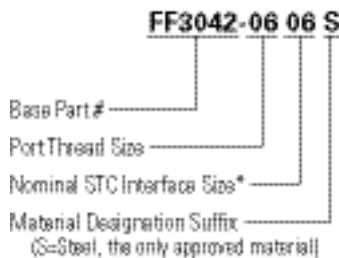


How to Order STC Adapters

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 the standard o-ring in Female OTC Adapters; 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.

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), due to the fact that the release sleeve is made out of HNBR.

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
- 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 | 29.5 | 750 |
| 1/2" | 4,250 | 295 | 17,000 | 1,175 | 29.5 | 750 |
| 5/8" | 4,000 | 275 | 16,000 | 1,100 | 29.5 | 750 |
| 3/4" | 4,000 | 275 | 16,000 | 1,100 | 29.5 | 750 |
| 1" | 4,000 | 275 | 16,000 | 1,100 | 29.5 | 750 |

Technology Comparison

| | THREADED FITTINGS | STC CONNECTORS |
|--|-------------------|----------------|
| 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 | | • |

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 release 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 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

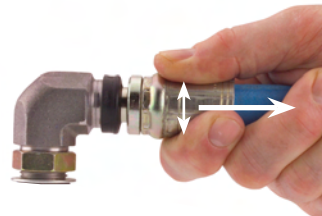


Incorrect Method

Do not hold sleeve during assembly

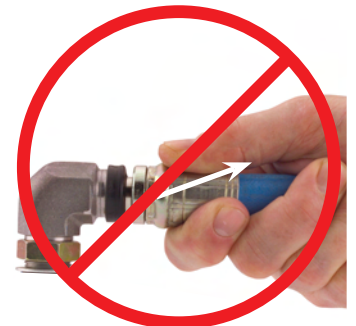
Assembly Verification

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.

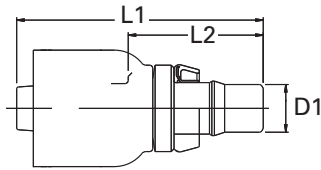


Incorrect Method

Subjecting the connection to a side-load by pulling on the hose.

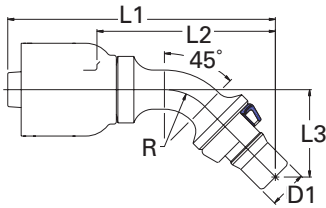
STC Crimp Hose Ends

Straight Male STC Hose End



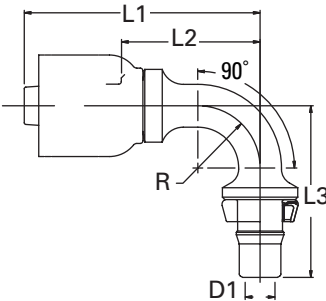
| STRAIGHT PART NUMBER | D1 | | L1 | | L2 | |
|-------------------------|------|------|------|------|------|------|
| | mm | in. | mm | in. | mm | in. |
| 04Z-BC06 | 4,2 | 0.17 | 52,4 | 2.06 | 29,0 | 1.14 |
| 06Z-BC06 | 6,7 | 0.26 | 55,5 | 2.19 | 30,2 | 1.19 |
| 06Z-BC08 | 6,7 | 0.26 | 60,6 | 2.39 | 35,4 | 1.39 |
| 08Z-BC08 | 9,6 | 0.38 | 66,3 | 2.61 | 36,6 | 1.44 |
| 10Z-BC10* | 12,8 | 0.50 | 69,0 | 2.72 | 39,6 | 1.56 |
| 12Z-BC12 | 15,5 | 0.61 | 74,6 | 2.94 | 44,4 | 1.75 |
| 16Z-BC16 | 20,7 | 0.82 | 83,7 | 3.30 | 49,3 | 1.94 |

45° Male STC Hose End



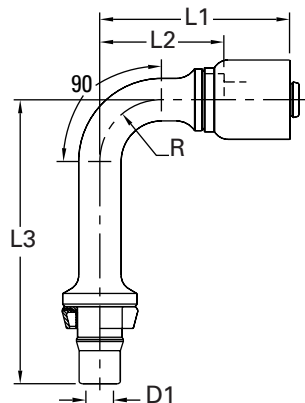
| 45° PART NUMBER | D1 | | L1 | | L2 | | L3 | | R | |
|--------------------|------|------|-------|------|------|------|------|------|------|------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. |
| 04Z-BC46 | 4,2 | 0.17 | 69,8 | 2.75 | 46,4 | 1.83 | 22,2 | 0.86 | 14,0 | 0.55 |
| 06Z-BC46 | 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 |
| 10Z-BC50 | 11,5 | 0.45 | 97,8 | 3.85 | 68,4 | 2.69 | 33,6 | 1.32 | 22,0 | 0.87 |
| 12Z-BC52 | 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



| 90° PART NUMBER | D1 | | L1 | | L2 | | L3 | | R | |
|--------------------|------|------|-------|------|------|------|------|------|------|------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. |
| 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 |
| 10Z-BC70 | 11,5 | 0.45 | 77,9 | 3.07 | 48,5 | 1.91 | 60,4 | 2.36 | 22,0 | 0.87 |
| 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 |

Long Drop 90° Male STC Hose End

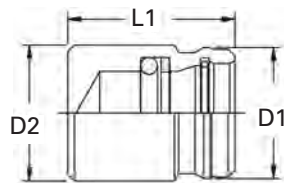


| LONG DROP 90° PART NUMBER | D1 | | L1 | | L2 | | L3 | | R | |
|------------------------------|------|------|------|------|------|------|-------|------|------|------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. |
| 06Z-BC86 | 6,4 | 0.25 | 59,3 | 2.33 | 34,0 | 1.34 | 70,6 | 2.78 | 14,0 | 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 |

* MTO Item

Female STC Cap and Male STC Plug

Female STC Cap

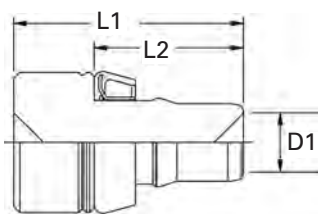


| PART NUMBER | D1 | | L1 | | D2 | |
|-------------|------|------|------|------|------|------|
| | mm | in. | mm | in. | mm | in. |
| FF90202-06S | 17,0 | 0.67 | 18,0 | 0.71 | 21,1 | 0.83 |
| FF90202-08S | 20,3 | 0.80 | 21,0 | 0.83 | 26,8 | 1.06 |
| FF90202-10S | 24,4 | 0.96 | 25,0 | 0.99 | 33,0 | 1.30 |
| FF90202-12S | 31,3 | 1.24 | 32,0 | 1.26 | 36,7 | 1.45 |
| FF90202-16S | 39,0 | 1.54 | 50,9 | 2.00 | 41,0 | 1.61 |

NOTE:

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

Male STC Plug



| PART NUMBER | D1 | | L1 | | L2 | |
|-------------|------|------|------|------|------|------|
| | mm | in. | mm | in. | mm | in. |
| FF90384-06S | 6,8 | 0.27 | 31,2 | 1.23 | 19,2 | 0.76 |
| FF90384-08S | 9,7 | 0.38 | 37,5 | 1.48 | 24,4 | 0.96 |
| FF90384-10S | 11,5 | 0.45 | 42,4 | 1.68 | 27,2 | 1.08 |
| FF90384-12S | 15,6 | 0.62 | 46,8 | 1.85 | 31,6 | 1.25 |
| FF90384-16S | 20,6 | 0.81 | 51,9 | 2.05 | 36,0 | 1.42 |

NOTE:

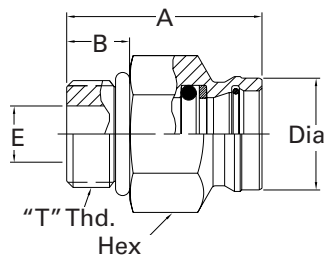
Male STC Plug can hold pressure equal to the operating pressure of the particular STC size.

STC Adapters

Male SAE O-Ring to Female STC

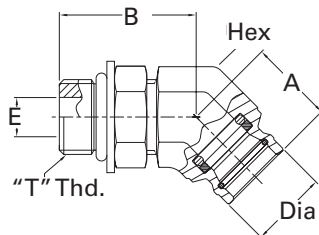
STC adapters come standard with nitrile O-rings. See page 334 for seal options.

Straight FF3042



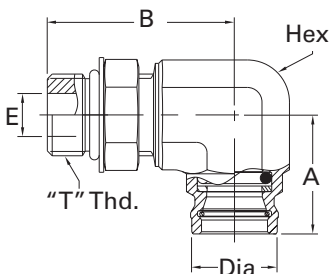
| STRAIGHT PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|-------------------------|------|------|------|------|------|------|------|------|------|------|--------------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3042-0406S | 30,0 | 1.18 | 9,1 | 0.36 | 17,0 | 0.67 | 4,4 | 0.17 | 19,0 | 0.75 | 7/16-20 2A |
| FF3042-0606S | 28,7 | 1.13 | 9,9 | 0.39 | 17,0 | 0.67 | 7,5 | 0.30 | 19,0 | 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 | 0.83 | 9/16-18 2A |
| FF3042-0806S | 29,9 | 1.18 | 11,1 | 0.44 | 17,0 | 0.67 | 9,9 | 0.39 | 25,0 | 0.98 | 3/4-162A |
| FF3042-0808S | 34,5 | 1.36 | 11,1 | 0.44 | 20,3 | 0.80 | 9,9 | 0.39 | 24,0 | 0.94 | 3/4-162A |
| FF3042-0810S | 36,5 | 1.44 | 11,1 | 0.44 | 24,4 | 0.96 | 10,0 | 0.39 | 25,4 | 1.00 | 3/4-162A |
| FF3042-1008S | 35,0 | 1.38 | 12,7 | 0.50 | 20,3 | 0.80 | 12,3 | 0.48 | 27,0 | 1.06 | 7/8-142A |
| FF3042-1010S | 38,0 | 1.50 | 12,7 | 0.50 | 24,4 | 0.96 | 12,3 | 0.48 | 27,0 | 1.06 | 7/8-142A |
| FF3042-1012S | 44,6 | 1.76 | 12,7 | 0.50 | 31,3 | 1.23 | 12,3 | 0.48 | 32,0 | 1.26 | 7/8-142A |
| FF3042-1210S | 40,4 | 1.59 | 15,1 | 0.59 | 24,4 | 0.96 | 15,5 | 0.61 | 32,0 | 1.26 | 1 1/16-12 2A |
| FF3042-1212S | 47,0 | 1.85 | 15,1 | 0.59 | 31,2 | 1.23 | 15,5 | 0.61 | 32,0 | 1.26 | 1 1/16-12 2A |
| FF3042-1616S | 50,9 | 2.00 | 15,1 | 0.59 | 41,0 | 1.61 | 21,4 | 0.84 | 41,0 | 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. | |
| FF3038-0406S | 18,5 | 0.73 | 28,4 | 1.12 | 17,0 | 0.67 | 4,4 | 0.17 | 19,0 | 0.75 | 7/16-20 2A |
| FF3038-0606S | 18,5 | 0.73 | 30,0 | 1.18 | 17,0 | 0.67 | 7,5 | 0.30 | 19,0 | 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 | 0.86 | 3/4-162A |
| FF3038-1010S | 23,1 | 0.91 | 42,5 | 1.67 | 24,4 | 0.96 | 12,3 | 0.48 | 27,0 | 1.05 | 7/8-142A |

90° Adjustable FF3046

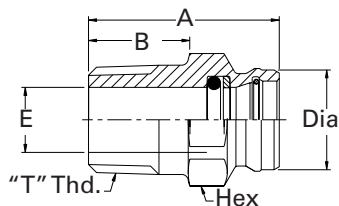


| 90° PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|--------------------|------|------|------|------|------|------|------|------|------|------|--------------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3046-0406S | 27,7 | 1.09 | 32,8 | 1.29 | 17,0 | 0.67 | 4,4 | 0.17 | 19,0 | 0.75 | 7/16-20 2A |
| FF3046-0606S | 27,7 | 1.09 | 35,6 | 1.40 | 17,0 | 0.67 | 7,5 | 0.30 | 19,0 | 0.75 | 9/16-18 2A |
| FF3046-0806S | 27,5 | 1.08 | 43,2 | 1.70 | 17,0 | 0.67 | 9,9 | 0.39 | 22,0 | 0.86 | 3/4-162A |
| FF3046-0808S | 27,5 | 1.08 | 43,2 | 1.70 | 20,3 | 0.80 | 9,9 | 0.39 | 22,0 | 0.86 | 3/4-162A |
| FF3046-1008S | 30,9 | 1.22 | 50,0 | 1.97 | 20,3 | 0.80 | 12,3 | 0.48 | 22,0 | 0.86 | 7/8-142A |
| FF3046-1010S | 31,8 | 1.25 | 48,2 | 1.90 | 24,4 | 0.96 | 12,3 | 0.48 | 27,0 | 1.05 | 7/8-142A |
| FF3046-1212S | 38,1 | 1.50 | 55,5 | 2.18 | 31,2 | 1.23 | 15,5 | 0.61 | 32,0 | 1.25 | 1 1/16-12 2A |
| FF3046-1616S | 46,4 | 1.83 | 63,5 | 2.50 | 41,0 | 1.61 | 21,5 | 0.85 | 41,0 | 1.62 | 1 5/16-12 2A |

STC Adapters Male NPTF to Female STC

STC adapters come standard with nitrile O-rings. See page 334 for seal options.

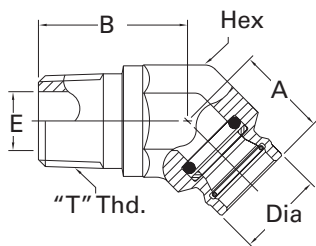
Straight FF3089



STRAIGHT

| PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|--------------|------|------|------|------|------|------|------|------|------|------|---------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3089-0406S | 36,8 | 1.45 | 14,6 | 0.57 | 17,0 | 0.67 | 7,1 | 0.28 | 19,0 | 0.75 | 1/4-18 |
| FF3089-0606S | 36,8 | 1.45 | 14,6 | 0.57 | 17,0 | 0.67 | 10,3 | 0.41 | 19,0 | 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 | 0.83 | 3/8-18 |
| FF3089-0806S | 41,6 | 1.64 | 19,4 | 0.76 | 17,0 | 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 | 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 | 27,0 | 1.06 | 3/4-14 |
| FF3089-1212S | 44,6 | 1.76 | 19,4 | 0.76 | 31,3 | 1.23 | 18,3 | 0.72 | 32,0 | 1.26 | 3/4-14 |

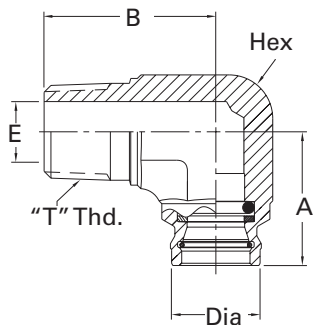
45° FF3093



45°

| PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|--------------|------|------|------|------|------|------|------|------|------|------|---------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3093-0406S | 18,8 | 0.74 | 26,7 | 1.05 | 17,0 | 0.67 | 7,1 | 0.28 | 19,0 | 0.75 | 1/4-18 |
| FF3093-0606S | 20,4 | 0.80 | 26,9 | 1.06 | 17,0 | 0.67 | 10,3 | 0.41 | 19,0 | 0.75 | 3/8-18 |
| FF3093-0808S | 25,6 | 1.01 | 34,0 | 1.34 | 20,3 | 0.80 | 13,5 | 0.53 | 22,0 | 0.86 | 1/2-14 |
| FF3093-0810S | 26,2 | 1.03 | 34,0 | 1.34 | 24,4 | 0.96 | 13,5 | 0.53 | 27,0 | 1.06 | 1/2-14 |
| FF3093-1212S | 32,0 | 1.28 | 35,0 | 1.38 | 31,2 | 1.23 | 18,3 | 0.72 | 32,0 | 1.26 | 3/4-14 |

90° FF3056

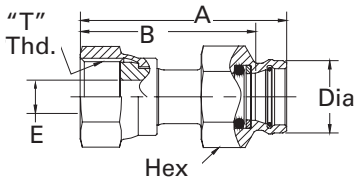


90°

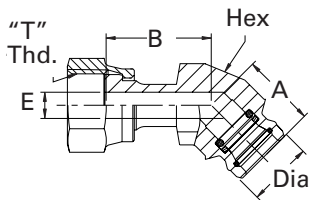
| PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|--------------|------|------|------|------|------|------|------|------|------|------|---------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3056-0606S | 27,7 | 1.09 | 27,5 | 1.08 | 17,0 | 0.67 | 10,3 | 0.41 | 19,0 | 0.75 | 3/8-18 |
| FF3056-0608S | 28,2 | 1.11 | 27,7 | 1.09 | 20,3 | 0.80 | 10,3 | 0.41 | 22,0 | 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 | 0.86 | 1/2-14 |
| FF3056-1212S | 37,3 | 1.47 | 41,9 | 1.65 | 31,2 | 1.23 | 18,3 | 0.72 | 32,0 | 1.26 | 3/4-14 |

STC Adapters
Female FOR-SEAL® to Female STC

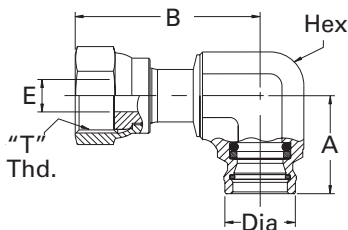
STC adapters come standard with nitrile O-rings. See page 334 for seal options.

Straight FF3236

| STRAIGHT PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|-------------------------|------|------|------|------|------|------|-----|------|------|------|--------------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3236-0606S | 50,8 | 2.00 | 18,2 | 0.72 | 19,0 | 0.75 | 6,7 | 0.26 | 19,0 | 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 | 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. | |
| FF3362-0606S | 18,8 | 0.74 | 26,9 | 1.06 | 17,0 | 0.67 | 6,7 | 0.26 | 19,0 | 0.75 | 11/16-16 2B |

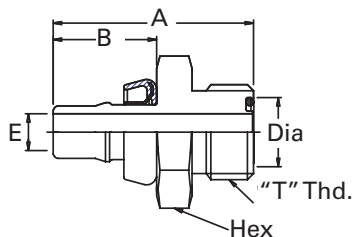
90° FF3246

| 90° PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|--------------------|------|------|------|------|------|------|-----|------|------|------|-------------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3246-0606S | 27,7 | 1.09 | 40,6 | 1.60 | 16,5 | 0.65 | 6,7 | 0.26 | 19,0 | 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 | 0.86 | 13/16-16 2B |

STC Adapters Male FOR-SEAL® to Male STC

STC adapters come standard with nitrile O-rings. See page 334 for seal options.

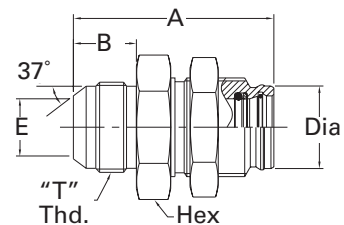
Straight FF3318T



| STRAIGHT PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|----------------------|------|------|------|------|------|------|-----|------|------|------|----------|
| | 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 |

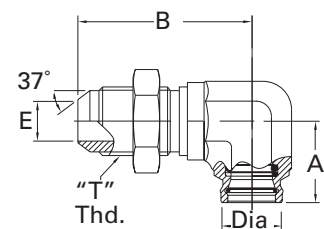
STC Adapters SAE 37° Male Flare to Female STC, Bulkhead Adapters

Straight FF3412



| STRAIGHT PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|----------------------|------|------|------|------|------|------|------|------|------|------|-------------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3412-1612S | 73,7 | 2.90 | 23,1 | 0.91 | 31,2 | 1.23 | 20,6 | 0.81 | 46,0 | 1.79 | 15/16-12 2A |

90° Elbow FF3044

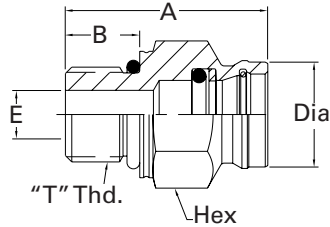


| 90° PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|-----------------|------|------|------|------|------|------|------|------|------|------|-------------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3044-1210S | 31,8 | 1.25 | 67,8 | 2.67 | 24,4 | 0.96 | 15,5 | 0.61 | 27,0 | 1.06 | 11/16-16 2A |
| FF3044-1616S | 46,4 | 1.83 | 64,5 | 2.54 | 41,0 | 1.61 | 21,4 | 0.84 | 41,0 | 1.61 | 15/16-12 2A |

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

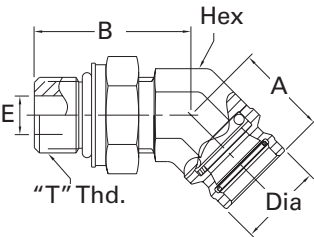
STC adapters come standard with nitrile O-rings. See page 334 for seal options.

Straight FF3061



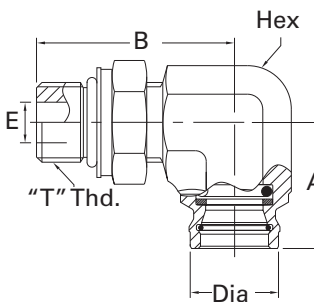
| STRAIGHT PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3061-1006S | 29,0 | 1.14 | 9,5 | 0.37 | 17,0 | 0.67 | 3,1 | 0.12 | 19,0 | 0.75 | M10x1 6g |
| FF3061-1206S | 30,5 | 1.20 | 11,0 | 0.43 | 17,0 | 0.67 | 4,1 | 0.16 | 19,0 | 0.75 | M12x1.5 6g |
| FF3061-1406S | 30,5 | 1.20 | 11,0 | 0.43 | 17,0 | 0.67 | 6,1 | 0.24 | 19,0 | 0.75 | M14x1.5 6g |
| FF3061-1408S | 34,8 | 1.37 | 11,0 | 0.43 | 20,3 | 0.80 | 6,1 | 0.24 | 21,0 | 0.82 | M14x1.5 6g |
| FF3061-1606S | 32,0 | 1.26 | 12,5 | 0.49 | 17,0 | 0.67 | 7,1 | 0.28 | 22,0 | 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 | 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 | 0.98 | M16-1.5 6g |
| FF3061-1806S | 33,5 | 1.32 | 14,0 | 0.55 | 17,0 | 0.67 | 9,1 | 0.36 | 24,0 | 0.94 | M18-1.5 6g |
| FF3061-1808S | 38,1 | 1.50 | 14,0 | 0.55 | 20,3 | 0.80 | 9,1 | 0.36 | 24,0 | 0.94 | M18-1.5 6g |
| FF3061-1810S | 39,4 | 1.55 | 14,0 | 0.55 | 24,4 | 0.96 | 9,1 | 0.36 | 25,0 | 0.98 | M18-1.5 6g |
| FF3061-1812S | 50,0 | 1.97 | 14,0 | 0.55 | 31,3 | 1.23 | 9,1 | 0.36 | 32,0 | 1.26 | M18-1.5 6g |
| FF3061-2210S | 40,4 | 1.59 | 15,0 | 0.59 | 24,4 | 0.96 | 12,1 | 0.48 | 27,0 | 1.06 | M22-1.5 6g |
| FF3061-2212S | 51,0 | 2.01 | 15,0 | 0.59 | 31,3 | 1.23 | 12,1 | 0.48 | 32,0 | 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. | |
| FF3065-1406S | 18,8 | 0.74 | 31,4 | 1.24 | 17,0 | 0.67 | 6,1 | 0.24 | 19,0 | 0.75 | M14-1.5 6g |
| FF3065-1606S | 18,8 | 0.74 | 33,5 | 1.32 | 17,0 | 0.67 | 7,1 | 0.28 | 19,0 | 0.75 | M16-1.5 6g |
| FF3065-1808S | 21,6 | 0.85 | 37,0 | 1.46 | 20,3 | 0.80 | 9,1 | 0.36 | 22,0 | 0.87 | M18-1.5 6g |
| FF3065-1810S | 25,9 | 1.02 | 42,5 | 1.67 | 24,4 | 0.96 | 9,1 | 0.36 | 27,0 | 1.06 | M18-1.5 6g |
| FF3065-2212S | 31,2 | 1.23 | 44,0 | 1.73 | 31,2 | 1.23 | 12,1 | 0.48 | 32,0 | 1.25 | M22-1.5 6g |
| FF3065-2712S | 30,3 | 1.19 | 52,6 | 2.07 | 31,0 | 1.21 | 15,1 | 0.60 | 36,0 | 1.40 | M27-2 6g |

90° Adjustable FF3067

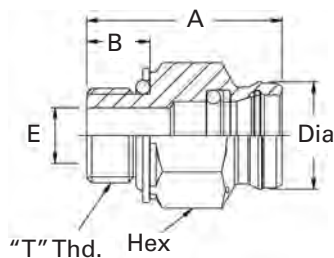


| 90° PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|--------------------|------|------|------|------|------|------|------|------|------|------|------------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3067-1406S | 24,9 | 0.98 | 35,5 | 1.40 | 17,0 | 0.67 | 6,1 | 0.24 | 19,0 | 0.75 | M14-1.5 6g |
| FF3067-1606S | 27,7 | 1.09 | 42,9 | 1.69 | 17,0 | 0.67 | 7,1 | 0.28 | 19,0 | 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 | 0.87 | M18-1.5 6g |
| FF3067-1810S | 33,3 | 1.31 | 47,5 | 1.87 | 24,4 | 0.96 | 9,1 | 0.36 | 27,0 | 1.06 | M18-1.5 6g |
| FF3067-2210S | 33,3 | 1.31 | 49,0 | 1.93 | 24,4 | 0.96 | 12,1 | 0.48 | 27,0 | 1.06 | M22-1.5 6g |
| FF3067-2212S | 37,6 | 1.48 | 50,8 | 2.00 | 31,2 | 1.23 | 12,1 | 0.48 | 32,0 | 1.25 | M22-1.5 6g |
| FF3067-2712S | 37,6 | 1.48 | 55,5 | 2.18 | 31,2 | 1.23 | 15,1 | 0.60 | 32,0 | 1.26 | M27-2 6g |

STC Adapters O-Ring Boss DIN 3852 Metric Male to Female STC

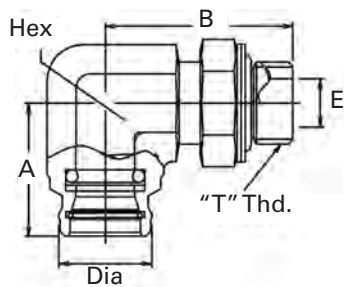
STC adapters come standard with nitrile O-rings. See page 334 for seal options.

Straight FF3284



| STRAIGHT PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------------|
| | 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

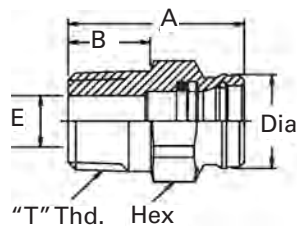


| 90° PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|--------------------|------|--------|------|--------|------|--------|------|--------|------|--------|------------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3286-1808S | 28.8 | (1.14) | 40.8 | (1.61) | 20.3 | (0.80) | 10.5 | (0.42) | 22.0 | (0.87) | M18-1.5 6g |

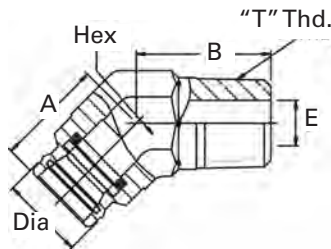
STC Adapters

Male BSPT to Female STC

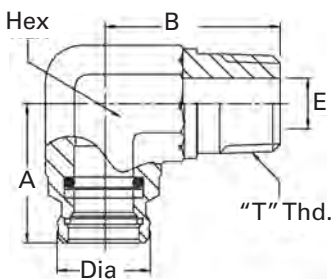
STC adapters come standard with nitrile O-rings. See page 334 for seal options.

Straight FF3503**STRAIGHT
PART NUMBER**

| PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|--------------|------|------|------|------|------|------|------|------|------|------|------------|
| | 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**

| PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|--------------|------|------|------|------|------|------|------|------|------|------|------------|
| | 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 |

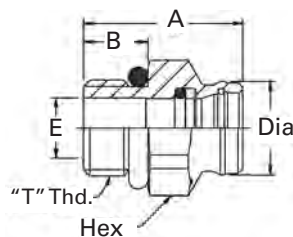
90° FF3507**90°
PART NUMBER**

| PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|--------------|------|------|------|------|------|------|------|------|------|------|------------|
| | 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 |

**STC Adapters
Male BSPP (Special JIS) to Female STC**

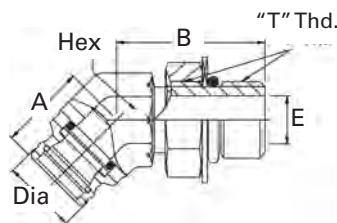
STC adapters come standard with nitrile O-rings. See page 334 for seal options.

Straight FF3509



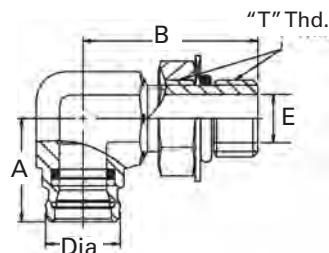
| STRAIGHT PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|-------------------------|------|------|------|------|------|------|------|------|------|------|-----------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3509-0406S | 30,1 | 1.19 | 12,0 | 0.47 | 17,0 | 0.67 | 6,1 | 0.24 | 19,0 | 0.75 | G1/4 - 19 |
| FF3509-0606S | 28,9 | 1.14 | 12,0 | 0.47 | 17,0 | 0.67 | 9,6 | 0.38 | 22,0 | 0.87 | G3/8 - 19 |
| FF3509-0808S | 34,6 | 1.37 | 14,0 | 0.55 | 20,3 | 0.80 | 13,1 | 0.52 | 27,0 | 1.07 | G1/2 - 14 |
| FF3509-1212S | 47,6 | 1.88 | 16,0 | 0.24 | 31,3 | 1.24 | 18,1 | 0.72 | 32,0 | 1.26 | G3/4 - 14 |

45° FF3511



| 45° PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|--------------------|------|------|------|------|------|------|------|------|------|------|-----------|
| | 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 | G1/4 - 19 |
| FF3511-0606S | 16,8 | 0.66 | 35,0 | 1.38 | 17,0 | 0.67 | 9,6 | 0.38 | 19,0 | 0.75 | G3/8 - 19 |
| FF3511-0808S | 23,6 | 0.93 | 40,2 | 1.59 | 20,3 | 0.80 | 13,1 | 0.52 | 22,0 | 0.87 | G1/2 - 14 |
| FF3511-1212S | 29,9 | 1.18 | 46,7 | 1.85 | 31,3 | 1.24 | 18,1 | 0.72 | 32,0 | 1.26 | G3/4 - 14 |

90° FF3513



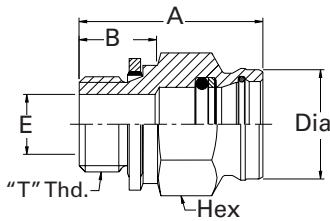
| 90° PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|--------------------|------|------|------|------|------|------|------|------|------|------|-----------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3513-0406S | 28.1 | 1.11 | 37.8 | 1.49 | 17.0 | 0.67 | 6.1 | 0.24 | 19.0 | 0.75 | G1/4 - 19 |
| FF3513-0606S | 28.1 | 1.11 | 39.5 | 1.56 | 17.0 | 0.67 | 9.6 | 0.38 | 19.0 | 0.75 | G3/8 - 19 |
| FF3513-0808S | 28.0 | 1.11 | 47.5 | 1.88 | 20.3 | 0.80 | 13.1 | 0.52 | 22.0 | 0.87 | G1/2 - 14 |
| FF3513-1212S | 38.0 | 1.50 | 56.4 | 2.23 | 31.3 | 1.24 | 18.1 | 0.72 | 32.0 | 1.26 | G3/4 - 14 |

WeatherGRIP™

STC Adapters

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

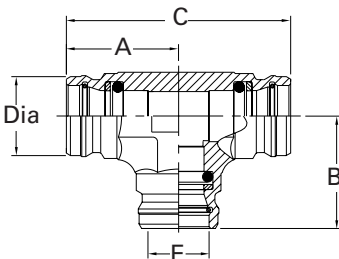
STC adapters come standard with nitrile O-rings. See page 334 for seal options.

Straight FF3218

| STRAIGHT PART NUMBER | A | | B | | DIA | | E | | HEX | | "T" THD |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------------|
| | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | |
| FF3218-0406S | 31,8 | 1.25 | 14,2 | 0.56 | 17,0 | 0.67 | 6,1 | 0.24 | 19,0 | 0.75 | G6 1/4-19A |
| FF3218-0606S | 32,3 | 1.27 | 14,6 | 0.58 | 17,0 | 0.67 | 9,6 | 0.38 | 22,0 | 0.87 | G6 3/8-19A |
| FF3218-0806S | 37,0 | 1.46 | 17,2 | 0.68 | 17,0 | 0.67 | 9,1 | 0.36 | 27,0 | 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 | 0.87 | G6 3/8-19A |
| FF3218-0808S | 38,6 | 1.52 | 17,2 | 0.68 | 20,3 | 0.80 | 12,3 | 0.48 | 27,0 | 1.06 | G6 1/2-14A |
| FF3218-0810S | 40,2 | 1.58 | 17,2 | 0.68 | 24,4 | 0.96 | 13,1 | 0.52 | 27,0 | 1.06 | G6 1/2-14A |
| FF3218-1210S | 42,2 | 1.66 | 19,2 | 0.75 | 24,4 | 0.96 | 15,5 | 0.61 | 32,0 | 1.26 | G6 3/4-14A |
| FF3218-1212S | 44,2 | 1.74 | 19,2 | 0.75 | 31,2 | 1.23 | 18,1 | 0.71 | 32,0 | 1.26 | G6 3/4-14A |

STC Adapters

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 |

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 |

Z-Series Sales Kit

Part number PR014040-01



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 |

VITON O-RINGS

| Size | Part Number |
|------|-------------|
| -06 | 22566-12 |
| -08 | 22566-112 |
| -10 | 22566-114 |
| -12 | 22566-117 |
| -16 | 22566-215 |