.48)	27 (1.06)	7/8-14 2A
FF3042-1012S	44.6 (1.76)	12.7 (0.50)	31.3 (1.23)	12.3 (0.48)	32 (1.26)	7/8-14 2A
FF3042-1210S	40.4 (1.59)	15.1 (0.59)	24.4 (0.96)	15.5 (0.61)	32 (1.26)	1 1/16- 12 2A
FF3042-1212S	47 (1.85)	15.1 (0.59)	31.2 (1.23)	15.5 (0.61)	32 (1.26)	1 1/16- 12 2A
FF3042-1616S	50.9 (2.00)	15.1 (0.59)	41 (1.61)	21.4 (0.84)	41 (1.62)	1 5/16- 12 2A

45° Adjustable FF3038



45° PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3038-0406S	18.5 (0.73)	28.4 (1.12)	17 (0.67)	4.4 (0.17)	19 (0.75)	7/16- 20 2A
FF3038-0606S	18.5 (0.73)	30 (1.18)	17 (0.67)	7.5 (0.30)	19 (0.75)	9/16- 18 2A
FF3038-0808S	21.4 (0.84)	34.5 (1.36)	20.3 (0.80)	9.9 (0.39)	22 (0.86)	3/4-16 2A
FF3038-1010S	23.1 (0.91)	42.5 (1.67)	24.4 (0.96)	12.3 (0.48)	27 (1.05)	7/8-14 2A

90° Adjustable FF3046



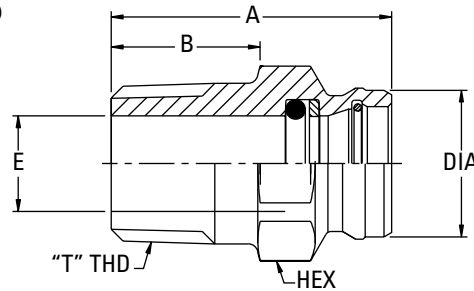
90° PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3046-0406S	27.7 (1.09)	32.8 (1.29)	17 (0.67)	4.4 (0.17)	19 (0.75)	7/16- 20 2A
FF3046-0606S	27.7 (1.09)	35.6 (1.40)	17 (0.67)	7.5 (0.30)	19 (0.75)	9/16- 18 2A
FF3046-0806S	27.5 (1.08)	43.2 (1.70)	17 (0.67)	9.9 (0.39)	22 (0.86)	3/4-16 2A
FF3046-0808S	27.5 (1.08)	43.2 (1.70)	20.3 (0.80)	9.9 (0.39)	22 (0.86)	3/4-16 2A
FF3046-1008S	30.9 (1.22)	50 (1.97)	20.3 (0.80)	12.3 (0.48)	22 (0.86)	7/8-14 2A
FF3046-1010S	31.8 (1.25)	48.2 (1.90)	24.4 (0.96)	12.3 (0.48)	27 (1.05)	7/8-14 2A
FF3046-1212S	38.1 (1.50)	55.5 (2.18)	31.2 (1.23)	15.5 (0.61)	32 (1.25)	1 1/16- 12 2A
FF3046-1616S	46.4 (1.83)	63.5 (2.50)	41 (1.61)	21.5 (0.85)	41 (1.62)	1 5/16- 12 2A

Adapters

STC adapters come standard with nitrile o-rings.
See page 7 for seal options.

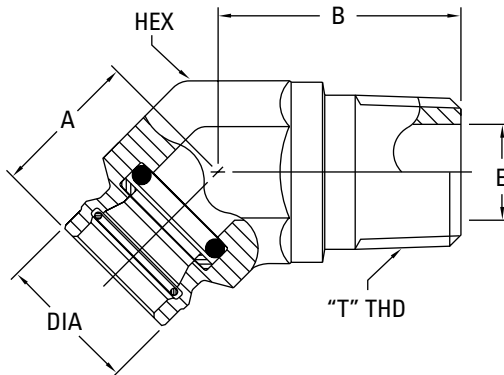
Male NPTF to Female STC

Straight FF3089



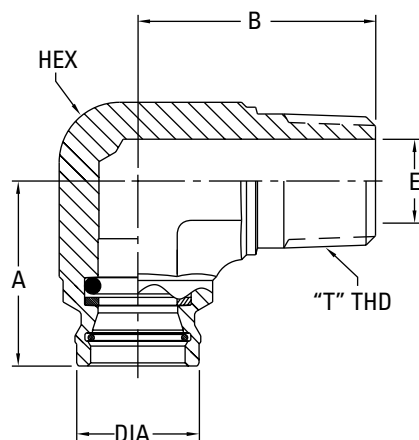
STRAIGHT PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3089-0406S	36.8 (1.45)	14.6 (0.57)	17 (0.67)	7.1 (0.28)	19 (0.75)	1/4-18
FF3089-0606S	36.8 (1.45)	14.6 (0.57)	17 (0.67)	10.3 (0.41)	19 (0.75)	3/8-18
FF3089-0608S	38.8 (1.53)	14.6 (0.57)	20.3 (0.80)	10.3 (0.41)	21 (0.83)	3/8-18
FF3089-0806S	41.6 (1.64)	19.4 (0.76)	17 (0.67)	9.7 (0.38)	22.2 (0.88)	1/2-14
FF3089-0808S	37.8 (1.49)	19.4 (0.76)	20.3 (0.80)	12.3 (0.48)	24 (0.94)	1/2-14
FF3089-0810S	43.9 (1.73)	19.4 (0.76)	24.4 (0.96)	13.5 (0.53)	25.4 (1.00)	1/2-14
FF3089-1210S	43.9 (1.73)	19.4 (0.76)	24.4 (0.96)	16.2 (0.64)	27 (1.06)	3/4-14
FF3089-1212S	44.6 (1.76)	19.4 (0.76)	31.3 (1.23)	18.3 (0.72)	32 (1.26)	3/4-14

45° FF3093



45° PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3093-0406S	18.8 (0.74)	26.7 (1.05)	17 (0.67)	7.1 (0.28)	19 (0.75)	1/4-18
FF3093-0606S	20.4 (0.80)	26.9 (1.06)	17 (0.67)	10.3 (0.41)	19 (0.75)	3/8-18
FF3093-0808S	25.6 (1.01)	34 (1.34)	20.3 (0.80)	13.5 (0.53)	22 (0.86)	1/2-14
FF3093-0810S	26.2 (1.03)	34 (1.34)	24.4 (0.96)	13.5 (0.53)	27 (1.06)	1/2-14
FF3093-1212S	32 (1.28)	35 (1.38)	31.2 (1.23)	18.3 (0.72)	32 (1.26)	3/4-14

90° FF3056



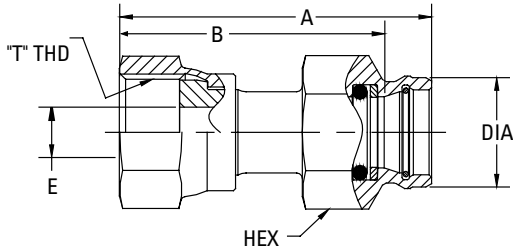
90° PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3056-0606S	27.7 (1.09)	27.5 (1.08)	17 (0.67)	10.3 (0.41)	19 (0.75)	3/8-18
FF3056-0608S	28.2 (1.11)	27.7 (1.09)	20.3 (0.80)	10.3 (0.41)	22 (0.86)	3/8-18
FF3056-0808S	29.8 (1.17)	38.4 (1.51)	20.3 (0.80)	13.5 (0.53)	22 (0.86)	1/2-14
FF3056-1212S	37.3 (1.47)	41.9 (1.65)	31.2 (1.23)	18.3 (0.72)	32 (1.26)	3/4-14

Adapters

STC adapters come standard with nitrile o-rings.
See page 7 for seal options.

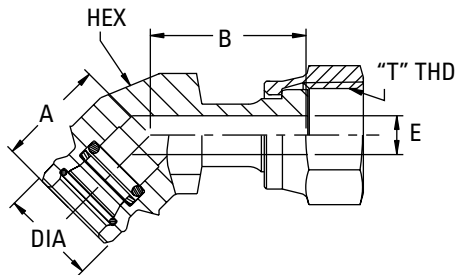
Female ORS to Female STC

Straight FF3236



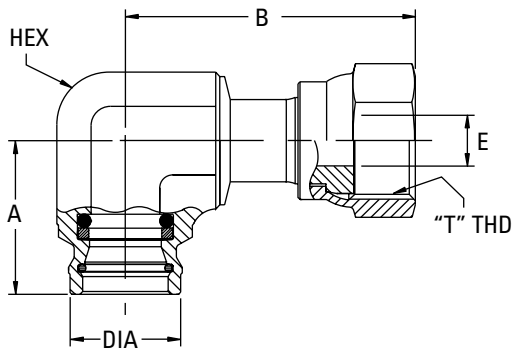
STRAIGHT PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3236-0606S	50.8 (2.00)	18.2 (0.72)	19 (0.75)	6.7 (0.26)	19 (0.75)	11/16-16 2B
FF3236-0808S	45.5 (1.79)	22.1 (0.87)	20.3 (0.80)	9.1 (0.36)	24 (0.95)	1 3/16-16 2B

45° FF3362



45° PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3362-0606S	18.8 (0.74)	26.9 (1.06)	17 (0.67)	6.7 (0.26)	19 (0.75)	11/16-16 2B

90° FF3246



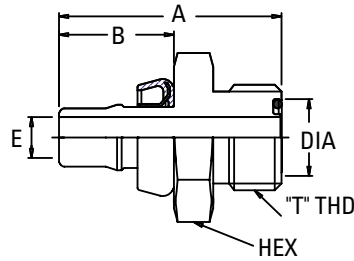
90° PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3246-0606S	27.7 (1.09)	40.6 (1.60)	16.5 (0.65)	6.7 (0.26)	19 (0.75)	11/16-16 2B
FF3246-0808S	27.5 (1.08)	51.9 (2.04)	19.8 (0.78)	9.1 (0.36)	22 (0.86)	13/16-16 2B

Adapters

STC adapters come standard with nitrile o-rings.
See page 7 for seal options.

Male ORS to Male STC

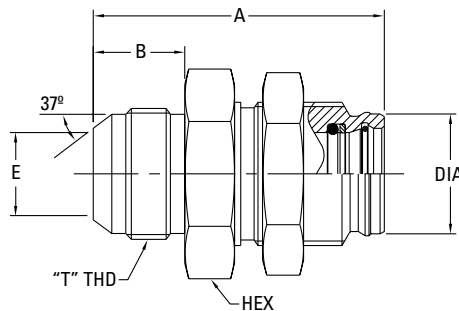
Straight FF3318T



STRAIGHT PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3318T0606S	36.5 (1.44)	18.8 (0.74)	12.6 (0.50)	6.7 (0.26)	24.0 (0.95)	11/16-16

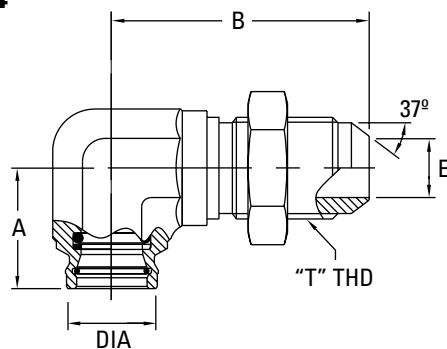
SAE 37° Male Flare to Female STC, Bulkhead Adapters

Straight FF3412



STRAIGHT PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3412-1612S	73.7 (2.90)	23.1 (0.91)	31.2 (1.23)	20.6 (0.81)	46 (1.79)	15/16-12 2A

90° Elbow FF3044



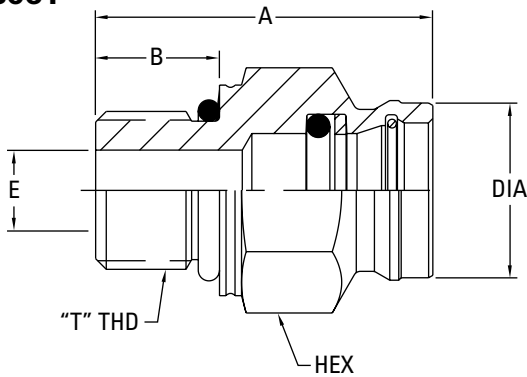
90° PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3044-1210S	31.8 (1.25)	67.8 (2.67)	24.4 (0.96)	15.5 (0.61)	27 (1.06)	11/16-16 2A
FF3044-1616S	46.4 (1.83)	64.5 (2.54)	41 (1.61)	21.4 (0.84)	41 (1.61)	15/16-12 2A

Adapters

STC adapters come standard with nitrile o-rings.
See page 7 for seal options.

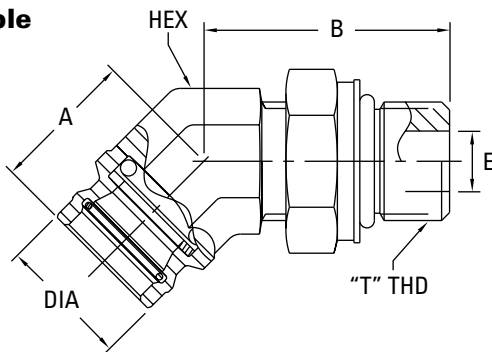
Male ISO 6149 O-Ring Boss (S-Series) to Female STC

Straight FF3061



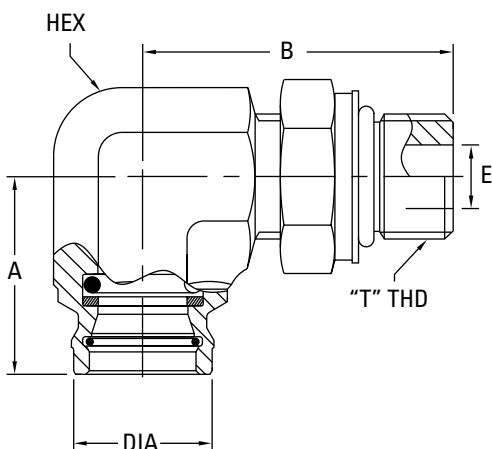
STRAIGHT PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3061-1006S	29 (1.14)	9.5 (0.37)	17 (0.67)	3.1 (0.12)	19 (0.75)	M10x1 6g
FF3061-1206S	30.5 (1.20)	11 (0.43)	17 (0.67)	4.1 (0.16)	19 (0.75)	M12x1.5 6g
FF3061-1406S	30.5 (1.20)	11 (0.43)	17 (0.67)	6.1 (0.24)	19 (0.75)	M14x1.5 6g
FF3061-1408S	34.8 (1.37)	11 (0.43)	20.3 (0.80)	6.1 (0.24)	21 (0.82)	M14x1.5 6g
FF3061-1606S	32 (1.26)	12.5 (0.49)	17 (0.67)	7.1 (0.28)	22 (0.86)	M16x1.5 6g
FF3061-1608S	36.3 (1.43)	12.5 (0.49)	20.3 (0.80)	7.1 (0.28)	22 (0.86)	M16x1.5 6g
FF3061-1610S	39.5 (1.56)	12.5 (0.49)	24.4 (0.96)	7.1 (0.28)	25 (0.98)	M16-1.5 6g
FF3061-1806S	33.5 (1.32)	14 (0.55)	17 (0.67)	9.1 (0.36)	24 (0.94)	M18-1.5 6g
FF3061-1808S	38.1 (1.50)	14 (0.55)	20.3 (0.80)	9.1 (0.36)	24 (0.94)	M18-1.5 6g
FF3061-1810S	39.4 (1.55)	14 (0.55)	24.4 (0.96)	9.1 (0.36)	25 (0.98)	M18-1.5 6g
FF3061-1812S	50 (1.97)	14 (0.55)	31.3 (1.23)	9.1 (0.36)	32 (1.26)	M18-1.5 6g
FF3061-2210S	40.4 (1.59)	15 (0.59)	24.4 (0.96)	12.1 (0.48)	27 (1.06)	M22-1.5 6g
FF3061-2212S	51 (2.01)	15 (0.59)	31.3 (1.23)	12.1 (0.48)	32 (1.26)	M22-1.5 6g

45° Adjustable FF3065



45° PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3065-1406S	18.8 (0.74)	31.4 (1.24)	17 (0.67)	6.1 (0.24)	19 (0.75)	M14-1.5 6g
FF3065-1606S	18.8 (0.74)	33.5 (1.32)	17 (0.67)	7.1 (0.28)	19 (0.75)	M16-1.5 6g
FF3065-1808S	21.6 (0.85)	37 (1.46)	20.3 (0.80)	9.1 (0.36)	22 (0.87)	M18-1.5 6g
FF3065-1810S	25.9 (1.02)	42.5 (1.67)	24.4 (0.96)	9.1 (0.36)	27 (1.05)	M18-1.5 6g
FF3065-2212S	31.2 (1.23)	44 (1.73)	31.2 (1.23)	12.1 (0.48)	32 (1.25)	M22-1.5 6g
FF3065-2712S	30.3 (1.19)	52.6 (2.07)	31 (1.21)	15.1 (0.60)	36 (1.40)	M27-2 6g

90° Adjustable FF3067



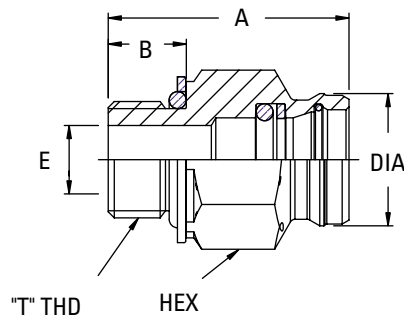
90° PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3067-1406S	24.9 (0.98)	35.5 (1.40)	17 (0.67)	6.1 (0.24)	19 (0.75)	M14-1.5 6g
FF3067-1606S	27.7 (1.09)	42.9 (1.69)	17 (0.67)	7.1 (0.28)	19 (0.75)	M16-1.5 6g
FF3067-1808S	28.2 (1.11)	44.3 (1.74)	20.3 (0.80)	9.1 (0.36)	22 (0.87)	M18-1.5 6g
FF3067-1810S	33.3 (1.31)	47.5 (1.87)	24.4 (0.96)	9.1 (0.36)	27 (1.06)	M18-1.5 6g
FF3067-2210S	33.3 (1.31)	49 (1.93)	24.4 (0.96)	12.1 (0.48)	27 (1.06)	M22-1.5 6g
FF3067-2212S	37.6 (1.48)	50.8 (2.00)	31.2 (1.23)	12.1 (0.48)	32 (1.25)	M22-1.5 6g
FF3067-2712S	37.6 (1.48)	55.5 (2.18)	31.2 (1.23)	15.1 (0.60)	32 (1.26)	M27-2 6g

Adapters

STC adapters come standard with nitrile o-rings.
See page 7 for seal options.

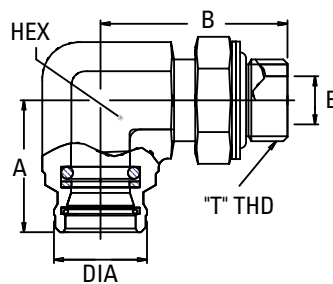
O-Ring Boss DIN 3852 Metric Male to Female STC

Straight FF3284



STRAIGHT PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3284-1608S	37.5 (1.48)	12.0 (0.47)	20.3 (0.80)	8.5 (0.34)	22.1 (0.88)	M18-1.5 6g
FF3284-1808S	37.0 (1.46)	12.0 (0.47)	20.3 (0.80)	10.5 (0.42)	23.8 (0.94)	M18-1.5 6g
FF3284-2612S	48.4 (1.91)	15.4 (0.61)	31.3 (1.24)	15.0 (0.60)	36.0 (1.42)	M18-1.5 6g

90° FF3286



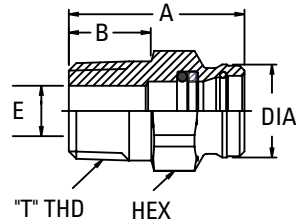
90° PART NUMBER	A	B	DIA	E	"T" HEX	THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3284-1808S	28.8 (1.14)	40.8 (1.61)	20.3 (0.80)	10.5 (0.42)	22.0 (0.87)	M18-1.5 6g

Adapters

STC adapters come standard with nitrile o-rings.
See page 7 for seal options.

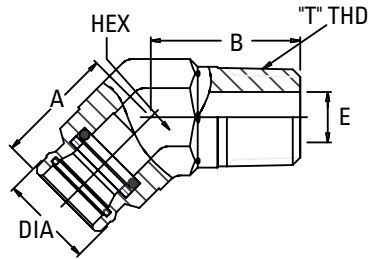
Male BSPT to Female STC

Straight FF3503



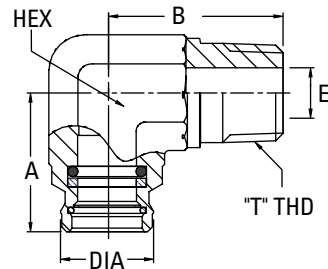
STRAIGHT PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3503-0406S	37.1 (1.47)	13.0 (0.51)	17.0 (0.67)	5.0 (0.20)	19.0 (0.75)	R ¹ / ₄ - 19
FF3503-0606S	36.9 (1.46)	15.0 (0.59)	17.0 (0.67)	8.0 (0.32)	19.0 (0.75)	R ³ / ₈ - 19
FF3503-0808S	38.3 (1.51)	18.0 (0.71)	20.3 (0.80)	11.0 (0.43)	24.0 (0.95)	R ¹ / ₂ - 14
FF3503-1212S	44.7 (1.77)	20.0 (0.79)	31.3 (1.24)	16.0 (0.63)	32.0 (1.26)	R ³ / ₄ - 14

45° FF3505



45° PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3505-0406S	18.7 (0.74)	13.0 (0.51)	17.0 (0.67)	5.0 (0.20)	19.0 (0.75)	R ¹ / ₄ - 19
FF3505-0606S	20.5 (0.81)	24.4 (0.96)	17.0 (0.67)	8.0 (0.32)	19.0 (0.75)	R ³ / ₈ - 18
FF3505-0808S	26.2 (1.04)	34.0 (1.34)	20.3 (0.80)	11.0 (0.43)	22.0 (0.87)	R ¹ / ₂ - 14
FF3505-1212S	32.6 (1.29)	36.0 (1.42)	31.3 (1.24)	16.0 (0.63)	32.0 (1.26)	R ³ / ₄ - 14

90° FF3507



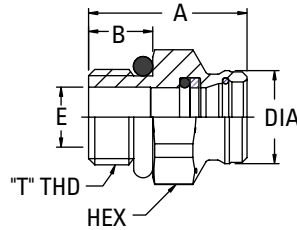
90° PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3507-0406S	28.1 (1.11)	27.5 (1.08)	17.0 (0.67)	5.0 (0.20)	19.0 (0.75)	R ¹ / ₄ - 19
FF3507-0606S	28.1 (1.11)	27.5 (1.08)	17.0 (0.67)	5.0 (0.20)	19.0 (0.75)	R ³ / ₈ - 19
FF3507-0808S	30.3 (1.19)	38.4 (1.50)	20.3 (0.80)	11.0 (0.43)	22.0 (0.87)	R ¹ / ₂ - 14
FF3507-1212S	37.3 (1.47)	41.9 (1.65)	31.3 (1.24)	16.0 (0.63)	32.0 (1.26)	R ³ / ₄ - 14

Adapters

STC adapters come standard with nitrile o-rings.
See page 7 for seal options.

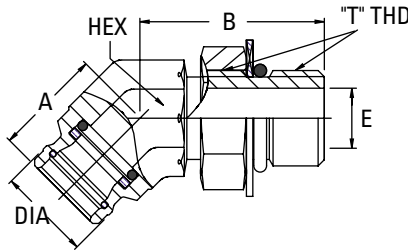
Male BSPP (Special JIS) to Female STC

Straight FF3509



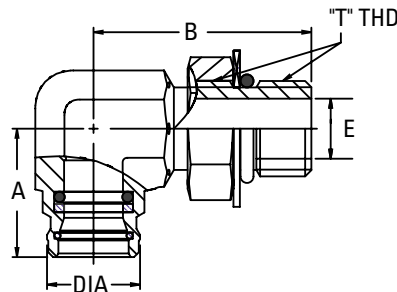
STRAIGHT PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3509-0406S	30.1 (1.19)	12.0 (0.47)	17.0 (0.67)	6.1 (0.24)	19.0 (0.75)	G ¹ / ₄ - 19
FF3509-0606S	28.9 (1.14)	12.0 (0.47)	17.0 (0.67)	9.6 (0.38)	22.0 (0.87)	G ³ / ₈ - 19
FF3509-0808S	34.6 (1.37)	14.0 (0.55)	20.3 (0.80)	13.1 (0.52)	27 (1.07)	G ¹ / ₂ - 14
FF3509-1212S	47.6 (1.88)	16.0 (0.24)	31.3 (1.24)	18.1 (0.72)	32 (1.26)	G ³ / ₄ - 14

45° FF3511



45° PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3511-0406S	16.8 (0.66)	32.4 (1.28)	17.0 (0.67)	6.1 (0.24)	19.0 (0.75)	G ¹ / ₄ - 19
FF3511-0606S	16.8 (0.66)	35.0 (1.38)	17.0 (0.67)	9.6 (0.38)	19.0 (0.75)	G ³ / ₈ - 19
FF3511-0808S	23.6 (0.93)	40.2 (1.59)	20.3 (0.80)	13.1 (0.52)	22.0 (0.87)	G ¹ / ₂ - 14
FF3511-1212S	29.9 (1.18)	46.7 (1.85)	31.3 (1.24)	18.1 (0.72)	32.0 (1.26)	G ³ / ₄ - 14

90° FF3513



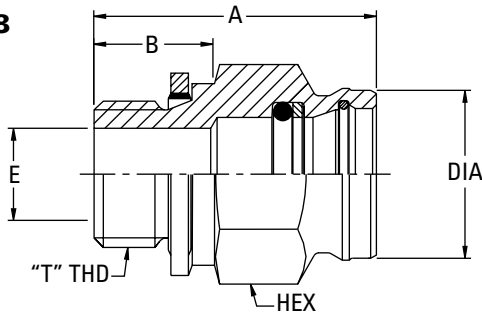
90° PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
F3513-0406S	28.1 (1.11)	37.8 (1.49)	17.0 (0.67)	6.1 (0.24)	19.0 (0.75)	G ¹ / ₄ - 19
FF3513-0606S	28.1 (1.11)	39.5 (1.56)	17.0 (0.67)	9.6 (0.38)	19.0 (0.75)	G ³ / ₈ - 19
FF3513-0808S	28.0 (1.11)	47.5 (1.88)	20.3 (0.80)	13.1 (0.52)	22.0 (0.87)	G ¹ / ₂ - 14
FF3513-1212S	38.0 (1.50)	56.4 (2.23)	31.3 (1.24)	18.1 (0.72)	32.0 (1.26)	G ³ / ₄ - 14

Adapters

STC adapters come standard with nitrile o-rings.
See page 7 for seal options.

Male BSPP to Female STC - Meets Standard 5005 DIN 3852 Form A

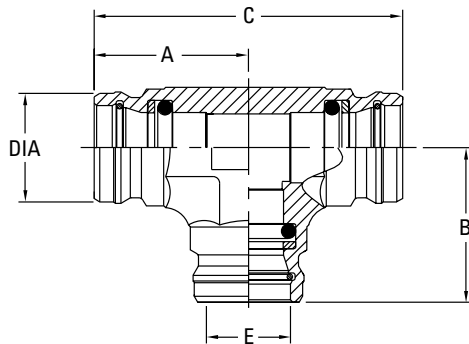
Straight FF3218



STRAIGHT PART NUMBER	A	B	DIA	E	HEX	"T" THD
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3218-0406S	31.8 (1.25)	14.2 (0.56)	17 (0.67)	6.1 (0.24)	19 (0.75)	G6 1/4- 19A
FF3218-0606S	32.3 (1.27)	14.6 (0.58)	17 (0.67)	9.6 (0.38)	22 (0.87)	G6 3/8- 19A
FF3218-0806S	37 (1.46)	17.2 (0.68)	17 (0.67)	9.1 (0.36)	27 (1.06)	G6 1/2- 14A
FF3218-0608S	36.1 (1.42)	14.6 (0.58)	20.3 (0.80)	9.6 (0.38)	22 (0.87)	G6 3/8- 19A
FF3218-0808S	38.6 (1.52)	17.2 (0.68)	20.3 (0.80)	12.3 (0.48)	27 (1.06)	G6 1/2- 14A
FF3218-0810S	40.2 (1.58)	17.2 (0.68)	24.4 (0.96)	13.1 (0.52)	27 (1.06)	G6 1/2- 14A
FF3218-1210S	42.2 (1.66)	19.2 (0.75)	24.4 (0.96)	15.5 (0.61)	32 (1.26)	G6 3/4- 14A
FF3218-1212S	44.2 (1.74)	19.2 (0.75)	31.2 (1.23)	18.1 (0.71)	32 (1.26)	G6 3/4- 14A

Tee Adapter Female STC

FF3178



PART NUMBER	A	B	C	DIA	E
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3178-0808S	28.2 (1.11)	28.2 (1.11)	56.4 (2.22)	20.3 (0.80)	20.3 (0.80)

Adapters

Braze Female STC Adapters

Female STC Braze spud adapters are available. To attach these carbon steel braze spuds to a carbon steel surface, the following brazing techniques can be used:

1. Silver Brazing
2. Copper Brazing

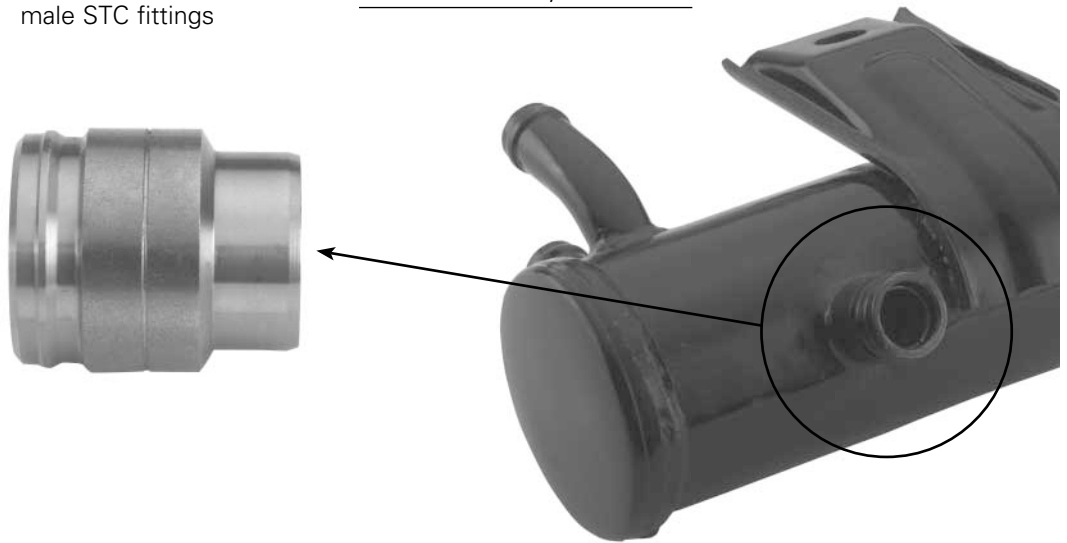
- Braze spuds can be attached by the end user
- Alternative to direct porting for smaller production runs
- Offered in straight configurations
- Can be used with standard male STC fittings

SIZE	PRESSURE RATING (PSI)
-06	5,000
-08	4,250
-10	3,750
-12	3,750
-16	2,500

NOTE:

Post brazing coatings that exceed 0.0004" thickness require masking of inside of the female connector to prevent interferences with mating components. Industrial platings are generally acceptable, but paintings will probably require maskings.

Please contact Eaton for product availability.



Press Fit Adapters

Eaton Offers a Lower Pressure STC Adapter Solution

Press fit "barbed" STC female adapters can be pressed into SAE counterbores in softer materials such as aluminum.

Advantages

- Offers threadless adapter technology – there are no torque requirements and no cross-threading
 - Offers an alternative solution to direct porting STC into aluminum castings
- Adapter design contains an elastomeric seal to provide virtually leak-free performance
 - Fits in confined spaces that a threaded connection wouldn't
 - threaded connection limits how close ports can be to each other due to wrench or socket clearance
 - press fit adapters have no hex points
- Can be used with all male STC fittings
 - Maximum operating pressure is 500 psi for sizes -8 and -10.



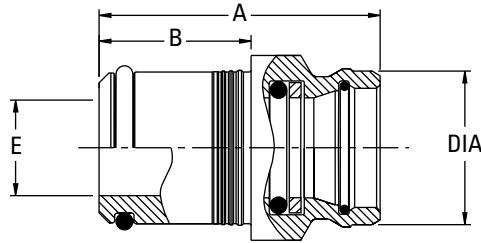
See next page for dimensional information.

For more details, consult Eaton Bulletin JA901 or contact your Eaton representative.

Press Fit Adapters

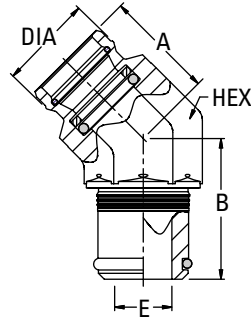
Female STC

Straight FF3113



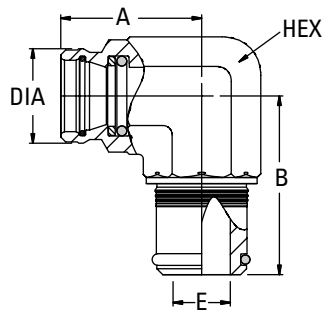
STRAIGHT PART NUMBER	A	B	DIA	E
	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3113-02-0808S	36.2 (1.42)	19.6 (0.77)	20.3 (0.80)	12.3 (0.48)

45° FF3162



45° PART NUMBER	A	B	DIA	E	HEX
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3162-0808S	24.1 (0.95)	30.2 (1.19)	20.3 (0.80)	12.3 (0.49)	22.0 (0.87)

90° FF3115



90° PART NUMBER	A	B	DIA	E	HEX
	mm (in.)	mm (in.)	mm (in.)	mm (in.)	mm (in.)
FF3115-0808S	30.3 (1.20)	38.4 (1.52)	20.3 (0.80)	12.3 (0.49)	22.0 (0.87)
FF3115-1010S	33.5 (1.32)	40.9 (1.62)	24.4 (0.96)	15.5 (0.61)	27.0 (1.07)

Direct Port STC Connections

Eaton female STC connectors can be direct ported into valves, pump housings, motor cases, etc. Direct porting increases the value of STC connections compared to threaded connections by:

- Eliminating the need for adapters; the hose fitting connects directly into the casting
- Offering fewer leak paths
- Offering higher pressure capability compared to STC adapters

Applications Include:

- Power Steering Valves
- Hydraulic Pumps/Motors
- Joysticks
- Control Valves
- Oil Coolers
- Oil Filter Heads
- Engine Blocks



Contact Eaton for details relating to design and licensing questions.

SAMPLE IMPULSE TEST RESULTS - ALUMINUM

Size	Pressure	Material	Cycles
-6	3,500 psi	6061T651	1 million
-8	3,500 psi	6061T651	1 million
-10	3,500 psi	6061T651	1 million
-12	3,500 psi	6061T651	1 million
-6	3,500 psi	2024T351	1 million
-8	3,500 psi	2024T351	1 million
-10	3,500 psi	2024T351	1 million
-12	3,500 psi	2024T351	1 million

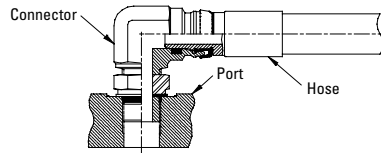
SAMPLE IMPULSE TEST RESULTS*

Size	Pressure	Material Cycles
-8	6,000 psi	65-45-122 million
-10	5,000 psi	Class 35 1.5 million
-12	6,500 psi	Class 40 2 million
-12	6,000 psi	80-55-061 million

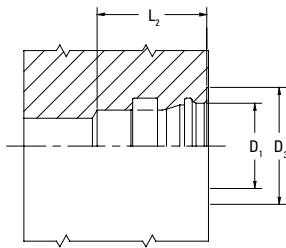
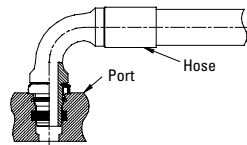
*Performance is based on thickness/geometry of material.

Direct Port STC Connections

STC with Adapters



STC with Direct Port



STC DIRECT PORT DIMENSIONS	D1	D3	L2 (MINIMUM)
STC Size	mm	mm	mm
-06	11.4	18.3	15.2
-08	15.3	21.5	19.5
-10	18.7	25.5	22.3
-12	23.2	32.3	26.6
-16	29.2	41.0	31.8

Direct Port Tools (For Female Ports)



Please consult A-MEFI-TI001-E for instructions on how to properly use tools.

PNEUMATIC INSERTION TOOL

Size	Part Number
-06	FT1362-06
-08	FT1362-08
-10	FT1362-10
-12	FT1362-12
-16	FT1362-16

RETAINING RING INSERTION TOOL

Size	Part Number
-06	FT1363-06
-08	FT1363-08
-10	FT1363-10
-12	FT1363-12
-16	FT1363-16

RETAINING RING TEST TOOL

Size	Part Number
-06	FT1364-06
-08	FT1364-08
-10	FT1364-10
-12	FT1364-12
-16	FT1364-16

Accessories and Sales Tools

Release Tools

- STC -06 = FF90213-06
- STC -08 = FF90213-08
- STC -10 = FF90213-10
- STC -12 = FF90213-12
- STC -16 = FF90213-01-16S



STC Repair Kits (Female Halves)

Includes

- Instructions on repairing STC (Bulletin JA535)
- Back-up Ring
- Retaining Ring
- O-Ring

BUNA-N/NITRILE

Size	Part Number
-06	FF12228-06
-08	FF12228-08
-10	FF12228-10
-12	FF12228-12
-16	FF12228-16

VITON

Size	Part Number
-06	FF12230-06
-08	FF12230-08
-10	FF12230-10
-12	FF12230-12
-16	FF12230-16

HNBR

Size	Part Number
-06	FF12229-06
-08	FF12229-08
-10	FF12229-10
-12	FF12229-12
-16	FF12229-16

EPDM

Size	Part Number
-06	FF12231-06
-08	FF12231-08
-10	FF12231-10
-12	FF12231-12
-16	FF12231-16

STC Video

Part number A-MEFI-ME001-E



Female Ring Part Numbers

RETAINING RINGS

Size	Part Number
-06	FF90277-06C
-08	FF90277-08C
-10	FF90277-10C
-12	FF90277-12C
-16	FF90277-16C

NITRILE O-RINGS

Size	Part Number
-06	22550-12
-08	22550-112
-10	22550-114
-12	22550-117
-16	22550-215

BACK-UP RINGS

Size	Part Number
-06	FF90241-12
-08	FF90241-112
-10	FF90241-114
-12	FF90241-117
-16	FF90241-215

HNBR O-RINGS

Size	Part Number
-06	FF90467-12
-08	FF90467-112
-10	FF90467-114
-12	FF90467-117
-16	FF90467-215

STC Sales Kit

Part number FF12389-10



VITON O-RINGS

Size	Part Number
-06	22556-12
-08	22556-112
-10	22556-114
-12	22556-117
-16	22556-215

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