

Coaxial Closure Fittings

Swagelok® coaxial closure fittings reduce the cost of installing coaxial tubing systems used in research and development, semiconductor manufacturing, and other commercial applications that use hazardous or toxic gases.

Coaxial tubing systems require a closure over the jacket tube to seal the system after the process tubing has been welded. Typically, the closure tube is welded in place. Using a Swagelok coaxial closure fitting will “close-in” the system, eliminating the need for difficult, time-consuming, and expensive welding and removing the risk of possible damage to process tubing from weld drop-through.

Swagelok tube fittings are easy to install and have demonstrated reliability and performance. In addition, Swagelok tube fitting end connections can be checked for proper assembly with the Swagelok gap inspection gage before pressurizing the system.



Material

Material	Bar Stock ^①	Forgings ^②
316 stainless steel	ASTM A276, ASME SA479, EN 1.4401	ASTM A182, ASME SA182, EN 1.4401

① Straight fittings and tube adapters.

② Elbows, crosses, and tees.

Pressure Ratings

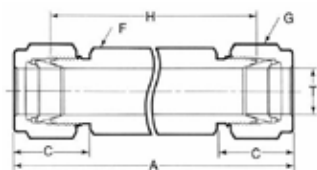
Pressure ratings for fittings with both tube fitting ends and bored-through fittings are determined by the end connection with the lower pressure rating.

Swagelok tube fitting ends are rated to the working pressure of tubing as listed in Swagelok *Tubing Data*, MS-01-107. Careful selection of high-quality tubing is important when installing safe, leak-tight systems.

Bored-through fittings have a reduced pressure rating. In general we have multiplied the allowable working pressure of the tubing, as found in Swagelok *Tubing Data*, MS-01-107, by the factors listed in the table below.

Size (in.)	Size (mm)	Factor
Up to 1/2 in.	Up to 12 mm	0.75
Above 1/2 in. to 3/4 in.	Above 12 mm to 18 mm	0.50
Above 3/4 in.	Above 18 mm	0.25

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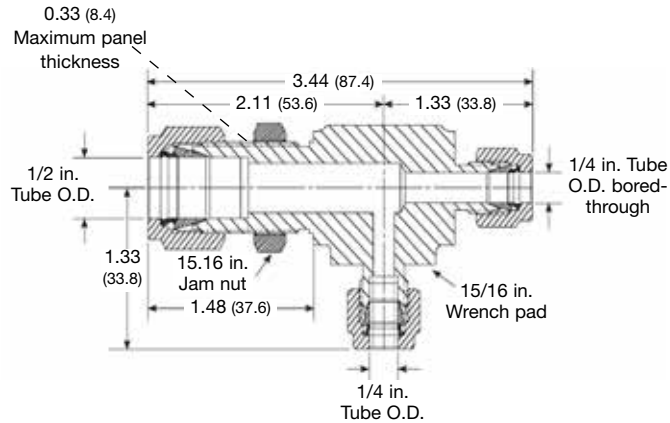
T Tube OD in.	Ordering Number	Dimensions, in. (mm)				
		A	C	F Hex Flat	G Hex Flat	H
1/2	SS-810-6-0029	5.30 (135)	0.86 (21.8)	13/16	7/8	4.50 (114)
	SS-810-6-0030	4.30 (109)	0.86 (21.8)	13/16	7/8	3.50 (88.9)
5/8	SS-1010-6-0016	4.42 (112)	0.86 (21.8)	15/16	1	3.62 (91.9)
	SS-1010-6-0017	5.30 (135)	0.86 (21.8)	15/16	1	4.50 (114)
3/4	SS-1210-6-0021	6.55 (166)	0.86 (21.8)	1 1/16	1 1/8	5.75 (146)
	SS-1210-6-0051BT	4.30 (109)	0.86 (21.8)	1 1/16	1 1/8	3.50 (88.9)
1	SS-1610-6-0010	3.50 (88.9)	1.04 (26.4)	1 3/8	1 1/2	2.54 (64.5)
	SS-1610-6-0013BT	4.30 (109)	1.04 (26.4)	1 3/8	1 1/2	3.34 (84.8)
	SS-1610-6-0015BT	6.50 (165)	1.04 (26.4)	1 3/8	1 1/2	5.54 (141)

Dimensions shown with Swagelok nuts finger-tight. Dimensions are for reference only and are subject to change.

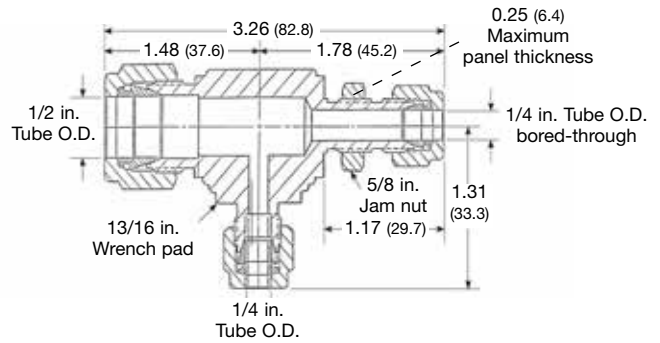
Swagelok®

Bulkhead Mounted Tees

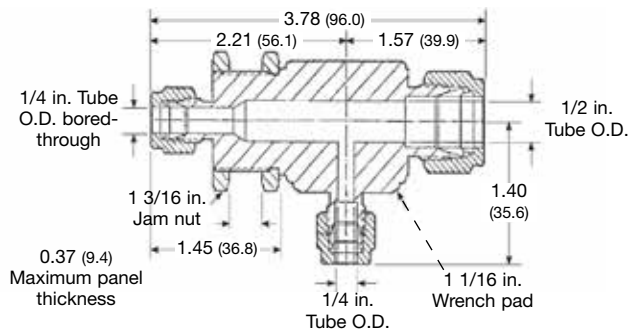
SS-810-31-0001



SS-810-3-0032

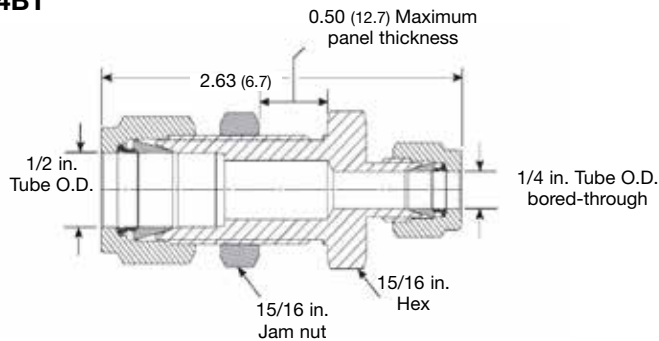


SS-810-3-0034 Gaugeable Bulkhead



Bulkhead Reducing Union Tube Fitting

SS-810-61-4BT



Dimensions shown with Swagelok nuts finger-tight. Dimensions are for reference only and are subject to change.

Safe Product Selection

When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.

⚠ WARNING

Do not mix/interchange Swagelok products or components not governed by industrial design standards, including Swagelok tube fitting end connections, with those of other manufacturers.

Warranty Information

Swagelok products are backed by The Swagelok Limited Lifetime Warranty. For a copy, visit swagelok.com or contact your authorized Swagelok representative.