

# Medium & High Pressure Fittings and Tubing

DHL Series Tube Fittings and Tubing



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Medium Pressure Tube Fittings and Tubing



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# DHL Series Tube Fittings and Tubing

15,000 psig (1034 bar)



Medium & High Pressure  
Fittings and Tubing

Quick Couplings

Medium & High Pressure  
Valves

Line Filters

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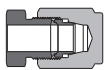
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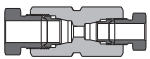
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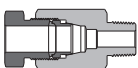
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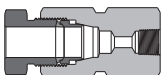
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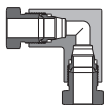
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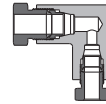
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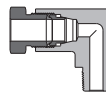
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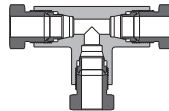
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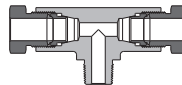
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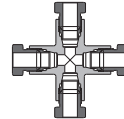
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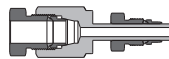
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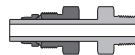
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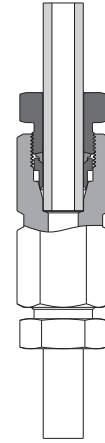
Tools and Installation Instructions

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# Tube Fittings

## Features

- ⦿ Working pressure up to 15,000 psig (1034 bar)
- ⦿ Double ferrules to compress sleeve
- ⦿ Easy and quick connection to DHL Series tubing
- ⦿ Tubing sizes available in 1/8", 1/4", 3/8", 1/2", 9/16" and 3/4"
- ⦿ High tensile 316 Stainless Steel as raw material
- ⦿ Nut threads coated with molybdenum disulfide-based lubricant to minimize the friction
- ⦿ Every fitting marked with size, material and heat number
- ⦿ Long tube-support area to improve vibration resistance and line loads
- ⦿ 4:1 safety factor



## Standard Materials of Construction

Component	Material	Specification
<i>Body, ferrule</i>	<i>316 stainless steel</i>	<i>ASTM A479</i>
Nut	316 stainless steel	ASTM A479

*Wetted components listed in italics.*

## Working Pressure

- ⦿ Working pressure is determined by the lowest working pressure of the ends.

## Tube Ends

The working pressure of the tube ends at ambient temperature is determined by the working pressure of the FITOK tubing used. For details, please refer to "Working Pressure of Tubing" on A-14.

## Heavy-Duty Stud Ends (SAE J1926-2)

Working pressure for heavy-duty end connections listed in this Catalog is rated to 10,000 psig (690 bar).

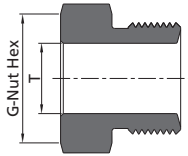
## NPT Ends

NPT Size in.	Working Pressure psig (bar)
1/8	15,000 (1034)
1/4	
3/8	
1/2	10,000 (690)
3/4	
1	

## Working Temperature

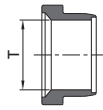
Connection Type	Working Temperature Range, °F (°C)
Tube Ends	-325 to 800 (-198 to 427)
Heavy-Duty Stud Ends (SAE J1926-2)	0 to 400 (-17.8 to 204)
NPT Ends	-325 to 400 (-198 to 204)

## Nuts



Tube		
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)
		G
1/8	SS-N-DHL2	0.37 (9.5)
1/4	SS-N-DHL4	0.63 (15.9)
3/8	SS-N-DHL6	0.75 (19.1)
1/2	SS-N-DHL8	0.94 (23.8)
9/16	SS-N-DHL9	1.06 (27.0)
3/4	SS-N-DHL12	1.38 (34.9)

## Front Ferrules



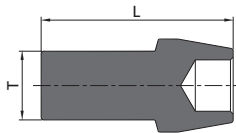
Tube	
T - Tube O.D. in.	Ordering Number
1/8	SS-FF-DHL2
1/4	SS-FF-DHL4
3/8	SS-FF-DHL6
1/2	SS-FF-DHL8
9/16	SS-FF-DHL9
3/4	SS-FF-DHL12

## Rear Ferrules



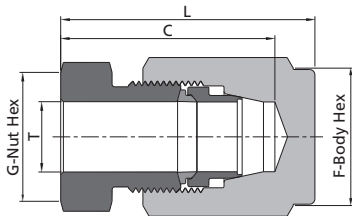
Tube	
T - Tube O.D. in.	Ordering Number
1/8	SS-RF-DHL2
1/4	SS-RF-DHL4
3/8	SS-RF-DHL6
1/2	SS-RF-DHL8
9/16	SS-RF-DHL9
3/4	SS-RF-DHL12

## Plugs



Tube		
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)
		L
1/8	SS-TP-DHL2	0.95 (24.2)
1/4	SS-TP-DHL4	1.20 (30.4)
3/8	SS-TP-DHL6	1.19 (30.2)
1/2	SS-TP-DHL8	1.36 (34.6)
9/16	SS-TP-DHL9	1.73 (44.0)
3/4	SS-TP-DHL12	2.30 (58.3)

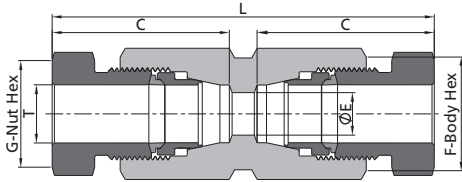
## Caps



Tube					
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)			
		L	C	F	G
1/8	SS-TC-DHL2	1.22 (31.1)	1.07 (27.2)	0.50 (12.7)	0.37 (9.5)
1/4	SS-TC-DHL4	1.70 (43.1)	1.38 (35.2)	0.63 (15.9)	0.63 (15.9)
3/8	SS-TC-DHL6	1.76 (44.8)	1.42 (36.1)	0.75 (19.1)	0.75 (19.1)
1/2	SS-TC-DHL8	2.03 (51.6)	1.56 (39.6)	1.00 (25.4)	0.94 (23.8)
9/16	SS-TC-DHL9	2.47 (62.8)	1.93 (49.0)	1.13 (28.6)	1.06 (27.0)
3/4	SS-TC-DHL12	3.22 (81.9)	2.49 (63.3)	1.50 (38.1)	1.38 (34.9)

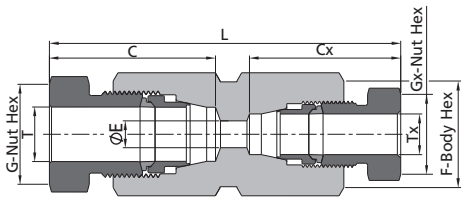
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## Unions



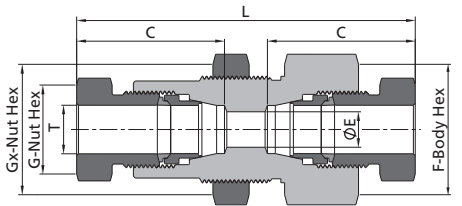
Tube		Dimensions, in. (mm)					
T - Tube O.D. in.	Ordering Number	L	C	E	F	G	
1/8	SS-U-DHL2	2.45 (62.2)	1.07 (27.2)	0.09 (2.4)	0.50 (12.7)	0.37 (9.5)	
1/4	SS-U-DHL4	3.00 (76.2)	1.38 (35.2)	0.19 (4.8)	0.63 (15.9)	0.63 (15.9)	
3/8	SS-U-DHL6	3.07 (77.9)	1.42 (36.1)	0.25 (6.4)	0.75 (19.1)	0.75 (19.1)	
1/2	SS-U-DHL8	3.36 (85.4)	1.56 (39.6)	0.37 (9.5)	1.00 (25.4)	0.94 (23.8)	
9/16	SS-U-DHL9	4.11 (104.4)	1.93 (49.0)	0.41 (10.4)	1.13 (28.6)	1.06 (27.0)	
3/4	SS-U-DHL12	5.38 (136.7)	2.49 (63.3)	0.56 (14.2)	1.50 (38.1)	1.38 (34.9)	

## Reducing Unions



Tube			Dimensions, in. (mm)						
T - Tube O.D. in.	Tx - Tube O.D. in.	Ordering Number	L	C	Cx	E	F	G	Gx
1/4	1/8	SS-U-DHL4-DHL2	2.73 (69.4)	1.39 (35.2)	1.07 (27.2)	0.09 (2.4)	0.63 (15.9)	0.63 (15.9)	0.37 (9.5)
3/8	1/8	SS-U-DHL6-DHL2	2.77 (70.3)	1.42 (36.1)	1.07 (27.2)	0.09 (2.4)	0.75 (19.1)	0.75 (19.1)	0.37 (9.5)
3/8	1/4	SS-U-DHL6-DHL4	3.06 (77.6)	1.42 (36.1)	1.39 (35.2)	0.19 (4.8)	0.75 (19.1)	0.75 (19.1)	0.63 (15.9)
1/2	1/4	SS-U-DHL8-DHL4	3.35 (85.1)	1.56 (39.6)	1.39 (35.2)	0.19 (4.8)	1.00 (25.4)	0.94 (23.8)	0.63 (15.9)
1/2	3/8	SS-U-DHL8-DHL6	3.32 (84.3)	1.56 (39.6)	1.42 (36.1)	0.25 (6.4)	1.00 (25.4)	0.94 (23.8)	0.75 (19.1)
9/16	1/2	SS-U-DHL9-DHL8	4.04 (102.5)	1.93 (49.0)	1.56 (39.6)	0.37 (9.5)	1.13 (28.6)	1.06 (27.0)	0.94 (23.8)
3/4	1/2	SS-U-DHL12-DHL8	4.73 (120.2)	2.49 (63.3)	1.56 (39.6)	0.37 (9.5)	1.50 (38.1)	1.38 (34.9)	0.94 (23.8)

## Bulkhead Unions



Tube		Dimensions, in. (mm)							
T - Tube O.D. in.	Ordering Number	L	C	E	F	G	Gx	Panel Hole Size	Maximum Panel Thickness
1/8	SS-BU-DHL2	2.95 (75.0)	1.07 (27.2)	0.09 (2.4)	0.75 (19.1)	0.37 (9.5)	0.81 (20.6)	0.69 (17.5)	0.38 (9.7)
1/4	SS-BU-DHL4	3.27 (83.1)	1.38 (35.2)	0.19 (4.8)	1.00 (25.4)	0.63 (15.9)	1.00 (25.4)	0.94 (23.9)	0.38 (9.7)
3/8	SS-BU-DHL6	3.21 (81.6)	1.42 (36.1)	0.25 (6.4)	1.00 (25.4)	0.75 (19.1)	1.06 (27.0)	0.94 (23.9)	0.38 (9.7)
1/2	SS-BU-DHL8	3.93 (99.8)	1.56 (39.6)	0.37 (9.5)	1.38 (34.9)	0.94 (23.8)	1.38 (34.9)	1.13 (28.6)	0.38 (9.7)
9/16	SS-BU-DHL9	4.64 (117.8)	1.93 (49.0)	0.41 (10.4)	1.63 (41.3)	1.06 (27.0)	1.63 (41.3)	1.33 (33.7)	0.38 (9.7)
3/4	SS-BU-DHL12	5.82 (147.9)	2.49 (63.3)	0.56 (14.2)	1.87 (47.6)	1.38 (34.9)	1.87 (47.6)	1.64 (41.7)	0.38 (9.7)

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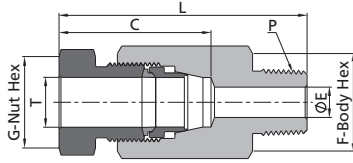
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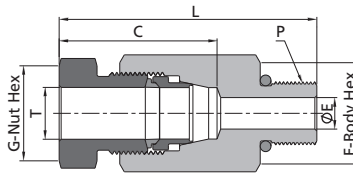
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## Male Connectors



Tube			NPT Thread				
T - Tube O.D. in.	P - NPT Size in.	Ordering Number	Dimensions, in. (mm)				
			L	C	E	F	G
1/8	1/8	SS-CM-DHL2-NS2	1.60 (40.6)	1.07 (27.2)	0.09 (2.4)	0.50 (12.7)	0.37 (9.5)
1/8	1/4	SS-CM-DHL2-NS4	1.72 (43.8)	1.07 (27.2)	0.09 (2.4)	0.56 (14.3)	0.37 (9.5)
1/8	3/8	SS-CM-DHL2-NS6	1.72 (43.8)	1.07 (27.2)	0.09 (2.4)	0.69 (17.5)	0.37 (9.5)
1/4	1/8	SS-CM-DHL4-NS2	1.95 (49.5)	1.39 (35.2)	0.19 (4.8)	0.63 (15.9)	0.63 (15.9)
1/4	1/4	SS-CM-DHL4-NS4	2.08 (52.8)	1.39 (35.2)	0.19 (4.8)	0.63 (15.9)	0.63 (15.9)
1/4	3/8	SS-CM-DHL4-NS6	2.08 (52.8)	1.39 (35.2)	0.19 (4.8)	0.69 (17.5)	0.63 (15.9)
1/4	1/2	SS-CM-DHL4-NS8	2.32 (59.0)	1.39 (35.2)	0.19 (4.8)	0.87 (22.2)	0.63 (15.9)
3/8	1/4	SS-CM-DHL6-NS4	2.17 (55.1)	1.42 (36.1)	0.25 (6.4)	0.75 (19.1)	0.75 (19.1)
3/8	3/8	SS-CM-DHL6-NS6	2.17 (55.1)	1.42 (36.1)	0.25 (6.4)	0.75 (19.1)	0.75 (19.1)
3/8	1/2	SS-CM-DHL6-NS8	2.30 (58.3)	1.42 (36.1)	0.25 (6.4)	0.87 (22.2)	0.75 (19.1)
1/2	1/4	SS-CM-DHL8-NS4	2.53 (64.3)	1.56 (39.6)	0.25 (6.4)	1.00 (25.4)	0.94 (23.8)
1/2	3/8	SS-CM-DHL8-NS6	2.53 (64.3)	1.56 (39.6)	0.31 (7.9)	1.00 (25.4)	0.94 (23.8)
1/2	1/2	SS-CM-DHL8-NS8	2.65 (67.4)	1.56 (39.6)	0.37 (9.5)	1.00 (25.4)	0.94 (23.8)
1/2	3/4	SS-CM-DHL8-NS12	2.53 (64.3)	1.56 (39.6)	0.37 (9.5)	1.06 (27.0)	0.94 (23.8)
9/16	1/4	SS-CM-DHL9-NS4	3.03 (77.0)	1.93 (49.0)	0.25 (6.4)	1.13 (28.6)	1.06 (27.0)
9/16	1/2	SS-CM-DHL9-NS8	3.11 (79.1)	1.93 (49.0)	0.41 (10.4)	1.13 (28.6)	1.06 (27.0)
3/4	1/2	SS-CM-DHL12-NS8	3.74 (95.1)	2.49 (63.3)	0.41 (10.4)	1.50 (38.1)	1.38 (34.9)
3/4	3/4	SS-CM-DHL12-NS12	3.74 (95.1)	2.49 (63.3)	0.56 (14.2)	1.50 (38.1)	1.38 (34.9)
3/4	1	SS-CM-DHL12-NS16	3.83 (97.4)	2.49 (63.3)	0.56 (14.2)	1.50 (38.1)	1.38 (34.9)



Tube			Heavy-duty SAE/MS				
T - Tube O.D. in.	P - SAE/MS Thread Size	Ordering Number	Dimensions, in. (mm)				
			L	C	E	F	G
1/8	7/16-20	SS-CM-DHL2-SH7	1.60 (40.6)	1.07 (27.2)	0.09 (2.4)	0.56 (14.3)	0.37 (9.5)
1/8	9/16-18	SS-CM-DHL2-SH9	1.66 (42.2)	1.07 (27.2)	0.09 (2.4)	0.69 (17.5)	0.37 (9.5)
1/4	7/16-20	SS-CM-DHL4-SH7	2.04 (51.7)	1.39 (35.2)	0.18 (4.5)	0.63 (15.9)	0.63 (15.9)
1/4	9/16-18	SS-CM-DHL4-SH9	2.07 (52.7)	1.39 (35.2)	0.19 (4.8)	0.69 (17.5)	0.63 (15.9)
3/8	7/16-20	SS-CM-DHL6-SH7	2.09 (53.0)	1.42 (36.1)	0.18 (4.5)	0.75 (19.1)	0.75 (19.1)
3/8	9/16-18	SS-CM-DHL6-SH9	2.13 (54.0)	1.42 (36.1)	0.25 (6.4)	0.75 (19.1)	0.75 (19.1)
1/2	7/16-20	SS-CM-DHL8-SH7	2.49 (63.3)	1.56 (39.6)	0.18 (4.5)	1.00 (25.4)	0.94 (23.8)
1/2	9/16-18	SS-CM-DHL8-SH9	2.49 (63.3)	1.56 (39.6)	0.30 (7.5)	1.00 (25.4)	0.94 (23.8)

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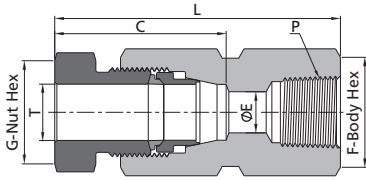
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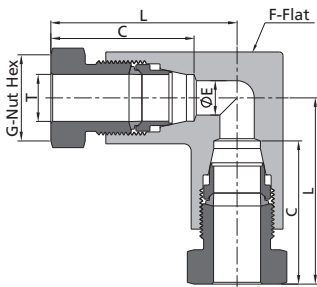
Technical Information

## Female Connectors



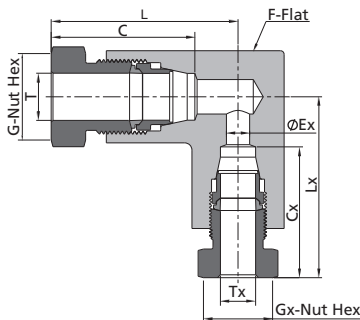
Tube			NPT Thread				
T - Tube O.D. in.	P - NPT Size in.	Ordering Number	Dimensions, in. (mm)				
			L	C	E	F	G
1/8	1/8	SS-CF-DHL2-NS2	1.97 (50.1)	1.07 (27.2)		0.63 (15.9)	0.37 (9.5)
1/8	1/4	SS-CF-DHL2-NS4	2.01 (53.3)	1.07 (27.2)		0.94 (23.8)	0.37 (9.5)
1/4	1/4	SS-CF-DHL4-NS4	2.33 (59.1)	1.38 (35.2)		0.94 (23.8)	0.63 (15.9)
3/8	1/4	SS-CF-DHL6-NS4	2.42 (61.5)	1.42 (36.1)		0.94 (23.8)	0.75 (19.1)
1/2	1/4	SS-CF-DHL8-NS4	2.78 (70.6)	1.56 (39.6)		1.00 (25.4)	0.94 (23.8)
1/2	1/2	SS-CF-DHL8-NS8	3.03 (77.0)	1.56 (39.6)		1.38 (34.9)	0.94 (23.8)
3/4	1/2	SS-CF-DHL12-NS8	3.85 (97.8)	2.49 (63.3)		1.50 (38.1)	1.38 (34.9)

## Union Elbows



Tube			Dimensions, in. (mm)				
T - Tube O.D. in.	Ordering Number		L	C	E	F	G
1/8	SS-LU-DHL2		1.29 (32.7)	1.07 (27.2)	0.09 (2.4)	0.63 (15.9)	0.37 (9.5)
1/4	SS-LU-DHL4		1.70 (43.1)	1.38 (35.2)	0.19 (4.8)	0.63 (15.9)	0.63 (15.9)
3/8	SS-LU-DHL6		1.67 (42.4)	1.42 (36.1)	0.25 (6.4)	0.75 (19.1)	0.75 (19.1)
1/2	SS-LU-DHL8		2.03 (51.6)	1.56 (39.6)	0.37 (9.5)	1.00 (25.4)	0.94 (23.8)
9/16	SS-LU-DHL9		2.43 (61.8)	1.93 (49.0)	0.41 (10.4)	1.38 (34.9)	1.06 (27.0)
3/4	SS-LU-DHL12		3.11 (79.1)	2.49 (63.3)	0.56 (14.2)	1.50 (38.1)	1.38 (34.9)

## Union Reducing Elbows



Tube			Dimensions, in. (mm)							
T - Tube O.D. in.	Tx - Tube O.D. in.	Ordering Number	L	Lx	C	Cx	Ex	F	G	Gx
1/4	1/8	SS-LU-DHL4-DHL2	1.70 (43.1)	1.37 (34.7)	1.38 (35.2)	1.07 (27.2)	0.09 (2.4)	0.63 (15.9)	0.63 (15.9)	0.37 (9.5)
3/8	1/8	SS-LU-DHL6-DHL2	1.67 (42.4)	1.33 (33.7)	1.42 (36.1)	1.07 (27.2)	0.09 (2.4)	0.75 (19.1)	0.75 (19.1)	0.37 (9.5)
3/8	1/4	SS-LU-DHL6-DHL4	1.67 (42.4)	1.70 (43.1)	1.42 (36.1)	1.38 (35.2)	0.19 (4.8)	0.75 (19.1)	0.75 (19.1)	0.63 (15.9)
1/2	1/4	SS-LU-DHL8-DHL4	2.03 (51.6)	1.95 (49.5)	1.56 (39.6)	1.38 (35.2)	0.19 (4.8)	0.94 (23.8)	0.94 (23.8)	0.63 (15.9)
1/2	3/8	SS-LU-DHL8-DHL6	2.03 (51.6)	1.96 (49.8)	1.56 (39.6)	1.42 (36.1)	0.25 (6.4)	0.94 (23.8)	0.94 (23.8)	0.75 (19.1)
9/16	1/2	SS-LU-DHL9-DHL8	2.43 (61.8)	2.37 (40.3)	1.93 (49.0)	1.56 (39.6)	0.37 (9.5)	1.38 (34.9)	1.06 (27.0)	0.94 (23.8)
3/4	1/2	SS-LU-DHL12-DHL8	3.11 (79.1)	2.81 (71.3)	2.49 (63.3)	1.56 (39.6)	0.37 (9.5)	1.50 (38.1)	1.38 (34.9)	0.94 (23.8)

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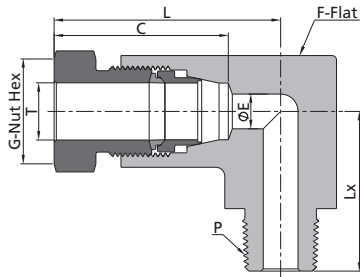
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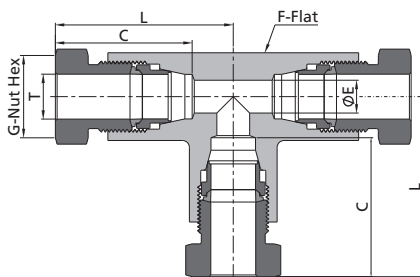


## Male Elbows



Tube			NPT Thread						
T - Tube O.D. in.	P - NPT Size in.	Ordering Number	Dimensions, in. (mm)						
			L	Lx	C	E	F	G	
1/8	1/8	SS-LM-DHL2-NS2	1.29 (32.7)	0.79 (20.0)	1.07 (27.2)	0.09 (2.4)	0.63 (15.9)	0.37 (9.5)	
1/8	1/4	SS-LM-DHL2-NS4	1.39 (35.3)	1.00 (25.4)	1.07 (27.2)	0.09 (2.4)	0.63 (15.9)	0.37 (9.5)	
1/8	3/8	SS-LM-DHL2-NS6	1.47 (37.4)	1.00 (25.4)	1.07 (27.2)	0.09 (2.4)	0.75 (19.1)	0.37 (9.5)	
1/4	1/4	SS-LM-DHL4-NS4	1.70 (43.1)	0.94 (23.8)	1.38 (35.2)	0.19 (4.8)	0.63 (15.9)	0.63 (15.9)	
1/4	3/8	SS-LM-DHL4-NS6	1.70 (43.1)	1.00 (25.4)	1.38 (35.2)	0.19 (4.8)	0.75 (19.1)	0.63 (15.9)	
1/4	1/2	SS-LM-DHL4-NS8	1.70 (43.1)	1.38 (34.9)	1.38 (35.2)	0.19 (4.8)	1.00 (25.4)	0.63 (15.9)	
3/8	1/4	SS-LM-DHL6-NS4	1.67 (42.4)	1.00 (25.4)	1.42 (36.1)	0.25 (6.4)	0.75 (19.1)	0.75 (19.1)	
3/8	3/8	SS-LM-DHL6-NS6	1.67 (42.4)	1.06 (27.0)	1.42 (36.1)	0.25 (6.4)	0.75 (19.1)	0.75 (19.1)	
3/8	1/2	SS-LM-DHL6-NS8	1.67 (42.4)	1.38 (34.9)	1.42 (36.1)	0.25 (6.4)	1.00 (25.4)	0.75 (19.1)	
1/2	1/4	SS-LM-DHL8-NS4	2.03 (51.6)	1.19 (30.2)	1.56 (39.6)	0.25 (6.4)	1.00 (25.4)	0.94 (23.8)	
1/2	3/8	SS-LM-DHL8-NS6	2.03 (51.6)	1.19 (30.2)	1.56 (39.6)	0.31 (7.9)	1.00 (25.4)	0.94 (23.8)	
1/2	1/2	SS-LM-DHL8-NS8	2.03 (51.6)	1.38 (34.9)	1.56 (39.6)	0.37 (9.5)	1.00 (25.4)	0.94 (23.8)	
9/16	1/2	SS-LM-DHL9-NS8	2.43 (61.8)	1.56 (39.5)	1.93 (49.0)	0.41 (10.4)	1.38 (34.9)	1.06 (27.0)	
3/4	1/2	SS-LM-DHL12-NS8	3.11 (79.1)	1.73 (44.0)	2.49 (63.3)	0.41 (10.4)	1.50 (38.1)	1.38 (34.9)	
3/4	3/4	SS-LM-DHL12-NS12	3.11 (79.1)	1.73 (44.0)	2.49 (63.3)	0.56 (14.2)	1.50 (38.1)	1.38 (34.9)	

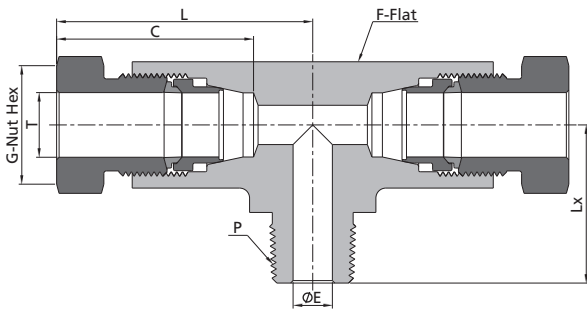
## Union Tees



Tube		Dimensions, in. (mm)				
T - Tube O.D. in.	Ordering Number	L	C	E	F	G
1/8	SS-TTT-DHL2	1.37 (34.7)	1.07 (27.2)	0.09 (2.4)	0.63 (15.9)	0.37 (9.5)
1/4	SS-TTT-DHL4	1.70 (43.1)	1.38 (35.2)	0.19 (4.8)	0.63 (15.9)	0.63 (15.9)
3/8	SS-TTT-DHL6	1.67 (42.4)	1.42 (36.1)	0.25 (6.4)	0.75 (19.1)	0.75 (19.1)
1/2	SS-TTT-DHL8	2.03 (51.6)	1.56 (39.6)	0.37 (9.5)	1.00 (25.4)	0.94 (23.8)
9/16	SS-TTT-DHL9	2.43 (61.8)	1.93 (49.0)	0.41 (10.4)	1.38 (34.9)	1.06 (27.0)
3/4	SS-TTT-DHL12	3.11 (79.1)	2.49 (63.3)	0.56 (14.2)	1.50 (38.1)	1.38 (34.9)

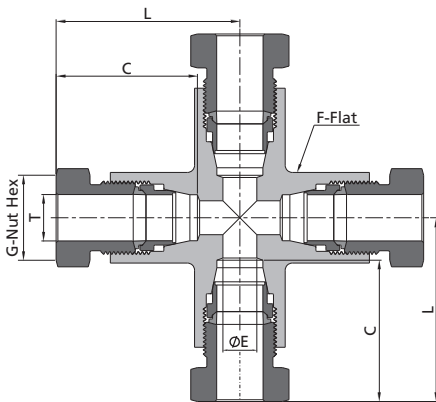
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## Male Branch Tees



Tube			NPT Thread						
T - Tube O.D. in.	P - NPT Size in.	Ordering Number	Dimensions, in. (mm)						
			L	Lx	C	E	F	G	
1/8	1/8	SS-TTM-DHL2-NS2	1.37 (34.7)	0.79 (20.0)	1.07 (27.2)	0.09 (2.4)	0.63 (15.9)	0.37 (9.5)	
1/8	1/4	SS-TTM-DHL2-NS4	1.37 (34.7)	1.00 (25.4)	1.07 (27.2)	0.09 (2.4)	0.63 (15.9)	0.37 (9.5)	
1/4	1/8	SS-TTM-DHL4-NS2	1.70 (43.1)	0.81 (20.6)	1.38 (35.2)	0.19 (4.8)	0.63 (15.9)	0.63 (15.9)	
1/4	1/4	SS-TTM-DHL4-NS4	1.70 (43.1)	1.00 (25.4)	1.38 (35.2)	0.19 (4.8)	0.63 (15.9)	0.63 (15.9)	
3/8	1/4	SS-TTM-DHL6-NS4	1.67 (42.4)	1.06 (27.0)	1.42 (36.1)	0.25 (6.4)	0.75 (19.1)	0.75 (19.1)	
1/2	1/4	SS-TTM-DHL8-NS4	2.03 (51.6)	1.19 (30.2)	1.56 (39.6)	0.25 (6.4)	1.00 (25.4)	0.94 (23.8)	
1/2	3/8	SS-TTM-DHL8-NS6	2.03 (51.6)	1.19 (30.2)	1.56 (39.6)	0.31 (7.9)	1.00 (25.4)	0.94 (23.8)	
3/4	3/4	SS-TTM-DHL12-NS12	3.11 (79.1)	1.73 (44.0)	2.49 (63.3)	0.56 (14.2)	1.50 (38.1)	1.38 (34.9)	

## Union Crosses



Tube		Dimensions, in. (mm)				
T - Tube O.D. in.	Ordering Number	L	C	E	F	G
1/8	SS-C-DHL2	1.37 (34.7)	1.07 (27.2)	0.09 (2.4)	0.63 (15.9)	0.37 (9.5)
1/4	SS-C-DHL4	1.70 (43.1)	1.38 (35.2)	0.19 (4.8)	0.63 (15.9)	0.63 (15.9)
3/8	SS-C-DHL6	1.67 (42.4)	1.42 (36.1)	0.25 (6.4)	0.75 (19.1)	0.75 (19.1)
1/2	SS-C-DHL8	2.03 (51.6)	1.56 (39.6)	0.37 (9.5)	1.00 (25.4)	0.94 (23.8)
9/16	SS-C-DHL9	2.43 (61.8)	1.93 (49.0)	0.41 (10.4)	1.38 (34.9)	1.06 (27.0)
3/4	SS-C-DHL12	3.11 (79.1)	2.49 (63.3)	0.56 (14.2)	1.50 (38.1)	1.38 (34.9)

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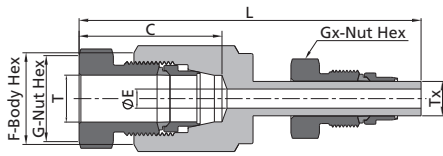
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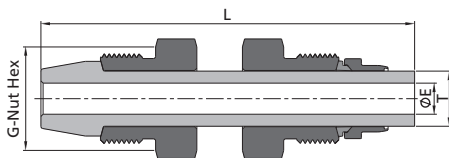
## Reducers <sup>①</sup>



Tube			Dimensions, in. (mm)						
T - Tube O.D. in.	Tx - Tube O.D. in.	Ordering Number	L	C	E	F	G	Gx	
1/4	3/8	SS-R-DHL4-DHM6	3.20 (82.1)	1.38 (35.2)	0.19 (4.8)	0.63 (15.9)	0.63 (15.9)	0.75 (19.1)	
1/4	1/2	SS-R-DHL4-DHM8	3.37 (85.5)	1.38 (35.2)	0.19 (4.8)	0.63 (15.9)	0.63 (15.9)	0.94 (23.8)	
3/8	1/2	SS-R-DHL6-DHM8	3.43 (87.1)	1.42 (36.1)	0.25 (6.4)	0.75 (19.1)	0.75 (19.1)	0.94 (23.8)	
1/2	3/8	SS-R-DHL8-DHM6	3.53 (89.7)	1.56 (39.6)	0.21 (5.3)	1.00 (25.4)	0.94 (23.8)	0.75 (19.1)	
1/2	3/4	SS-R-DHL8-DHM12	5.13 (130.4)	1.56 (39.6)	0.37 (9.5)	1.00 (25.4)	0.94 (23.8)	1.38 (34.9)	
9/16	3/4	SS-R-DHL9-DHM12	5.32 (135.1)	1.93 (49.0)	0.41 (10.4)	1.13 (28.6)	1.06 (27.0)	1.38 (34.9)	
3/4	9/16	SS-R-DHL12-DHM9	5.46 (138.6)	2.49 (63.3)	0.31 (7.9)	1.50 (38.1)	1.38 (34.9)	1.06 (27.0)	

<sup>①</sup> The right ends of reducers will have been preassembled with ferrules before shipping. Please follow the Reinstallation Instructions when installing the reducers.

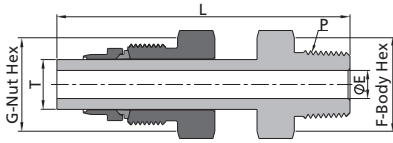
## Port Connectors <sup>①</sup>



Tube		Dimensions, in. (mm)		
T - Tube O.D. in.	Ordering Number	L	E	G
1/8	SS-P-DHL2	1.94 (49.2)	0.06 (1.6)	0.37 (9.5)
1/4	SS-P-DHL4	2.49 (63.2)	0.12 (3.0)	0.63 (15.9)
3/8	SS-P-DHL6	2.58 (65.5)	0.21 (5.3)	0.75 (19.1)
1/2	SS-P-DHL8	2.85 (72.3)	0.28 (7.1)	0.94 (23.8)
9/16	SS-P-DHL9	3.60 (91.4)	0.31 (7.9)	1.06 (27.0)
3/4	SS-P-DHL12	4.52 (114.9)	0.42 (10.7)	1.38 (34.9)

<sup>①</sup> The port connectors will have been preassembled with ferrules before shipping. Please follow the Reinstallation Instructions when installing the port connectors.

# Adapters <sup>①</sup>



Tube			NPT Thread			
T - Tube O.D. in.	P - NPT Size	Ordering Number	Dimensions, in. (mm)			
			L	E	F	G
1/4	1/4	SS-AM-DHM4-NS4	2.30 (58.5)	0.12 (3.0)	0.56 (14.3)	0.63 (15.9)
3/8	1/4	SS-AM-DHM6-NS4	2.38 (60.4)	0.21 (5.3)	0.56 (14.3)	0.75 (19.1)
3/8	1/2	SS-AM-DHM6-NS8	2.67 (67.9)	0.21 (5.3)	0.87 (22.2)	0.75 (19.1)
1/2	1/4	SS-AM-DHM8-NS4	2.55 (64.8)	0.25 (6.4)	0.56 (14.3)	0.94 (23.8)
1/2	1/2	SS-AM-DHM8-NS8	2.84 (72.2)	0.28 (7.1)	0.87 (22.2)	0.94 (23.8)
9/16	1/2	SS-AM-DHM9-NS8	3.64 (92.4)	0.31 (7.9)	0.87 (22.2)	1.06 (27.0)
3/4	3/4	SS-AM-DHM12-NS12	4.22 (107.1)	0.39 (10.0)	1.06 (27.0)	1.38 (34.9)

① The port connectors will have been preassembled with ferrules before shipping. Please follow the Reinstallation Instructions when installing the adapters.

NOTE: Dimensions are for reference only and are subject to change.

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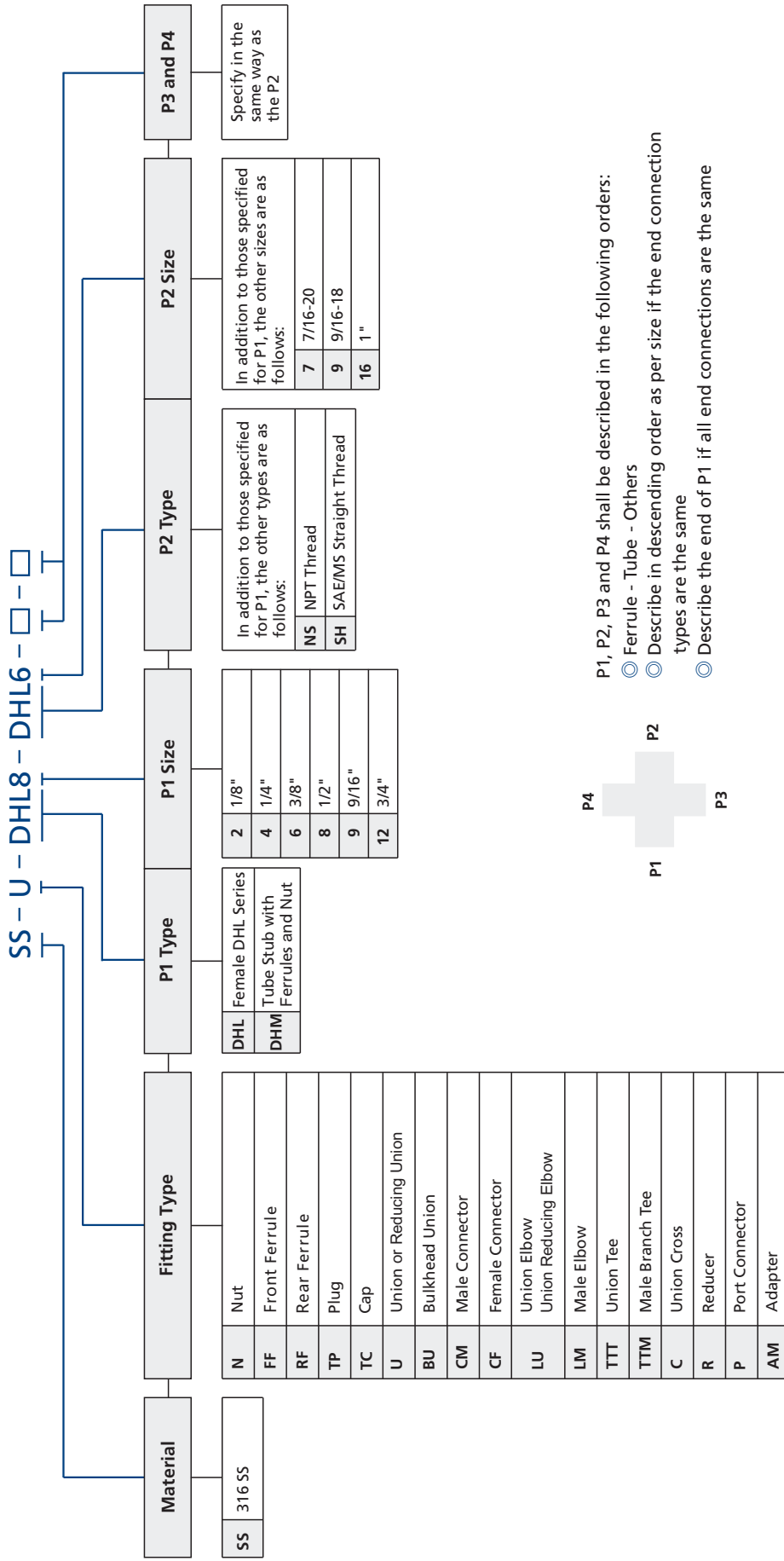
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### Ordering Number Description



NOTE: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.

# Tubing

## Features

- Working pressure up to 15,000 psig (1034 bar)
- Working temperature range: -325°F to 800°F (-198°C to 427°C)
- Material, size, pressure and heat number marked on the tubing surface
- Seamless, cold-drawn and work-hardened to achieve high strength and corrosion resistance
- Use with DHL Series tube fittings



## Material Standards and Mechanical Properties

### Cold-drawn 1/8-Hard Stainless Steel Seamless Tubing

Material Grade	UNS	Yield Strength ksi	Tensile Strength ksi	Elongation in 2 in. min. %	Hardness, Max.
316/316L	S31600/S31603	75 to 110	105 to 140	20	26 HRC

### Heavy-wall Annealed Stainless Steel Seamless Tubing<sup>①</sup>

Material Grade	UNS	Yield Strength, min, ksi	Tensile Strength, min, ksi	Elongation in 2 in. min. %	Hardness, Max.
316/316L	S31600/S31603	30	75	35	90 HRB

① Fully annealed, high-quality type 316/316L stainless steel tubing ASTM A269 or A213, or equivalent.

## Working Pressure

- The allowable working pressures in the table below are based on ASME B31.3 at ambient temperature.
- To get the allowable working pressure at elevated temperature, use the allowable working pressure at ambient temperature to multiply the factors in the table of Elevated Temperature Factors on the next page.

### Cold-drawn 1/8-Hard Stainless Steel Seamless Tubing

Tube O.D. in.	Wall Thickness in.	Working Pressure psig (bar)
1/4	0.065	15,000 (1034)
3/8	0.083	15,000 (1034)
1/2	0.109	15,000 (1034)
9/16	0.125	15,000 (1034)
3/4	0.165	15,000 (1034)

### Heavy-wall Annealed Stainless Steel Seamless Tubing

Tube O.D. in.	Wall Thickness in.	Working Pressure psig (bar)
1/8	0.037	15,000 (1034)
1/4	0.083	15,000 (1034)
1/4	0.065	10,300 (710)
3/8	0.118	15,000 (1034)
3/8	0.095	10,000 (690)
1/2	0.156	15,000 (1034)
1/2	0.134	11,200 (772)
9/16	0.188	15,000 (1034)
3/4	0.240	15,000 (1034)
3/4	0.188	10,000 (690)

**Elevated Temperature Factors**

Material Grade	Temperature		Factor
	°F	°C	
316/316L	100	38	1.00
	200	93	1.00
	300	149	1.00
	400	204	0.96
	500	260	0.89
	600	316	0.85
	700	371	0.81
	800	427	0.79

**Ordering Information**

**Cold-drawn 1/8-Hard Stainless Steel Seamless Tubing**

Tube O.D. in.	Wall Thickness in.	Basic Ordering Number	Tolerance O.D. in.	Wall Thickness Tolerance in.
1/4	0.065	SS-15T4H-065-	0.255/0.245	0.0585/0.0715
3/8	0.083	SS-15T6H-083-	0.370/0.380	0.0747/0.0913
1/2	0.109	SS-15T8H-109-	0.505/0.495	0.9810/0.1199
9/16	0.125	SS-15T9H-125-	0.557/0.567	0.1125/0.1375
3/4	0.165	SS-15T12H-165-	0.745/0.755	0.1485/0.1815

**Heavy-wall Annealed Stainless Steel Seamless Tubing**

Tube O.D. in.	Wall Thickness in.	Basic Ordering Number	Tolerance O.D. in.	Wall Thickness Tolerance in.
1/8	0.037	SS-15T2-037-	0.128/0.122	0.0333/0.0407
1/4	0.083	SS-15T4-083-	0.255/0.245	0.0747/0.0913
1/4	0.065	SS-15T4-065-	0.255/0.245	0.0585/0.0715
3/8	0.118	SS-15T6-118-	0.370/0.380	0.1062/0.1298
3/8	0.095	SS-15T6-095-	0.370/0.380	0.0855/0.1045
1/2	0.156	SS-15T8-156-	0.505/0.495	0.1404/0.1716
1/2	0.134	SS-15T8-134-	0.505/0.495	0.1206/0.1474
9/16	0.188	SS-15T9-188-	0.557/0.567	0.1692/0.2068
3/4	0.240	SS-15T12-240-	0.745/0.755	0.2160/0.2640
3/4	0.188	SS-15T12-188-	0.745/0.755	0.1692/0.2068

Add the length designator as a suffix to the basic ordering number to get the complete ordering number. The length designator "-10" means 10 feet. The length designator "-3M" means 3 meters.

Examples:

1. If 10 feet of 1/8" O.D. annealed tubing is needed, the complete ordering number is SS-15T2-037-10.
2. If 3 meters of 1/8" O.D. annealed tubing is needed, the complete ordering number is SS-15T2-037-3M.

NOTE: The tubing is available in random lengths but no more than 20 feet (6 meters).

**Installation Instructions**

Please see G-05.

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# Medium Pressure Tube Fittings and Tubing

20,000 psig (1379 bar)



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Unions - U



A-19

Reducing Unions - U



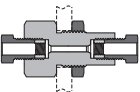
A-20

Unions (Slip Type) - SU



A-20

Bulkhead Unions - BU



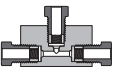
A-21

Union Elbows - LU



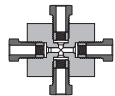
A-21

Union Tees - TTT



A-22

Union Crosses - C



A-22

Anti-vibration Gland Assemblies - AVGA



A-23

## Ordering Number Description

A-23

## Tubing A-24

Coned and Threaded Nipples - CTN



A-25

## Installation Instructions

G-07

Medium & High Pressure Fittings and Tubing

Quick Couplings

Medium & High Pressure Valves

Line Filters

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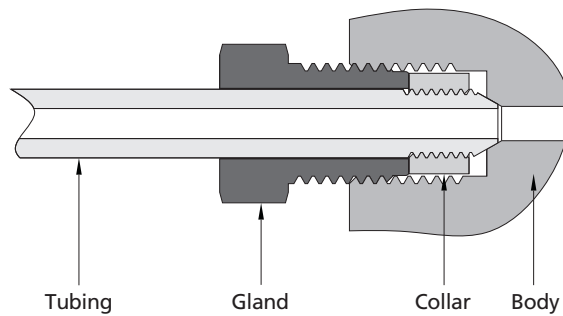
Technical Information

# Tube Fittings

## Features

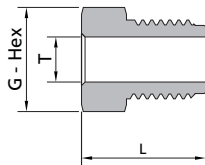
- ⦿ Maximum working pressure: 20,000 psig (1379 bar)
- ⦿ Working temperature range: -423°F to 1200°F (-252°C to 649°C)
- ⦿ Use with medium pressure tubing as standard
- ⦿ Coned-and-threaded connection
- ⦿ Tubing sizes available in 1/4", 3/8", 9/16", 3/4" and 1"
- ⦿ High tensile 316 Stainless Steel as raw material
- ⦿ Anti-vibration connection components available
- ⦿ Easy to disconnect and retighten
- ⦿ Metal-to-metal seal to provide perfect leak-tight service for working conditions from critical vacuum to medium pressure
- ⦿ Every fitting marked with size, material and heat number

## Construction



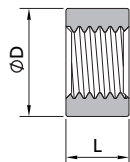
## Ordering Information and Dimensions

### Glands



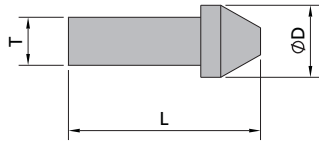
Tube			
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)	
		G	L
1/4	SS-G-2FH4	0.50 (12.7)	0.58 (14.7)
3/8	SS-G-2FH6	0.63 (15.9)	0.73 (18.5)
9/16	SS-G-2FH9	0.94 (23.8)	0.88 (22.4)
3/4	SS-G-2FH12	1.19 (30.2)	1.00 (25.4)
1	SS-G-2FH16	1.38 (34.9)	1.38 (35.1)

### Collars



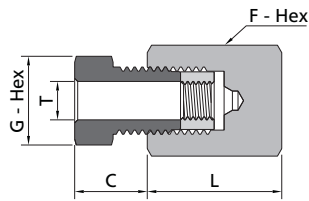
Tube			
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)	
		D	L
1/4	SS-CO-2FH4	0.38 (9.7)	0.22 (5.6)
3/8	SS-CO-2FH6	0.47 (11.9)	0.25 (6.4)
9/16	SS-CO-2FH9	0.72 (18.3)	0.31 (7.9)
3/4	SS-CO-2FH12	0.94 (23.8)	0.37 (9.4)
1	SS-CO-2FH16	1.25 (31.8)	0.50 (12.7)

### Plugs



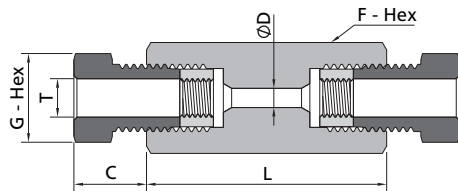
Tube		Dimensions, in. (mm)	
T - Tube O.D. in.	Ordering Number	D	L
1/4	SS-TP-2FH4	0.38 (9.7)	0.94 (23.8)
3/8	SS-TP-2FH6	0.47 (11.9)	1.18 (30.0)
9/16	SS-TP-2FH9	0.72 (18.3)	1.40 (35.6)
3/4	SS-TP-2FH12	0.94 (23.8)	1.69 (42.9)
1	SS-TP-2FH16	1.25 (31.8)	2.20 (55.9)

### Caps



Tube		Dimensions, in. (mm)			
T - Tube O.D. in.	Ordering Number	L	C	G	F
1/4	SS-TC-2FH4	0.81 (20.6)	0.38 (9.7)	0.50 (12.7)	0.63 (15.9)
3/8	SS-TC-2FH6	1.13 (28.6)	0.44 (11.2)	0.63 (15.9)	0.75 (19.1)
9/16	SS-TC-2FH9	1.38 (34.9)	0.55 (14.0)	0.94 (23.8)	1.00 (25.4)
3/4	SS-TC-2FH12	1.75 (44.5)	0.60 (15.2)	1.19 (30.2)	1.38 (34.9)
1	SS-TC-2FH16	2.25 (57.2)	0.74 (18.7)	1.38 (34.9)	1.75 (44.5)

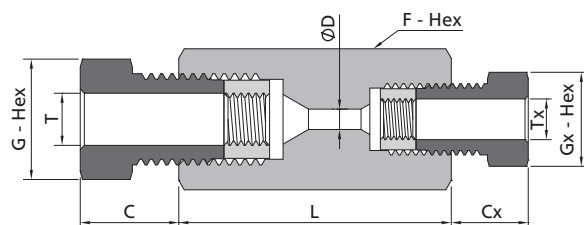
### Unions



Tube		Dimensions, in. (mm)				
T - Tube O.D. in.	Ordering Number	L	C	D	G	F
1/4	SS-U-2FH4	1.62 (41.1)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	0.63 (15.9)
3/8	SS-U-2FH6	1.75 (44.5)	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	0.75 (19.1)
9/16	SS-U-2FH9	2.14 (54.3)	0.55 (14.0)	0.31 (7.9)	0.94 (23.8)	1.00 (25.4)
3/4	SS-U-2FH12	2.50 (63.5)	0.60 (15.2)	0.44 (11.1)	1.19 (30.2)	1.38 (34.9)
1	SS-U-2FH16	3.50 (88.9)	0.74 (18.7)	0.56 (14.3)	1.38 (34.9)	1.75 (44.5)

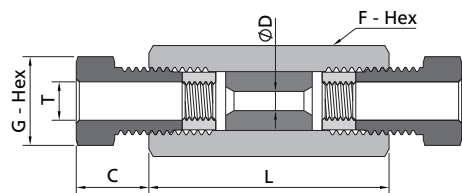
Medium & High Pressure Fittings and Tubing  
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## Reducing Unions



Tube			Dimensions, in. (mm)							
T - Tube O.D. in.	Tx - Tube O.D. in.	Ordering Number	L	C	Cx	D	G	Gx	F	
3/8	1/4	SS-U-2FH6-2FH4	1.75 (44.5)	0.44 (11.2)	0.38 (9.7)	0.11 (2.8)	0.63 (15.9)	0.50 (12.7)	0.75 (19.1)	
9/16	1/4	SS-U-2FH9-2FH4	2.00 (50.8)	0.55 (14.0)	0.38 (9.7)	0.11 (2.8)	0.94 (23.8)	0.50 (12.7)	1.00 (25.4)	
9/16	3/8	SS-U-2FH9-2FH6	2.00 (50.8)	0.55 (14.0)	0.44 (11.2)	0.20 (5.1)	0.94 (23.8)	0.63 (15.9)	1.00 (25.4)	
3/4	1/4	SS-U-2FH12-2FH4	2.25 (57.2)	0.60 (15.2)	0.38 (9.7)	0.11 (2.8)	1.19 (30.2)	0.50 (12.7)	1.38 (34.9)	
3/4	3/8	SS-U-2FH12-2FH6	2.25 (57.2)	0.60 (15.2)	0.44 (11.2)	0.20 (5.1)	1.19 (30.2)	0.63 (15.9)	1.38 (34.9)	
3/4	9/16	SS-U-2FH12-2FH9	2.50 (63.5)	0.60 (15.2)	0.55 (14.0)	0.31 (7.9)	1.19 (30.2)	0.94 (23.8)	1.38 (34.9)	
1	1/4	SS-U-2FH16-2FH4	2.75 (69.9)	0.74 (18.7)	0.38 (9.7)	0.11 (2.8)	1.38 (34.9)	0.50 (12.7)	1.75 (44.5)	
1	3/8	SS-U-2FH16-2FH6	2.88 (73.0)	0.74 (18.7)	0.44 (11.2)	0.20 (5.1)	1.38 (34.9)	0.63 (15.9)	1.75 (44.5)	
1	9/16	SS-U-2FH16-2FH9	3.00 (76.2)	0.74 (18.7)	0.55 (14.0)	0.31 (7.9)	1.38 (34.9)	0.94 (23.8)	1.75 (44.5)	
1	3/4	SS-U-2FH16-2FH12	3.00 (76.2)	0.74 (18.7)	0.60 (15.2)	0.44 (11.1)	1.38 (34.9)	1.19 (30.2)	1.75 (44.5)	

## Unions (Slip Type)



Tube		Dimensions, in. (mm)				
T - Tube O.D. in.	Ordering Number	L	C	D	G	F
1/4	SS-SU-2FH4	1.62 (41.1)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	0.63 (15.9)
3/8	SS-SU-2FH6	1.75 (44.5)	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	0.75 (19.1)
9/16	SS-SU-2FH9	2.14 (54.3)	0.55 (14.0)	0.31 (7.9)	0.94 (23.8)	1.00 (25.4)
3/4	SS-SU-2FH12	2.50 (63.5)	0.60 (15.2)	0.44 (11.1)	1.19 (30.2)	1.38 (34.9)
1	SS-SU-2FH16	3.50 (88.9)	0.74 (18.7)	0.56 (14.3)	1.38 (34.9)	1.75 (44.5)

Medium & High Pressure Fittings and Tubing

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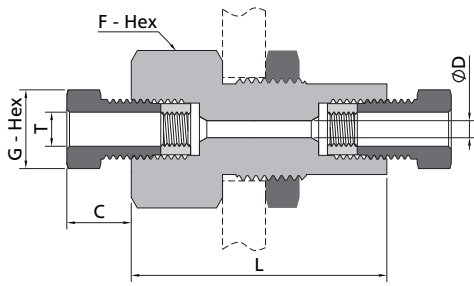
Sour Service Products

Subsea Valves

Tools and Installation Instructions

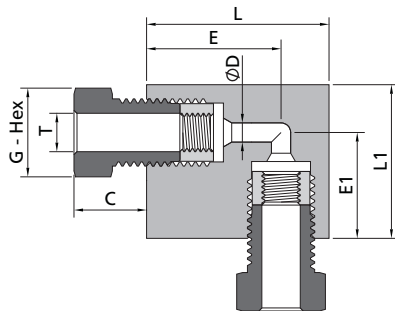
Technical Information

## Bulkhead Unions



Tube		Dimensions, in. (mm)						
T - Tube O.D. in.	Ordering Number	L	C	D	G	F	Panel Hole Size	Max. Panel Thickness
1/4	SS-BU-2FH4	1.88 (47.8)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.00 (25.4)	0.81 (20.6)	0.38 (9.7)
3/8	SS-BU-2FH6	2.00 (50.8)	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	1.06 (27.0)	0.94 (23.9)	0.38 (9.7)
9/16	SS-BU-2FH9	2.38 (60.5)	0.55 (14.0)	0.31 (7.9)	0.94 (23.8)	1.38 (34.9)	1.13 (28.6)	0.38 (9.7)
3/4	SS-BU-2FH12	2.62 (66.5)	0.60 (15.2)	0.44 (11.1)	1.19 (30.2)	1.88 (47.6)	1.69 (42.9)	0.38 (9.7)
1	SS-BU-2FH16	3.50 (88.9)	0.74 (18.7)	0.56 (14.3)	1.38 (34.9)	2.13 (54.0)	1.94 (49.3)	0.38 (9.7)

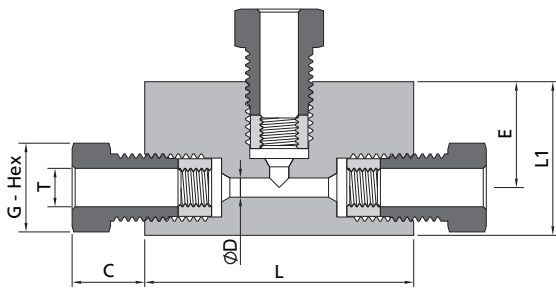
## Union Elbows



Tube		Dimensions, in. (mm)							
T - Tube O.D. in.	Ordering Number	C	D	G	L	E	L1	E1	Thickness
1/4	SS-LU-2FH4	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.12 (28.4)	0.75 (19.1)	1.12 (28.4)	0.75 (19.1)	0.63 (15.9)
3/8	SS-LU-2FH6	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	1.38 (34.9)	1.00 (25.4)	1.38 (34.9)	1.00 (25.4)	0.75 (19.1)
9/16	SS-LU-2FH9	0.55 (14.0)	0.31 (7.9)	0.94 (23.8)	1.75 (44.5)	1.25 (31.8)	1.75 (44.5)	1.25 (31.8)	1.00 (25.4)
3/4	SS-LU-2FH12	0.60 (15.2)	0.44 (11.1)	1.19 (30.2)	2.25 (57.2)	1.50 (38.1)	2.25 (57.2)	1.50 (38.1)	1.38 (34.9)
1	SS-LU-2FH16	0.74 (18.7)	0.56 (14.3)	1.38 (34.9)	3.00 (76.2)	2.06 (52.3)	3.00 (76.2)	2.06 (52.3)	1.75 (44.5)

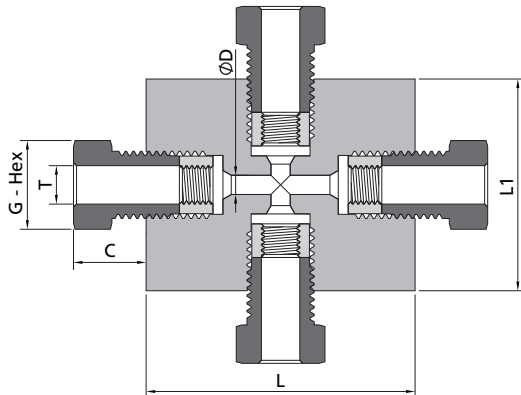
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## Union Tees



Tube		Dimensions, in. (mm)						
T - Tube O.D. in.	Ordering Number	C	D	G	L	L1	E	Thickness
1/4	SS-TTT-2FH4	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.50 (38.1)	1.12 (28.4)	0.75 (19.1)	0.63 (15.9)
3/8	SS-TTT-2FH6	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	2.00 (50.8)	1.38 (34.9)	1.00 (25.4)	0.75 (19.1)
9/16	SS-TTT-2FH9	0.55 (14.0)	0.31 (7.9)	0.94 (23.8)	2.50 (63.5)	1.75 (44.5)	1.25 (31.8)	1.00 (25.4)
3/4	SS-TTT-2FH12	0.60 (15.2)	0.44 (11.1)	1.19 (30.2)	3.00 (76.2)	2.25 (57.2)	1.50 (38.1)	1.38 (34.9)
1	SS-TTT-2FH16	0.74 (18.7)	0.56 (14.3)	1.38 (34.9)	4.12 (104.6)	3.00 (76.2)	2.06 (52.3)	1.75 (44.5)

## Union Crosses



Tube		Dimensions, in. (mm)					
T - Tube O.D. in.	Ordering Number	C	D	G	L	L1	Thickness
1/4	SS-C-2FH4	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.50 (38.1)	1.50 (38.1)	0.63 (15.9)
3/8	SS-C-2FH6	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	2.00 (50.8)	2.00 (50.8)	0.75 (19.1)
9/16	SS-C-2FH9	0.55 (14.0)	0.31 (7.9)	0.94 (23.8)	2.50 (63.5)	2.50 (63.5)	1.00 (25.4)
3/4	SS-C-2FH12	0.60 (15.2)	0.44 (11.1)	1.19 (30.2)	3.00 (76.2)	3.00 (76.2)	1.38 (34.9)
1	SS-C-2FH16	0.74 (18.7)	0.56 (14.3)	1.38 (34.9)	4.12 (104.6)	4.12 (104.6)	1.75 (44.5)

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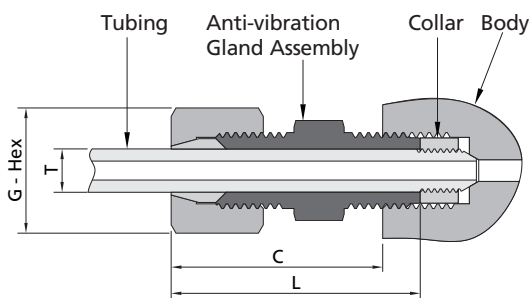
Tools and Installation Instructions

Technical Information

## Anti-vibration Gland Assemblies

The extreme vibration or shock in tubing systems, such as mobile pressure systems or long tubing runs culminating at a compressor are subjected to, will be prevented by using FITOK Anti-vibration Gland Assemblies. These assemblies provide the same reliable connection as standard FITOK glands to essentially prolong vibrational fatigue life.

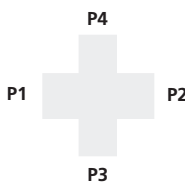
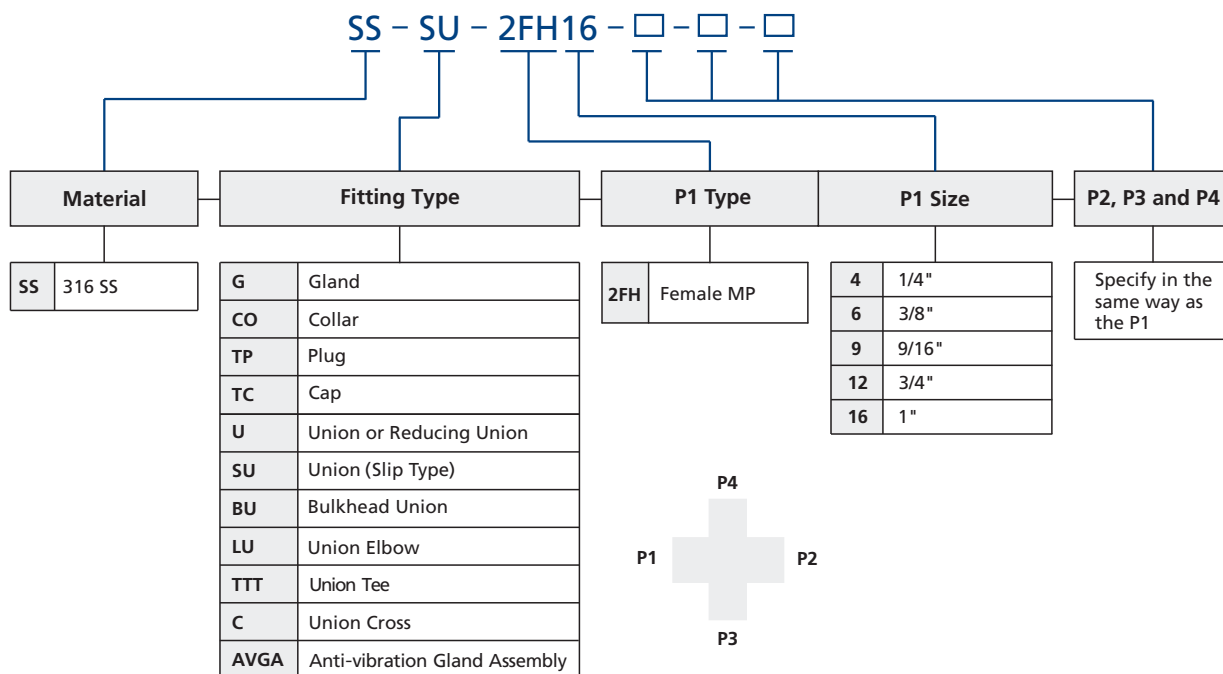
A coned and threaded tubing, when subjected to unusual or excessive vibration, may fail prematurely and break at the last thread. FITOK Anti-vibration Gland Assembly acts to move the fulcrum of vibration away from the threaded part of the tubing onto the strong, solid wall of the tubing. A wedge-like collet firmly holds the assembly in place, virtually eliminating premature tubing failure while reliably maintaining a leakage-free connection between the tubing and the connection seat.



Tube		Dimensions, in. (mm)		
T - Tube O.D. in.	Ordering Number	L	C	G
1/4	SS-AVGA-2FH4	1.24 (31.6)	1.05 (26.7)	0.63 (15.9)
3/8	SS-AVGA-2FH6	1.50 (38.1)	1.22 (30.9)	0.81 (20.6)
9/16	SS-AVGA-2FH9	1.78 (45.2)	1.42 (36.0)	0.94 (23.8)
3/4	SS-AVGA-2FH12	2.00 (50.8)	1.61 (40.8)	1.38 (34.9)
1	SS-AVGA-2FH16	2.38 (60.5)	1.74 (44.3)	1.50 (38.1)

NOTE: Dimensions are for reference only and are subject to change.

## Ordering Number Description



- P1, P2, P3 and P4 shall be described in the following orders:
- ⊙ Describe in descending order as per size if the end connection types are the same
  - ⊙ Describe the end of P1 if all end connections are the same

NOTE: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.

# Tubing

## Features

- ⦿ Cold drawn 316/316L Stainless Steel seamless tubing
- ⦿ Working temperature range: -423°F to 1200°F (-252°C to 649°C)
- ⦿ Every tubing marked with material, size and heat number
- ⦿ Use with medium pressure tube fittings

## Ordering Information and Dimensions

Tube O.D. in.	Tube I.D. in.	Material Grade	Basic Ordering Number	Max./Min. O.D. in. (mm)
1/4	0.109	316/316L	SS-MT-2FH4-	0.248/0.243 (6.30/6.17)
3/8	0.203	316/316L	SS-MT-2FH6-	0.370/0.365 (9.40/9.27)
9/16	0.312	316/316L	SS-MT-2FH9-	0.557/0.552 (14.15/14.02)
3/4	0.438	316/316L	SS-MT-2FH12-	0.745/0.740 (18.92/18.80)
1	0.562	316/316L	SS-MT-2FH16-	0.995/0.990 (25.27/25.14)



Add the length designator as a suffix to the basic ordering number to get the complete ordering number. The length designator "-10" means 10 feet. The length designator "-6M" means 6 meters.

Examples:

1. If 10 feet of 3/8" O.D. tubing is needed, the complete ordering number is SS-MT-2FH6-10.
2. If 6 meters of 3/4" O.D. tubing is needed, the complete ordering number is SS-MT-2FH12-6M.

The tubing is available in random lengths but no more than 20 feet (6 meters).

## Working Pressure

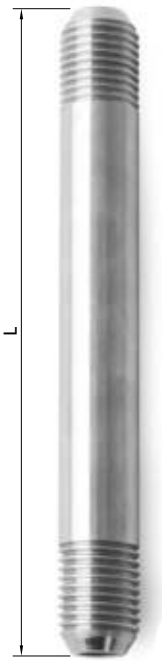
Tube O.D. in.	Working Pressure, psig (bar)				
	-423 to 100°F (-252 to 37.8°C)	200°F (93°C)	400°F (204°C)	600°F (316°C)	800°F (427°C)
1/4	20,000 (1379)	20,000 (1379)	19,250 (1327)	18,050 (1244)	16,800 (1158)
3/8	20,000 (1379)	20,000 (1379)	19,250 (1327)	18,050 (1244)	16,800 (1158)
9/16	20,000 (1379)	20,000 (1379)	19,250 (1327)	18,050 (1244)	16,800 (1158)
3/4	20,000 (1379)	20,000 (1379)	19,250 (1327)	18,050 (1244)	16,800 (1158)
1	20,000 (1379)	20,000 (1379)	19,250 (1327)	18,050 (1244)	16,800 (1158)

Data in this table are applied only to the working temperature below 800°F (427°C). For the working temperature above 800°F (427°C), please contact FITOK Group or our authorized distributors.



## Coned and Threaded Nipples

- ⦿ Machined from medium pressure tubing
- ⦿ For 1/4", 3/8" and 9/16" O.D. medium pressure tubing, manual coning and threading tools can be used to make nipples



Tube O.D. in.	Tube I.D. in.	Ordering Number	L in. (mm)
1/4	0.109	SS-CTN-2FH4-2.75	2.75 (69.9)
1/4	0.109	SS-CTN-2FH4-3	3 (76.2)
1/4	0.109	SS-CTN-2FH4-4	4 (101.6)
1/4	0.109	SS-CTN-2FH4-6	6 (152.4)
1/4	0.109	SS-CTN-2FH4-8	8 (203.2)
1/4	0.109	SS-CTN-2FH4-10	10 (254.0)
1/4	0.109	SS-CTN-2FH4-12	12 (304.8)
3/8	0.203	SS-CTN-2FH6-3	3 (76.2)
3/8	0.203	SS-CTN-2FH6-4	4 (101.6)
3/8	0.203	SS-CTN-2FH6-6	6 (152.4)
3/8	0.203	SS-CTN-2FH6-8	8 (203.2)
3/8	0.203	SS-CTN-2FH6-10	10 (254.0)
3/8	0.203	SS-CTN-2FH6-12	12 (304.8)
9/16	0.312	SS-CTN-2FH9-4	4 (101.6)
9/16	0.312	SS-CTN-2FH9-6	6 (152.4)
9/16	0.312	SS-CTN-2FH9-8	8 (203.2)
9/16	0.312	SS-CTN-2FH9-10	10 (254.0)
9/16	0.312	SS-CTN-2FH9-12	12 (304.8)
3/4	0.438	SS-CTN-2FH12-4	4 (101.6)
3/4	0.438	SS-CTN-2FH12-6	6 (152.4)
3/4	0.438	SS-CTN-2FH12-8	8 (203.2)
3/4	0.438	SS-CTN-2FH12-10	10 (254.0)
3/4	0.438	SS-CTN-2FH12-12	12 (304.8)
1	0.562	SS-CTN-2FH16-6	6 (152.4)
1	0.562	SS-CTN-2FH16-8	8 (203.2)
1	0.562	SS-CTN-2FH16-10	10 (254.0)
1	0.562	SS-CTN-2FH16-12	12 (304.8)

## Installation Instructions

Please see G-07.

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# High Pressure Tube Fittings and Tubing

60,000 psig (4137 bar)



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## Tube Fittings A-28

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Collars - CO



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Plugs - TP



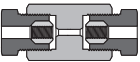
A-28

Caps - TC



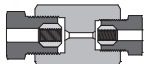
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Unions - U



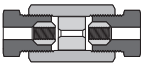
A-29

Reducing Unions - U



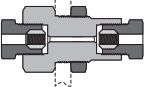
A-29

Unions (Slip Type) - SU



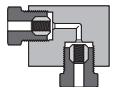
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Bulkhead Unions - BU



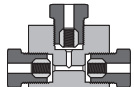
A-30

Union Elbows - LU



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Union Tees - TTT



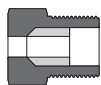
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Union Crosses - C



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Anti-vibration Gland Assemblies - AVGA



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## Ordering Number Description

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## Tubing A-33

Coned and Threaded Nipples - CTN



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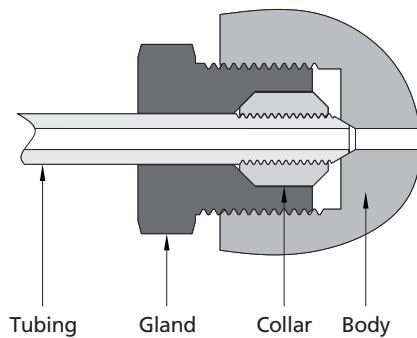
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# Tube Fittings

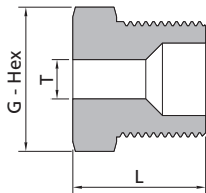
## Features

- Maximum working pressure: 60,000 psig (4137 bar)
- Working temperature range: -423°F to 1200°F (-252°C to 649°C)
- Use with high pressure tubing as standard
- Coned-and-threaded connection
- High tensile 316 Stainless Steel as raw material
- Anti-vibration connection components available
- Easy to disconnect and retighten
- Metal-to-metal seal to provide perfect leak-tight service from critical vacuum to high pressure
- Every fitting marked with size, material and heat number

## Construction

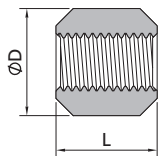


## Ordering Information and Dimensions Glands



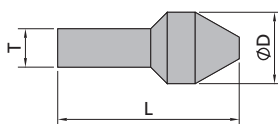
Tube			
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)	
		G	L
1/4	SS-G-6FH4	0.63 (15.9)	0.82 (20.8)
3/8	SS-G-6FH6	0.81 (20.6)	1.13 (28.7)
9/16	SS-G-6FH9	1.19 (30.2)	1.50 (38.1)

## Collars



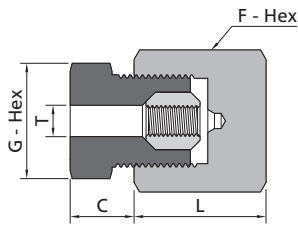
Tube			
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)	
		D	L
1/4	SS-CO-6FH4	0.38 (9.6)	0.38 (9.6)
3/8	SS-CO-6FH6	0.50 (12.7)	0.54 (13.7)
9/16	SS-CO-6FH9	0.81 (20.6)	0.62 (15.8)

## Plugs



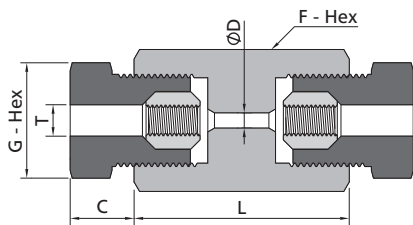
Tube			
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)	
		D	L
1/4	SS-TP-6FH4	0.38 (9.6)	1.04 (26.4)
3/8	SS-TP-6FH6	0.50 (12.7)	1.35 (34.3)
9/16	SS-TP-6FH9	0.81 (20.6)	1.89 (48.0)

## Caps



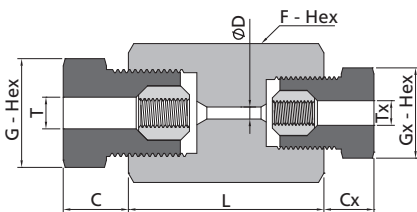
Tube		Dimensions, in. (mm)			
T - Tube O.D. in.	Ordering Number	L	C	G	F
1/4	SS-TC-6FH4	0.75 (19.1)	0.47 (11.9)	0.63 (15.9)	0.75 (19.1)
3/8	SS-TC-6FH6	1.13 (28.6)	0.61 (15.6)	0.81 (20.6)	1.00 (25.4)
9/16	SS-TC-6FH9	1.38 (34.9)	0.95 (24.1)	1.19 (30.2)	1.38 (34.9)

## Unions



Tube		Dimensions, in. (mm)				
T - Tube O.D. in.	Ordering Number	L	C	D	G	F
1/4	SS-U-6FH4	1.38 (34.9)	0.47 (11.9)	0.09 (2.3)	0.63 (15.9)	0.75 (19.1)
3/8	SS-U-6FH6	1.75 (44.5)	0.61 (15.6)	0.13 (3.3)	0.81 (20.6)	1.00 (25.4)
9/16	SS-U-6FH9	2.19 (55.6)	0.95 (24.1)	0.19 (4.8)	1.19 (30.2)	1.38 (34.9)

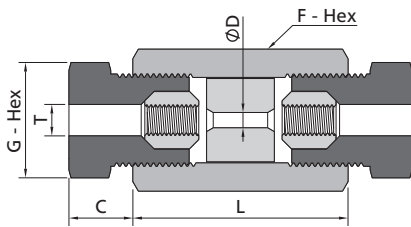
## Reducing Unions



Tube			Dimensions, in. (mm)						
T - Tube O.D. in.	Tx - Tube O.D. in.	Ordering Number	L	C	Cx	D	G	Gx	F
3/8	1/4	SS-U-6FH6-6FH4	1.63 (41.3)	0.61 (15.6)	0.47 (11.9)	0.09 (2.3)	0.81 (20.6)	0.63 (15.9)	1.00 (25.4)
9/16	1/4	SS-U-6FH9-6FH4	1.75 (44.5)	0.95 (24.1)	0.47 (11.9)	0.09 (2.3)	1.19 (30.2)	0.63 (15.9)	1.38 (34.9)
9/16	3/8	SS-U-6FH9-6FH6	2.00 (50.8)	0.95 (24.1)	0.61 (15.6)	0.13 (3.3)	1.19 (30.2)	0.81 (20.6)	1.38 (34.9)

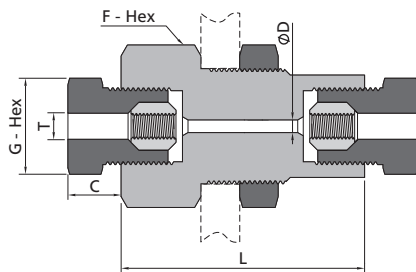
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## Unions (Slip Type)



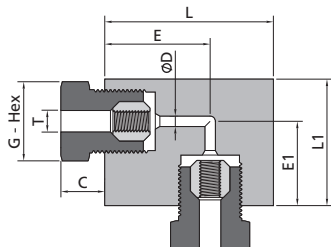
Tube		Dimensions, in. (mm)				
T - Tube O.D. in.	Ordering Number	L	C	D	G	F
1/4	SS-SU-6FH4	1.38 (34.9)	0.47 (11.9)	0.09 (2.3)	0.63 (15.9)	0.75 (19.1)
3/8	SS-SU-6FH6	1.75 (44.5)	0.61 (15.6)	0.13 (3.3)	0.81 (20.6)	1.00 (25.4)
9/16	SS-SU-6FH9	2.19 (55.6)	0.95 (24.1)	0.19 (4.8)	1.19 (30.2)	1.38 (34.9)

## Bulkhead Unions



Tube		Dimensions, in. (mm)						
T - Tube O.D. in.	Ordering Number	L	C	D	G	F	Panel Hole Size	Max. Panel Thickness
1/4	SS-BU-6FH4	1.88 (47.8)	0.47 (11.9)	0.09 (2.3)	0.63 (15.9)	1.06 (27.0)	0.94 (23.9)	0.38 (9.7)
3/8	SS-BU-6FH6	2.38 (60.5)	0.61 (15.6)	0.13 (3.3)	0.81 (20.6)	1.38 (34.9)	1.13 (28.6)	0.38 (9.7)
9/16	SS-BU-6FH9	2.75 (69.9)	0.95 (24.1)	0.19 (4.8)	1.19 (30.2)	1.88 (47.6)	1.69 (42.9)	0.38 (9.7)

## Union Elbows



Tube		Dimensions, in. (mm)							
T - Tube O.D. in.	Ordering Number	C	D	G	L	E	L1	E1	Thickness
1/4	SS-LU-6FH4	0.47 (11.9)	0.09 (2.3)	0.63 (15.9)	1.50 (38.1)	0.88 (22.4)	1.00 (25.4)	0.62 (15.7)	0.75 (19.1)
3/8	SS-LU-6FH6	0.61 (15.6)	0.13 (3.3)	0.81 (20.6)	2.00 (50.8)	1.25 (31.8)	1.50 (38.1)	1.00 (25.4)	1.00 (25.4)
9/16	SS-LU-6FH9	0.95 (24.1)	0.19 (4.8)	1.19 (30.2)	2.62 (66.5)	1.88 (47.8)	1.88 (47.8)	1.12 (28.4)	1.50 (38.1)

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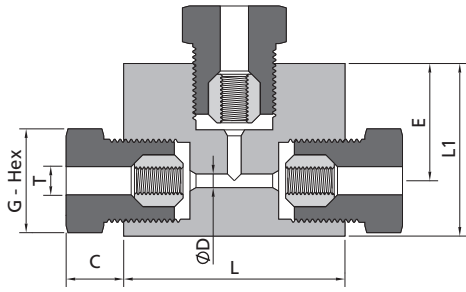
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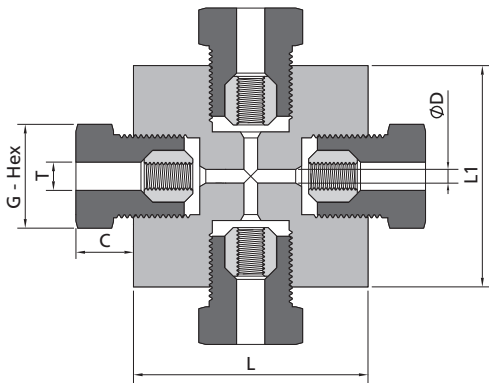
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### Union Tees



Tube		Dimensions, in. (mm)						
T - Tube O.D. in.	Ordering Number	C	D	G	L	L1	E	Thickness
1/4	SS-TTT-6FH4	0.47 (11.9)	0.09 (2.3)	0.63 (15.9)	2.00 (50.8)	1.25 (31.8)	0.88 (22.4)	0.75 (19.1)
3/8	SS-TTT-6FH6	0.61 (15.6)	0.13 (3.3)	0.81 (20.6)	2.00 (50.8)	1.56 (39.6)	1.06 (26.9)	1.00 (25.4)
9/16	SS-TTT-6FH9	0.95 (24.1)	0.19 (4.8)	1.19 (30.2)	2.62 (66.5)	2.12 (53.8)	1.38 (35.0)	1.50 (38.1)

### Union Crosses

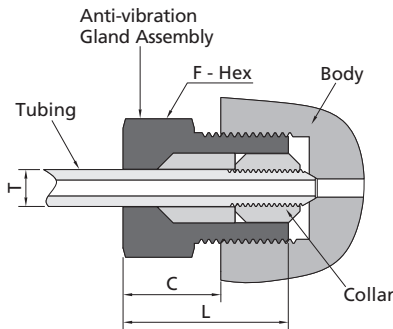


Tube		Dimensions, in. (mm)					
T - Tube O.D. in.	Ordering Number	C	D	G	L	L1	Thickness
1/4	SS-C-6FH4	0.47 (11.9)	0.09 (2.3)	0.63 (15.9)	2.00 (50.8)	1.25 (31.8)	0.75 (19.1)
3/8	SS-C-6FH6	0.61 (15.6)	0.13 (3.3)	0.81 (20.6)	2.00 (50.8)	2.12 (53.8)	1.00 (25.4)
9/16	SS-C-6FH9	0.95 (24.1)	0.19 (4.8)	1.19 (30.2)	2.62 (66.5)	2.75 (69.9)	1.50 (38.1)

## Anti-vibration Gland Assemblies

The extreme vibration or shock in tubing systems, such as mobile pressure systems or long tubing runs culminating at a compressor are subjected to, will be prevented by using FITOK Anti-vibration Gland Assemblies. These assemblies provide the same reliable connection as standard FITOK glands to essentially prolong vibrational fatigue life.

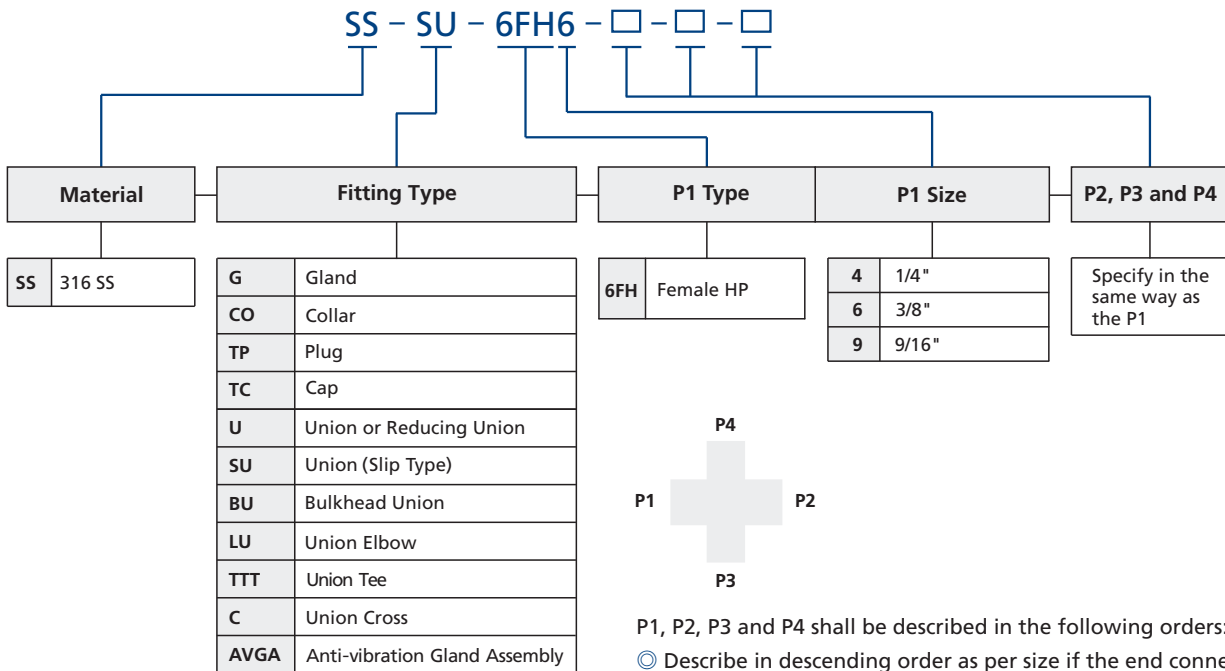
A coned and threaded tubing, when subjected to unusual or excessive vibration, may fail prematurely and break at the last thread. FITOK Anti-vibration Gland Assembly acts to move the fulcrum of vibration away from the threaded part of the tubing onto the strong, solid wall of the tubing. A wedge-like collet firmly holds the assembly in place, virtually eliminating premature tubing failure while reliably maintaining a leakage-free connection between the tubing and the connection seat.



Tube		Dimensions, in. (mm)		
T - Tube O.D. in.	Ordering Number	L	C	F
1/4	SS-AVGA-6FH4	0.81 (20.6)	0.47 (11.9)	0.63 (15.9)
3/8	SS-AVGA-6FH6	1.12 (28.4)	0.61 (15.6)	0.81 (20.6)
9/16	SS-AVGA-6FH9	1.50 (38.1)	0.95 (24.1)	1.19 (30.2)

NOTE: Dimensions are for reference only and are subject to change.

## Ordering Number Description



- P1, P2, P3 and P4 shall be described in the following orders:
- ⊙ Describe in descending order as per size if the end connection types are the same
  - ⊙ Describe the end of P1 if all end connections are the same

NOTE: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.



# Tubing

## Features

- ⦿ Cold drawn 316/316L Stainless Steel seamless tubing
- ⦿ Working temperature range: -423°F to 1200°F (-252°C to 649°C)
- ⦿ Every tubing marked with material, size and heat number
- ⦿ Use with high pressure tube fittings

## Ordering Information and Dimensions

Tube O.D. in.	Tube I.D. in.	Material Grade	Basic Ordering Number	Max./Min. O.D. in. (mm)
1/4	0.083	316/316L	SS-HT-6FH4-	0.248/0.243 (6.30/6.17)
3/8	0.125	316/316L	SS-HT-6FH6-	0.370/0.365 (9.40/9.27)
9/16	0.188	316/316L	SS-HT-6FH9-	0.557/0.552 (14.15/14.02)



Add the length designator as a suffix to the basic ordering number to get the complete ordering number. The length designator "-10" means 10 feet. The length designator "-6M" means 6 meters.

Examples:

1. If 10 feet of 1/4" O.D. tubing is needed, the complete ordering number is SS-HT-6FH4-10.
2. If 6 meters of 9/16" O.D. tubing is needed, the complete ordering number is SS-HT-6FH9-6M.

The tubing is available in random lengths but no more than 20 feet (6 meters).

## Working Pressure

Tube O.D. in.	Working Pressure, psig (bar)				
	-423 to 100°F (-252 to 37.8°C)	200°F (93°C)	400°F (204°C)	600°F (316°C)	800°F (427°C)
1/4	60,000 (4137)	60,000 (4137)	57,750 (3982)	54,250 (3740)	50,700 (3496)
3/8	60,000 (4137)	60,000 (4137)	57,750 (3982)	54,250 (3740)	50,700 (3496)
9/16	60,000 (4137)	60,000 (4137)	57,750 (3982)	54,250 (3740)	50,700 (3496)

Data in this table are applied only to the working temperature below 800°F (427°C). For the working temperature above 800°F (427°C), please contact FITOK Group or our authorized distributors.

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## Coned and Threaded Nipples

- ⦿ Machined from high pressure tubing
- ⦿ For 1/4", 3/8" and 9/16" O.D. high pressure tubing, manual coning and threading tools can be used to make nipples



Tube O.D. in.	Tube I.D. in.	Ordering Number	L in. (mm)
1/4	0.083	SS-CTN-6FH4-2.75	2.75 (69.9)
1/4	0.083	SS-CTN-6FH4-3	3 (76.2)
1/4	0.083	SS-CTN-6FH4-4	4 (101.6)
1/4	0.083	SS-CTN-6FH4-6	6 (152.4)
1/4	0.083	SS-CTN-6FH4-8	8 (203.2)
1/4	0.083	SS-CTN-6FH4-10	10 (254.0)
1/4	0.083	SS-CTN-6FH4-12	12 (304.8)
3/8	0.125	SS-CTN-6FH6-3	3 (76.2)
3/8	0.125	SS-CTN-6FH6-4	4 (101.6)
3/8	0.125	SS-CTN-6FH6-6	6 (152.4)
3/8	0.125	SS-CTN-6FH6-8	8 (203.2)
3/8	0.125	SS-CTN-6FH6-10	10 (254.0)
3/8	0.125	SS-CTN-6FH6-12	12 (304.8)
9/16	0.188	SS-CTN-6FH9-4	4 (101.6)
9/16	0.188	SS-CTN-6FH9-6	6 (152.4)
9/16	0.188	SS-CTN-6FH9-8	8 (203.2)
9/16	0.188	SS-CTN-6FH9-10	10 (254.0)
9/16	0.188	SS-CTN-6FH9-12	12 (304.8)

## Installation Instructions

Please see G-07.

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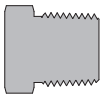
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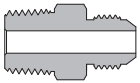
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## Pipe Plugs - HPP



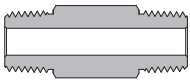
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## Hex Nipples - HPHN



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## Hex Long Nipples - HPLN



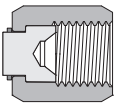
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## Pipe Caps - HPC



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## Pipe Cap Assemblies(Moveable Insert)-HMC



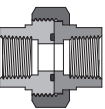
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## Hex Couplings - HPCG



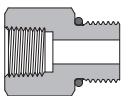
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## Zero-Clearance Unions - HPZC



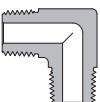
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## Adapters - HPA



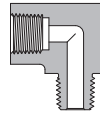
A-52

## Male Elbows - HPME



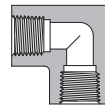
A-58

## Street Elbows - HPSE



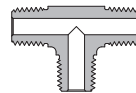
A-59

## Female Elbows - HPE



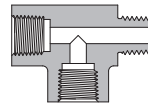
A-61

## Male Tees - HPMT



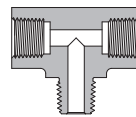
A-61

## Male Street Tees - HPST



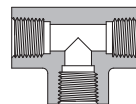
A-62

## Male Branch Tees - HPBT



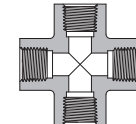
A-63

## Female Tees - HPT



A-63

## Female Crosses - HPCR



A-64

## Ordering Number Description

A-65

## Features

- ⦿ High tensile 316 Stainless Steel as standard material, other materials available upon request
- ⦿ The hardened threads with smooth surface finishing avoid galling and help to extend the fitting service life
- ⦿ Radius junction design for elbows provides smooth flow path
- ⦿ Every fitting marked with size, material and heat number

## Thread Specifications

Connection Type	Code	Thread Type	Thread Specification
Male or Female NPT	NS	NPT	ASME B1.20.1, SAE AS71051
Male or Female ISO/BSP Tapered	RT	ISO/BSP Tapered	ISO 7-1, BS EN 10226-1, DIN EN 10226-1, JIS B0203
Heavy-Duty Stud Ends (SAE J1926-2, ISO 11926-2)	SH	SAE/MS	ASME B1.1
Ports with O-ring Seal in Truncated Housing (SAE J1926-1, ISO 11926-1)	US		
Male or Female JIC (37° Flare)	AN		
Female Swivel JIC (37° Flare)	AS		
Male Type "M"	HM		

## Working Pressure

The working pressures of pipe fittings are shown in the "Ordering Information and Dimensions".

## Working Temperature

Connection Type	Working Temperature Range
Male or Female NPT	-325°F to 400°F (-198°C to 204°C)
Male or Female ISO/BSP Tapered	-325°F to 400°F (-198°C to 204°C)
Heavy-Duty Stud Ends (SAE J1926-2, ISO 11926-2)	0°F to 400°F (-17.8°C to 204°C) <sup>①</sup>
Ports with O-ring Seal in Truncated Housing (SAE J1926-1, ISO 11926-1)	-50°F to 550°F (-45°C to 288°C)
Male or Female JIC (37° Flare)	-423°F to 1200°F (-252°C to 649°C)
Female Swivel JIC (37° Flare)	-423°F to 1200°F (-252°C to 649°C)
Male Type "M"	-423°F to 1200°F (-252°C to 649°C)

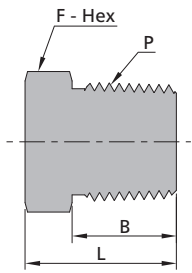
<sup>①</sup> The ends are supplied with a Fluorocarbon FKM O-ring as standard, other materials of O-rings available.

## Cautions:

- ⦿ Do not loosen or tighten fittings when the system is pressurized.
- ⦿ Always use proper thread sealants on tapered pipe threads.

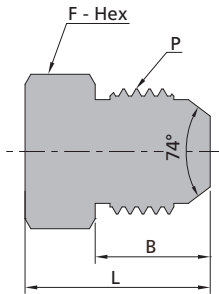
# Ordering Information and Dimensions

## Pipe Plugs

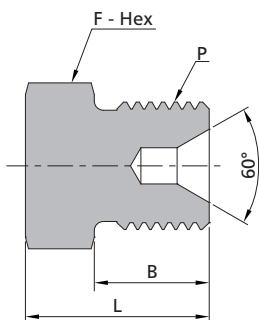


Male NPT Threads						
P-NPT Size, in.	Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)	
		L	F	B		
1/8	SS-HPP-NS2	0.63 (16.0)	0.44 (11.1)	0.38 (9.7)	15000 (1034)	
1/4	SS-HPP-NS4	0.87 (22.2)	0.56 (14.3)	0.56 (14.2)	15000 (1034)	
3/8	SS-HPP-NS6	0.93 (23.6)	0.69 (17.5)	0.56 (14.2)	15000 (1034)	
1/2	SS-HPP-NS8	1.16 (29.5)	0.87 (22.2)	0.75 (19.1)	15000 (1034)	
3/4	SS-HPP-NS12	1.25 (31.8)	1.06 (27.0)	0.75 (19.1)	10000 (690)	
1	SS-HPP-NS16	1.55 (39.3)	1.37 (34.9)	0.94 (23.9)	10000 (690)	

Male ISO/BSP Tapered Threads						
P-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)	
		L	F	B		
1/8	SS-HPP-RT2	0.63 (16.0)	0.44 (11.1)	0.38 (9.7)	15000 (1034)	
1/4	SS-HPP-RT4	0.87 (22.2)	0.56 (14.3)	0.56 (14.2)	15000 (1034)	
3/8	SS-HPP-RT6	0.93 (23.6)	0.69 (17.5)	0.56 (14.2)	15000 (1034)	
1/2	SS-HPP-RT8	1.16 (29.5)	0.87 (22.2)	0.75 (19.1)	15000 (1034)	
3/4	SS-HPP-RT12	1.25 (31.8)	1.06 (27.0)	0.75 (19.1)	10000 (690)	
1	SS-HPP-RT16	1.55 (39.3)	1.37 (34.9)	0.94 (23.9)	10000 (690)	

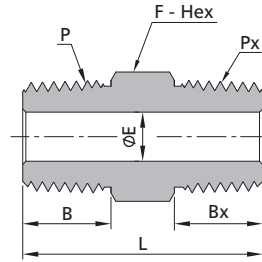


Male JIC						
P-SAE/MS Thread Size, in.	Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)	
		L	F	B		
7/16-20	SS-HPP-AN4	0.83 (21.0)	0.50 (12.7)	0.55 (14.0)	20000 (1379)	
9/16-18	SS-HPP-AN6	0.89 (22.7)	0.63 (15.9)	0.56 (14.1)	20000 (1379)	
3/4-16	SS-HPP-AN8	1.05 (26.7)	0.81 (20.6)	0.66 (16.7)	20000 (1379)	
7/8-14	SS-HPP-AN10	1.19 (30.3)	0.94 (23.8)	0.76 (19.3)	20000 (1379)	
1 1/16-12	SS-HPP-AN12	1.37 (34.9)	1.13 (28.6)	0.86 (21.9)	15000 (1034)	
1 5/16-12	SS-HPP-AN16	1.51 (38.3)	1.37 (34.9)	0.91 (23.1)	15000 (1034)	



Male Type "M"						
P-SAE/MS Thread Size, in.	Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)	
		L	F	B		
9/16-18	SS-HPP-HM9	0.84 (21.3)	0.63 (15.9)	0.50 (12.7)	60000 (4137)	
3/4-16	SS-HPP-HM12	1.01 (25.6)	0.75 (19.1)	0.63 (16.0)	30000 (2068)	
7/8-14	SS-HPP-HM14	1.21 (30.8)	1.00 (25.4)	0.76 (19.2)	50000 (3447)	
1-12	SS-HPP-HM16	1.10 (27.9)	1.00 (25.4)	0.64 (16.3)	30000 (2068)	
1 5/16-12	SS-HPP-HM21	1.22 (30.9)	1.37 (34.9)	0.62 (15.7)	20000 (1379)	

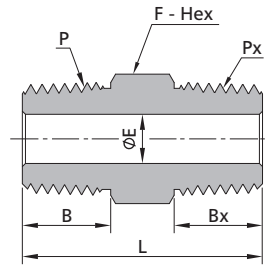
Hex Nipples



Male NPT Threads									
P-NPT Size, in.	Px-NPT Size, in.	Ordering Number	Dimensions, in. (mm)					Working Pressure psig (bar)	
			L	F	B	Bx	E		
1/8	1/8	SS-HPHN-NS2	1.05 (26.6)	0.44 (11.1)	0.38 (9.7)	0.38 (9.7)	0.19 (4.8)	15000 (1034)	
1/4	1/8	SS-HPHN-NS4-NS2	1.30 (32.9)	0.56 (14.3)	0.56 (14.2)	0.38 (9.7)	0.19 (4.8)	15000 (1034)	
1/4	1/4	SS-HPHN-NS4	1.47 (37.4)	0.56 (14.3)	0.56 (14.2)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
3/8	1/8	SS-HPHN-NS6-NS2	1.34 (34.1)	0.69 (17.5)	0.56 (14.2)	0.38 (9.7)	0.19 (4.8)	15000 (1034)	
3/8	1/4	SS-HPHN-NS6-NS4	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
3/8	3/8	SS-HPHN-NS6	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	0.31 (7.9)	15000 (1034)	
1/2	1/8	SS-HPHN-NS8-NS2	1.58 (40.2)	0.87 (22.2)	0.75 (19.1)	0.38 (9.7)	0.19 (4.8)	15000 (1034)	
1/2	1/4	SS-HPHN-NS8-NS4	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
1/2	3/8	SS-HPHN-NS8-NS6	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	0.31 (7.9)	15000 (1034)	
1/2	1/2	SS-HPHN-NS8	1.95 (49.6)	0.87 (22.2)	0.75 (19.1)	0.75 (19.1)	0.38 (9.6)	15000 (1034)	
3/4	1/8	SS-HPHN-NS12-NS2	1.67 (42.4)	1.06 (27.0)	0.75 (19.1)	0.38 (9.7)	0.22 (5.5)	10000 (690)	
3/4	1/4	SS-HPHN-NS12-NS4	1.85 (46.9)	1.06 (27.0)	0.75 (19.1)	0.56 (14.2)	0.28 (7.1)	10000 (690)	
3/4	3/8	SS-HPHN-NS12-NS6	1.85 (46.9)	1.06 (27.0)	0.75 (19.1)	0.56 (14.2)	0.38 (9.6)	10000 (690)	
3/4	1/2	SS-HPHN-NS12-NS8	2.04 (51.8)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	0.47 (11.9)	10000 (690)	
3/4	3/4	SS-HPHN-NS12	2.04 (51.8)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	0.58 (14.8)	10000 (690)	
1	1/8	SS-HPHN-NS16-NS2	1.96 (49.8)	1.37 (34.9)	0.94 (23.9)	0.38 (9.7)	0.22 (5.5)	10000 (690)	
1	1/4	SS-HPHN-NS16-NS4	2.14 (54.3)	1.37 (34.9)	0.94 (23.9)	0.56 (14.2)	0.28 (7.1)	10000 (690)	
1	3/8	SS-HPHN-NS16-NS6	2.14 (54.3)	1.37 (34.9)	0.94 (23.9)	0.56 (14.2)	0.38 (9.6)	10000 (690)	
1	1/2	SS-HPHN-NS16-NS8	2.33 (59.2)	1.37 (34.9)	0.94 (23.9)	0.75 (19.1)	0.47 (11.9)	10000 (690)	
1	3/4	SS-HPHN-NS16-NS12	2.33 (59.2)	1.37 (34.9)	0.94 (23.9)	0.75 (19.1)	0.58 (14.8)	10000 (690)	
1	1	SS-HPHN-NS16	2.52 (64.0)	1.37 (34.9)	0.94 (23.9)	0.94 (23.9)	0.79 (20.0)	10000 (690)	

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Male NPT Threads			Male ISO/BSP Tapered Threads					
P-NPT Size, in.	Px-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)					Working Pressure psig (bar)
			L	F	B	Bx	E	
1/8	1/8	SS-HPHN-NS2-RT2	1.05 (26.6)	0.44 (11.1)	0.38 (9.7)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/4	1/8	SS-HPHN-NS4-RT2	1.30 (32.9)	0.56 (14.3)	0.56 (14.2)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/4	1/4	SS-HPHN-NS4-RT4	1.47 (37.4)	0.56 (14.3)	0.56 (14.2)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
3/8	1/8	SS-HPHN-NS6-RT2	1.34 (34.1)	0.69 (17.5)	0.56 (14.2)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
3/8	1/4	SS-HPHN-NS6-RT4	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
3/8	3/8	SS-HPHN-NS6-RT6	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
1/2	1/8	SS-HPHN-NS8-RT2	1.58 (40.2)	0.87 (22.2)	0.75 (19.1)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/2	1/4	SS-HPHN-NS8-RT4	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
1/2	3/8	SS-HPHN-NS8-RT6	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
1/2	1/2	SS-HPHN-NS8-RT8	1.95 (49.6)	0.87 (22.2)	0.75 (19.1)	0.75 (19.1)	0.38 (9.6)	15000 (1034)
3/4	1/8	SS-HPHN-NS12-RT2	1.67 (42.4)	1.06 (27.0)	0.75 (19.1)	0.38 (9.7)	0.22 (5.5)	10000 (690)
3/4	1/4	SS-HPHN-NS12-RT4	1.85 (46.9)	1.06 (27.0)	0.75 (19.1)	0.56 (14.2)	0.28 (7.1)	10000 (690)
3/4	3/8	SS-HPHN-NS12-RT6	1.85 (46.9)	1.06 (27.0)	0.75 (19.1)	0.56 (14.2)	0.38 (9.6)	10000 (690)
3/4	1/2	SS-HPHN-NS12-RT8	2.04 (51.8)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	0.47 (11.9)	10000 (690)
3/4	3/4	SS-HPHN-NS12-RT12	2.04 (51.8)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	0.58 (14.8)	10000 (690)
1	1/8	SS-HPHN-NS16-RT2	1.96 (49.8)	1.37 (34.9)	0.94 (23.9)	0.38 (9.7)	0.22 (5.5)	10000 (690)
1	1/4	SS-HPHN-NS16-RT4	2.14 (54.3)	1.37 (34.9)	0.94 (23.9)	0.56 (14.2)	0.28 (7.1)	10000 (690)
1	3/8	SS-HPHN-NS16-RT6	2.14 (54.3)	1.37 (34.9)	0.94 (23.9)	0.56 (14.2)	0.38 (9.6)	10000 (690)
1	1/2	SS-HPHN-NS16-RT8	2.33 (59.2)	1.37 (34.9)	0.94 (23.9)	0.75 (19.1)	0.47 (11.9)	10000 (690)
1	3/4	SS-HPHN-NS16-RT12	2.33 (59.2)	1.37 (34.9)	0.94 (23.9)	0.75 (19.1)	0.58 (14.8)	10000 (690)
1	1	SS-HPHN-NS16-RT16	2.52 (64.0)	1.37 (34.9)	0.94 (23.9)	0.94 (23.9)	0.79 (20.0)	10000 (690)

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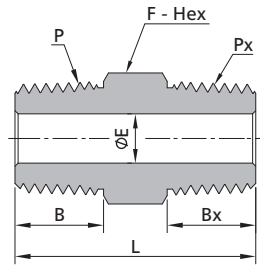
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Male ISO/BSP Tapered Threads									
P-ISO/BSP Tapered Size, in.	Px-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)					Working Pressure psig (bar)	
			L	F	B	Bx	E		
1/8	1/8	SS-HPHN-RT2	1.05 (26.6)	0.44 (11.1)	0.38 (9.7)	0.38 (9.7)	0.19 (4.8)	15000 (1034)	
1/4	1/8	SS-HPHN-RT4-RT2	1.30 (32.9)	0.56 (14.3)	0.56 (14.2)	0.38 (9.7)	0.19 (4.8)	15000 (1034)	
1/4	1/4	SS-HPHN-RT4	1.47 (37.4)	0.56 (14.3)	0.56 (14.2)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
3/8	1/8	SS-HPHN-RT6-RT2	1.34 (34.1)	0.69 (17.5)	0.56 (14.2)	0.38 (9.7)	0.19 (4.8)	15000 (1034)	
3/8	1/4	SS-HPHN-RT6-RT4	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
3/8	3/8	SS-HPHN-RT6	1.52 (38.6)	0.69 (17.5)	0.56 (14.2)	0.56 (14.2)	0.31 (7.9)	15000 (1034)	
1/2	1/8	SS-HPHN-RT8-RT2	1.58 (40.2)	0.87 (22.2)	0.75 (19.1)	0.38 (9.7)	0.19 (4.8)	15000 (1034)	
1/2	1/4	SS-HPHN-RT8-RT4	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
1/2	3/8	SS-HPHN-RT8-RT6	1.76 (44.7)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	0.31 (7.9)	15000 (1034)	
1/2	1/2	SS-HPHN-RT8	1.95 (49.6)	0.87 (22.2)	0.75 (19.1)	0.75 (19.1)	0.38 (9.6)	15000 (1034)	
3/4	1/8	SS-HPHN-RT12-RT2	1.67 (42.4)	1.06 (27.0)	0.75 (19.1)	0.38 (9.7)	0.22 (5.5)	10000 (690)	
3/4	1/4	SS-HPHN-RT12-RT4	1.85 (46.9)	1.06 (27.0)	0.75 (19.1)	0.56 (14.2)	0.28 (7.1)	10000 (690)	
3/4	3/8	SS-HPHN-RT12-RT6	1.85 (46.9)	1.06 (27.0)	0.75 (19.1)	0.56 (14.2)	0.38 (9.6)	10000 (690)	
3/4	1/2	SS-HPHN-RT12-RT8	2.04 (51.8)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	0.47 (11.9)	10000 (690)	
3/4	3/4	SS-HPHN-RT12	2.04 (51.8)	1.06 (27.0)	0.75 (19.1)	0.75 (19.1)	0.58 (14.8)	10000 (690)	
1	1/8	SS-HPHN-RT16-RT2	1.96 (49.8)	1.37 (34.9)	0.94 (23.9)	0.38 (9.7)	0.22 (5.5)	10000 (690)	
1	1/4	SS-HPHN-RT16-RT4	2.14 (54.3)	1.37 (34.9)	0.94 (23.9)	0.56 (14.2)	0.28 (7.1)	10000 (690)	
1	3/8	SS-HPHN-RT16-RT6	2.14 (54.3)	1.37 (34.9)	0.94 (23.9)	0.56 (14.2)	0.38 (9.6)	10000 (690)	
1	1/2	SS-HPHN-RT16-RT8	2.33 (59.2)	1.37 (34.9)	0.94 (23.9)	0.75 (19.1)	0.47 (11.9)	10000 (690)	
1	3/4	SS-HPHN-RT16-RT12	2.33 (59.2)	1.37 (34.9)	0.94 (23.9)	0.75 (19.1)	0.58 (14.8)	10000 (690)	
1	1	SS-HPHN-RT16	2.52 (64.0)	1.37 (34.9)	0.94 (23.9)	0.94 (23.9)	0.79 (20.0)	10000 (690)	

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Line Filters

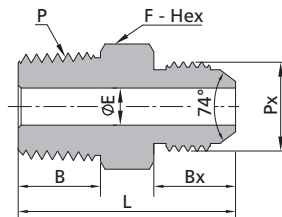
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Subsea Valves

Tools and Installation Instructions

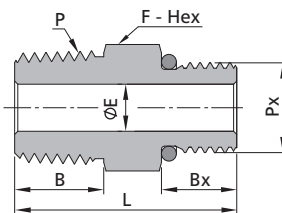
Technical Information

Hex Nipples



Male NPT Threads			Dimensions, in. (mm)					Male JIC
P-NPT Size, in.	Px-SAE/MS Thread Size, in.	Ordering Number	L	F	B	Bx	E	Working Pressure psig (bar)
			1/8	7/16-20	SS-HPHN-NS2-AN4	1.23 (31.3)	0.50 (12.7)	
1/8	9/16-18	SS-HPHN-NS2-AN6	1.31 (33.4)	0.63 (15.9)	0.38 (9.7)	0.56 (14.1)	0.19 (4.8)	15000 (1034)
1/4	7/16-20	SS-HPHN-NS4-AN4	1.46 (37.2)	0.56 (14.3)	0.56 (14.2)	0.55 (14.0)	0.17 (4.4)	15000 (1034)
1/4	9/16-18	SS-HPHN-NS4-AN6	1.49 (37.9)	0.63 (15.9)	0.56 (14.2)	0.56 (14.1)	0.23 (5.8)	15000 (1034)
1/4	3/4-16	SS-HPHN-NS4-AN8	1.65 (41.9)	0.81 (20.6)	0.56 (14.2)	0.66 (16.7)	0.25 (6.4)	15000 (1034)
3/8	7/16-20	SS-HPHN-NS6-AN4	1.52 (38.4)	0.69 (17.5)	0.56 (14.2)	0.55 (14.0)	0.17(4.4)	15000 (1034)
3/8	9/16-18	SS-HPHN-NS6-AN6	1.52 (38.4)	0.69 (17.5)	0.56 (14.2)	0.56 (14.1)	0.23 (5.8)	15000 (1034)
3/8	3/4-16	SS-HPHN-NS6-AN8	1.62 (41.1)	0.81 (20.6)	0.56 (14.2)	0.66 (16.7)	0.31 (7.9)	15000 (1034)
1/2	7/16-20	SS-HPHN-NS8-AN4	1.75 (44.5)	0.87 (22.2)	0.75 (19.1)	0.55 (14.0)	0.17 (4.4)	15000 (1034)
1/2	9/16-18	SS-HPHN-NS8-AN6	1.75 (44.6)	0.87 (22.2)	0.75 (19.1)	0.56 (14.1)	0.23 (5.8)	15000 (1034)
1/2	3/4-16	SS-HPHN-NS8-AN8	1.86 (47.2)	0.87 (22.2)	0.75 (19.1)	0.66 (16.7)	0.31 (8.0)	15000 (1034)
1/2	7/8-14	SS-HPHN-NS8-AN10	1.98 (50.4)	0.94 (23.8)	0.75 (19.1)	0.76 (19.3)	0.37 (9.4)	15000 (1034)
3/4	3/4-16	SS-HPHN-NS12-AN8	1.94 (49.4)	1.06 (27.0)	0.75 (19.1)	0.66 (16.7)	0.39 (9.9)	10000 (690)
3/4	7/8-14	SS-HPHN-NS12-AN10	2.05 (52.0)	1.06 (27.0)	0.75 (19.1)	0.76 (19.3)	0.48 (12.3)	10000 (690)
3/4	1 1/16-12	SS-HPHN-NS12-AN12	2.17 (55.0)	1.13 (28.6)	0.75 (19.1)	0.86 (21.9)	0.58 (14.8)	10000 (690)
3/4	1 5/16-12	SS-HPHN-NS12-AN16	2.30 (58.4)	1.37 (34.9)	0.75 (19.1)	0.91 (23.1)	0.58 (14.8)	10000 (690)
1	1 1/16-12	SS-HPHN-NS16-AN12	2.44 (62.0)	1.37 (34.9)	0.94 (23.9)	0.86 (21.9)	0.61 (15.5)	10000 (690)
1	1 5/16-12	SS-HPHN-NS16-AN16	2.49 (63.2)	1.37 (34.9)	0.94 (23.9)	0.91 (23.1)	0.79 (20.0)	10000 (690)

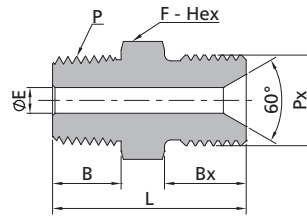
Hex Nipples<sup>①</sup>



Male NPT Threads			Dimensions, in. (mm)					Male SAE/MS Straight Threads
P-NPT Size, in.	Px-SAE/MS Thread Size, in.	Ordering Number	L	F	B	Bx	E	Working Pressure psig (bar)
			1/4	7/16-20	SS-HPHN-NS4-SH7	1.35 (34.2)	0.56 (14.3)	
1/4	9/16-18	SS-HPHN-NS4-SH9	1.43 (36.4)	0.69 (17.5)	0.56 (14.2)	0.47 (12.0)	0.28 (7.1)	10000 (690)
3/8	7/16-20	SS-HPHN-NS6-SH7	1.39 (35.4)	0.69 (17.5)	0.56 (14.2)	0.43 (11.0)	0.18 (4.5)	10000 (690)
3/8	9/16-18	SS-HPHN-NS6-SH9	1.43 (36.4)	0.69 (17.5)	0.56 (14.2)	0.47 (12.0)	0.30 (7.5)	10000 (690)
3/8	3/4-16	SS-HPHN-NS6-SH12	1.56 (39.6)	0.87 (22.2)	0.56 (14.2)	0.55 (14.0)	0.38 (9.6)	10000 (690)
1/2	9/16-18	SS-HPHN-NS8-SH9	1.67 (42.5)	0.87 (22.2)	0.75 (19.1)	0.47 (12.0)	0.30 (7.5)	10000 (690)
1/2	3/4-16	SS-HPHN-NS8-SH12	1.75 (44.5)	0.87 (22.2)	0.75 (19.1)	0.55 (14.0)	0.39 (10.0)	10000 (690)
1/2	7/8-14	SS-HPHN-NS8-SH14	1.88 (47.7)	1.00 (25.4)	0.75 (19.1)	0.63 (16.0)	0.47 (11.9)	10000 (690)
3/4	9/16-18	SS-HPHN-NS12-SH9	1.76 (44.7)	1.06 (27.0)	0.75 (19.1)	0.47 (12.0)	0.30 (7.5)	10000 (690)
3/4	3/4-16	SS-HPHN-NS12-SH12	1.84 (46.7)	1.06 (27.0)	0.75 (19.1)	0.55 (14.0)	0.39 (10.0)	10000 (690)
3/4	7/8-14	SS-HPHN-NS12-SH14	1.92 (48.7)	1.06 (27.0)	0.75 (19.1)	0.63 (16.0)	0.49 (12.5)	10000 (690)
1	3/4-16	SS-HPHN-NS16-SH12	2.13 (54.1)	1.37 (34.9)	0.94 (23.9)	0.55 (14.0)	0.39 (10.0)	10000 (690)
1	7/8-14	SS-HPHN-NS16-SH14	2.21 (56.1)	1.37 (34.9)	0.94 (23.9)	0.63 (16.0)	0.49 (12.5)	10000 (690)

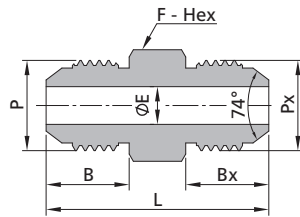
① SAE/MS Heavy-Duty Stud Ends are supplied with a Fluorocarbon FKM O-ring as standard, other materials of O-rings available.

Hex Nipples



Male NPT Threads					Male Type "M"				
P-NPT Size, in.	Px-SAE/MS Thread Size, in.	Ordering Number	Dimensions, in. (mm)					Working Pressure psig (bar)	
			L	F	B	Bx	E		
1/8	9/16-18	SS-HPHN-NS2-HM9	1.22 (31.0)	0.63 (15.9)	0.38 (9.7)	0.50 (12.7)	0.09 (2.4)	15000 (1034)	
1/8	3/4-16	SS-HPHN-NS2-HM12	13.9 (35.3)	0.75 (19.1)	0.38 (9.7)	0.63 (16.0)	0.19 (4.8)	15000 (1034)	
1/4	9/16-18	SS-HPHN-NS4-HM9	1.40 (35.5)	0.63 (15.9)	0.56 (14.2)	0.50 (12.7)	0.09 (2.4)	15000 (1034)	
1/4	3/4-16	SS-HPHN-NS4-HM12	1.57 (39.8)	0.75 (19.1)	0.56 (14.2)	0.63 (16.0)	0.25 (6.4)	15000 (1034)	
1/4	7/8-14	SS-HPHN-NS4-HM14	1.77 (45.0)	1.00 (25.4)	0.56 (14.2)	0.76 (19.2)	0.15 (3.8)	15000 (1034)	
3/8	9/16-18	SS-HPHN-NS6-HM9	1.42 (36.1)	0.69 (17.5)	0.56 (14.2)	0.50 (12.7)	0.09 (2.4)	15000 (1034)	
3/8	3/4-16	SS-HPHN-NS6-HM12	1.57 (39.8)	0.75 (19.1)	0.56 (14.2)	0.63 (16.0)	0.29 (7.4)	15000 (1034)	
3/8	7/8-14	SS-HPHN-NS6-HM14	1.96 (49.9)	1.00 (25.4)	0.56 (14.2)	0.76 (19.2)	0.15 (3.8)	15000 (1034)	
1/2	9/16-18	SS-HPHN-NS8-HM9	1.66 (42.2)	0.87 (22.2)	0.75 (19.1)	0.50 (12.7)	0.09 (2.4)	15000 (1034)	
1/2	3/4-16	SS-HPHN-NS8-HM12	1.79 (45.5)	0.87 (22.2)	0.75 (19.1)	0.63 (16.0)	0.29 (7.4)	15000 (1034)	
1/2	7/8-14	SS-HPHN-NS8-HM14	1.96 (49.9)	1.00 (25.4)	0.75 (19.1)	0.76 (19.2)	0.15 (3.8)	15000 (1034)	
1/2	1-12	SS-HPHN-NS8-HM16	1.85 (47.0)	1.00 (25.4)	0.75 (19.1)	0.64 (16.3)	0.38 (9.6)	15000 (1034)	
3/4	9/16-18	SS-HPHN-NS12-HM9	1.75 (44.4)	1.06 (27.0)	0.75 (19.1)	0.50 (12.7)	0.09 (2.4)	10000 (690)	
3/4	3/4-16	SS-HPHN-NS12-HM12	1.88 (47.7)	1.06 (27.0)	0.75 (19.1)	0.63 (16.0)	0.29 (7.4)	10000 (690)	
3/4	7/8-14	SS-HPHN-NS12-HM14	2.00 (50.9)	1.06 (27.0)	0.75 (19.1)	0.76 (19.2)	0.15 (3.8)	10000 (690)	
3/4	1-12	SS-HPHN-NS12-HM16	1.89 (48.0)	1.06 (27.0)	0.75 (19.1)	0.64 (16.3)	0.39 (10.0)	10000 (690)	
1	1-12	SS-HPHN-NS16-HM16	2.18 (55.4)	1.37 (34.9)	0.94 (23.9)	0.64 (16.3)	0.39 (10.0)	10000 (690)	
1	1 5/16-12	SS-HPHN-NS16-HM21	2.16 (54.8)	1.37 (34.9)	0.94 (23.9)	0.62 (15.7)	0.69 (17.5)	10000 (690)	

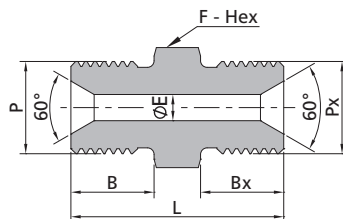
Hex Nipples



Male JIC					Working Pressure psig (bar)				
P-SAE/MS Thread Size, in.	Px-SAE/MS Thread Size, in.	Ordering Number	Dimensions, in. (mm)					Working Pressure psig (bar)	
			L	F	B	Bx	E		
7/16-20	7/16-20	SS-HPHN-AN4	1.40 (35.6)	0.50 (12.7)	0.55 (14.0)	0.55 (14.0)	0.17 (4.4)	20000 (1379)	
9/16-18	7/16-20	SS-HPHN-AN6-AN4	1.48 (37.7)	0.63 (15.9)	0.56 (14.1)	0.55 (14.0)	0.17 (4.4)	20000 (1379)	
9/16-18	9/16-18	SS-HPHN-AN6	1.49 (37.8)	0.63 (15.9)	0.56 (14.1)	0.56 (14.1)	0.23 (5.8)	20000 (1379)	
3/4-16	9/16-18	SS-HPHN-AN8-AN6	1.65 (41.8)	0.81 (20.6)	0.66 (16.7)	0.56 (14.1)	0.23 (5.8)	20000 (1379)	
3/4-16	3/4-16	SS-HPHN-AN8	1.75 (44.4)	0.81 (20.6)	0.66 (16.7)	0.66 (16.7)	0.31 (8.0)	20000 (1379)	
7/8-14	9/16-18	SS-HPHN-AN10-AN6	1.79 (45.4)	0.94 (23.8)	0.76 (19.3)	0.56 (14.1)	0.23 (5.8)	20000 (1379)	
7/8-14	3/4-16	SS-HPHN-AN10-AN8	1.89 (48.0)	0.94 (23.8)	0.76 (19.3)	0.66 (16.7)	0.31 (8.0)	20000 (1379)	
7/8-14	7/8-14	SS-HPHN-AN10	1.99 (50.6)	0.94 (23.8)	0.76 (19.3)	0.76 (19.3)	0.37 (9.4)	20000 (1379)	
1 1/16-12	3/4-16	SS-HPHN-AN12-AN8	2.07 (52.6)	1.13 (28.6)	0.86 (21.9)	0.66 (16.7)	0.31 (8.0)	15000 (1034)	
1 1/16-12	7/8-14	SS-HPHN-AN12-AN10	2.17 (55.2)	1.13 (28.6)	0.86 (21.9)	0.76 (19.3)	0.37 (9.4)	15000 (1034)	
1 1/16-12	1 1/16-12	SS-HPHN-AN12	2.28 (57.8)	1.13 (28.6)	0.86 (21.9)	0.86 (21.9)	0.46 (11.6)	15000 (1034)	
1 5/16-12	7/8-14	SS-HPHN-AN16-AN10	2.31 (58.6)	1.37 (34.9)	0.91 (23.1)	0.76 (19.3)	0.37 (9.4)	15000 (1034)	
1 5/16-12	1 1/16-12	SS-HPHN-AN16-AN12	2.41 (61.2)	1.37 (34.9)	0.91 (23.1)	0.86 (21.9)	0.46 (11.6)	15000 (1034)	
1 5/16-12	1 5/16-12	SS-HPHN-AN16	2.46 (62.4)	1.37 (34.9)	0.91 (23.1)	0.91 (23.1)	0.57 (14.6)	15000 (1034)	

Medium & High Pressure Fittings and Tubing  
Quick Couplings  
Medium & High Pressure Valves  
Line Filters  
Sour Service Products  
Subsea Valves  
Tools and Installation  
Technical Information

## Hex Nipples



Male Type "M"			Dimensions, in. (mm)					Male Type "M"
Px-SAE/MS Thread Size, in.	Px-SAE/MS Thread Size, in.	Ordering Number	L	F	B	Bx	E	Working Pressure psig (bar)
3/4-16	9/16-18	SS-HPHN-HM12-HM9	1.51 (38.3)	0.75 (19.1)	0.63 (16.0)	0.50 (12.7)	0.09 (2.4)	30000 (2068)
3/4-16	3/4-16	SS-HPHN-HM12	1.64 (41.6)	0.75 (19.1)	0.63 (16.0)	0.63 (16.0)	0.29 (7.4)	30000 (2068)
7/8-14	9/16-18	SS-HPHN-HM14-HM9	1.71 (43.5)	1.00 (25.4)	0.76 (19.2)	0.50 (12.7)	0.09 (2.4)	50000 (3447)
7/8-14	3/4-16	SS-HPHN-HM14-HM12	1.84 (46.8)	1.00 (25.4)	0.76 (19.2)	0.63 (16.0)	0.15 (3.8)	30000 (2068)
7/8-14	7/8-14	SS-HPHN-HM14	1.97 (50.0)	1.00 (25.4)	0.76 (19.2)	0.76 (19.2)	0.15 (3.8)	50000 (3447)
1-12	9/16-18	SS-HPHN-HM16-HM9	1.60 (40.6)	1.00 (25.4)	0.64 (16.3)	0.50 (12.7)	0.09 (2.4)	30000 (2068)
1-12	3/4-16	SS-HPHN-HM16-HM12	1.73 (43.9)	1.00 (25.4)	0.64 (16.3)	0.63 (16.0)	0.29 (7.4)	30000 (2068)
1-12	7/8-14	SS-HPHN-HM16-HM14	1.85 (47.1)	1.00 (25.4)	0.64 (16.3)	0.76 (19.2)	0.15 (3.8)	30000 (2068)
1-12	1-12	SS-HPHN-HM16	1.74 (44.2)	1.00 (25.4)	0.64 (16.3)	0.64 (16.3)	0.39 (10.0)	30000 (2068)
1 5/16-12	1-12	SS-HPHN-HM21-HM16	1.86 (47.2)	1.37 (34.9)	0.62 (15.7)	0.64 (16.3)	0.39 (10.0)	20000 (1379)
1 5/16-12	1 5/16-12	SS-HPHN-HM21	1.83 (46.6)	1.37 (34.9)	0.62 (15.7)	0.62 (15.7)	0.69 (17.5)	20000 (1379)

Medium & High Pressure  
Fittings and Tubing

Quick Couplings

Medium & High Pressure  
Valves

Line Filters

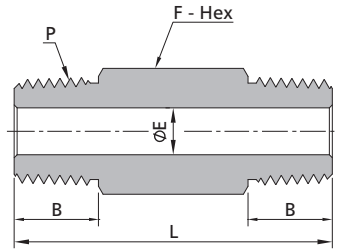
Sour Service Products

Subsea Valves

Tools and Installation  
Instructions

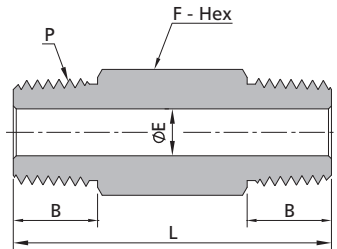
Technical Information

Hex Long Nipples



Male NPT Threads						
P-NPT Size, in.	Ordering Number	Dimensions, in. (mm)				Working Pressure psig (bar)
		L	F	B	E	
1/8	SS-HPLN-NS2-1.5	1.50 (38.1)	0.44 (11.1)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/8	SS-HPLN-NS2-2	2.00 (50.8)	0.44 (11.1)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/8	SS-HPLN-NS2-2.5	2.50 (63.5)	0.44 (11.1)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/8	SS-HPLN-NS2-3	3.00 (76.2)	0.44 (11.1)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/4	SS-HPLN-NS4-2	2.00 (50.8)	0.56 (14.3)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
1/4	SS-HPLN-NS4-2.5	2.50 (63.5)	0.56 (14.3)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
1/4	SS-HPLN-NS4-3	3.00 (76.2)	0.56 (14.3)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
1/4	SS-HPLN-NS4-4	4.00 (101.6)	0.56 (14.3)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
3/8	SS-HPLN-NS6-2	2.00 (50.8)	0.69 (17.5)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
3/8	SS-HPLN-NS6-2.5	2.50 (63.5)	0.69 (17.5)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
3/8	SS-HPLN-NS6-3	3.00 (76.2)	0.69 (17.5)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
3/8	SS-HPLN-NS6-4	4.00 (101.6)	0.69 (17.5)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
1/2	SS-HPLN-NS8-3	3.00 (76.2)	0.87 (22.2)	0.75 (19.1)	0.38 (9.6)	15000 (1034)
1/2	SS-HPLN-NS8-4	4.00 (101.6)	0.87 (22.2)	0.75 (19.1)	0.38 (9.6)	15000 (1034)
1/2	SS-HPLN-NS8-6	6.00 (152.4)	0.87 (22.2)	0.75 (19.1)	0.38 (9.6)	15000 (1034)
3/4	SS-HPLN-NS12-3	3.00 (76.2)	1.06 (27.0)	0.75 (19.1)	0.58 (14.8)	10000 (690)
3/4	SS-HPLN-NS12-4	4.00 (101.6)	1.06 (27.0)	0.75 (19.1)	0.58 (14.8)	10000 (690)
3/4	SS-HPLN-NS12-6	6.00 (152.4)	1.06 (27.0)	0.75 (19.1)	0.58 (14.8)	10000 (690)
3/4	SS-HPLN-NS12-8	8.00 (203.2)	1.06 (27.0)	0.75 (19.1)	0.58 (14.8)	10000 (690)
1	SS-HPLN-NS16-3	3.00 (76.2)	1.37 (34.9)	0.94 (23.9)	0.79 (20.0)	10000 (690)
1	SS-HPLN-NS16-4	4.00 (101.6)	1.37 (34.9)	0.94 (23.9)	0.79 (20.0)	10000 (690)
1	SS-HPLN-NS16-6	6.00 (152.4)	1.37 (34.9)	0.94 (23.9)	0.79 (20.0)	10000 (690)
1	SS-HPLN-NS16-8	8.00 (203.2)	1.37 (34.9)	0.94 (23.9)	0.79 (20.0)	10000 (690)

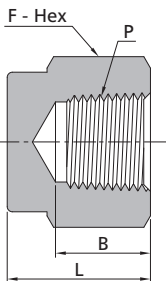
## Hex Long Nipples



## Male ISO/BSP Tapered Threads

P-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)				Working Pressure psig (bar)
		L	F	B	E	
1/8	SS-HPLN-RT2-1.5	1.50 (38.1)	0.44 (11.1)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/8	SS-HPLN-RT2-2	2.00 (50.8)	0.44 (11.1)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/8	SS-HPLN-RT2-2.5	2.50 (63.5)	0.44 (11.1)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/8	SS-HPLN-RT2-3	3.00 (76.2)	0.44 (11.1)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/4	SS-HPLN-RT4-2	2.00 (50.8)	0.56 (14.3)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
1/4	SS-HPLN-RT4-2.5	2.50 (63.5)	0.56 (14.3)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
1/4	SS-HPLN-RT4-3	3.00 (76.2)	0.56 (14.3)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
1/4	SS-HPLN-RT4-4	4.00 (101.6)	0.56 (14.3)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
3/8	SS-HPLN-RT6-2	2.00 (50.8)	0.69 (17.5)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
3/8	SS-HPLN-RT6-2.5	2.50 (63.5)	0.69 (17.5)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
3/8	SS-HPLN-RT6-3	3.00 (76.2)	0.69 (17.5)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
3/8	SS-HPLN-RT6-4	4.00 (101.6)	0.69 (17.5)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
1/2	SS-HPLN-RT8-3	3.00 (76.2)	0.87 (22.2)	0.75 (19.1)	0.38 (9.6)	15000 (1034)
1/2	SS-HPLN-RT8-4	4.00 (101.6)	0.87 (22.2)	0.75 (19.1)	0.38 (9.6)	15000 (1034)
1/2	SS-HPLN-RT8-6	6.00 (152.4)	0.87 (22.2)	0.75 (19.1)	0.38 (9.6)	15000 (1034)
3/4	SS-HPLN-RT12-3	3.00 (76.2)	1.06 (27.0)	0.75 (19.1)	0.58 (14.8)	10000 (690)
3/4	SS-HPLN-RT12-4	4.00 (101.6)	1.06 (27.0)	0.75 (19.1)	0.58 (14.8)	10000 (690)
3/4	SS-HPLN-RT12-6	6.00 (152.4)	1.06 (27.0)	0.75 (19.1)	0.58 (14.8)	10000 (690)
3/4	SS-HPLN-RT12-8	8.00 (203.2)	1.06 (27.0)	0.75 (19.1)	0.58 (14.8)	10000 (690)
1	SS-HPLN-RT16-3	3.00 (76.2)	1.37 (34.9)	0.94 (23.9)	0.79 (20.0)	10000 (690)
1	SS-HPLN-RT16-4	4.00 (101.6)	1.37 (34.9)	0.94 (23.9)	0.79 (20.0)	10000 (690)
1	SS-HPLN-RT16-6	6.00 (152.4)	1.37 (34.9)	0.94 (23.9)	0.79 (20.0)	10000 (690)
1	SS-HPLN-RT16-8	8.00 (203.2)	1.37 (34.9)	0.94 (23.9)	0.79 (20.0)	10000 (690)

## Pipe Caps



## Female NPT Threads

P-NPT Size, in.	Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
		L	F	B	
1/8	SS-HPC-NS2	0.75 (19.1)	0.63 (15.9)	0.41 (10.4)	15000 (1034)
1/4	SS-HPC-NS4	0.91 (23.1)	0.94 (23.8)	0.59 (15.0)	15000 (1034)
3/8	SS-HPC-NS6	1.03 (26.2)	1.13 (28.6)	0.59 (15.0)	15000 (1034)
1/2	SS-HPC-NS8	1.34 (34.0)	1.37 (34.9)	0.78 (19.8)	15000 (1034)
3/4	SS-HPC-NS12	1.62 (36.6)	1.50 (38.1)	0.81 (20.6)	10000 (690)
1	SS-HPC-NS16	1.62 (41.1)	44.5 (1.75)	1.00 (25.4)	10000 (690)

Medium &amp; High Pressure Fittings and Tubing

Quick Couplings

Medium &amp; High Pressure Valves

Line Filters

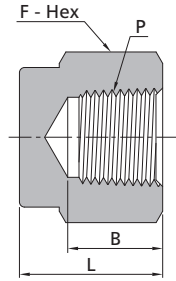
Sour Service Products

Subsea Valves

Tools and Installation Instructions

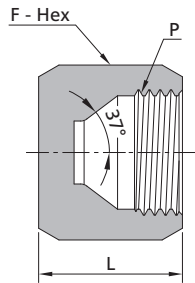
Technical Information

Pipe Caps



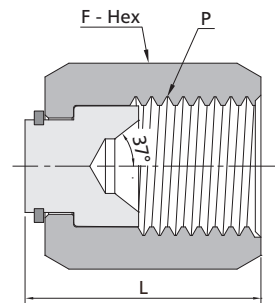
Female ISO/BSP Tapered Threads					
P-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
		L	F	B	
1/8	SS-HPC-RT2	0.75 (19.1)	0.63 (15.9)	0.41 (10.4)	15000 (1034)
1/4	SS-HPC-RT4	0.91 (23.1)	0.94 (23.8)	0.59 (15.0)	15000 (1034)
3/8	SS-HPC-RT6	1.03 (26.2)	1.13 (28.6)	0.59 (15.0)	15000 (1034)
1/2	SS-HPC-RT8	1.34 (34.0)	1.37 (34.9)	0.78 (19.8)	15000 (1034)
3/4	SS-HPC-RT12	1.62 (36.6)	1.50 (38.1)	0.81 (20.6)	10000 (690)
1	SS-HPC-RT16	1.62 (41.1)	1.75 (44.5)	1.00 (25.4)	10000 (690)

Pipe Caps



Female JIC				
P-SAE/MS Thread Size, in.	Ordering Number	Dimensions, in. (mm)		Working Pressure psig (bar)
		L	F	
7/16-20	SS-HPC-AN4	0.63 (16.1)	0.56 (14.3)	20000 (1379)
9/16-18	SS-HPC-AN6	0.72 (18.3)	0.69 (17.5)	20000 (1379)
3/4-16	SS-HPC-AN8	0.85 (21.6)	0.87 (22.2)	20000 (1379)
7/8-14	SS-HPC-AN10	0.98 (24.9)	1.00 (25.4)	20000 (1379)
1 1/16-12	SS-HPC-AN12	1.06 (26.8)	1.25 (31.8)	15000 (1034)
1 5/16-12	SS-HPC-AN16	1.18 (30.0)	1.50 (38.1)	15000 (1034)

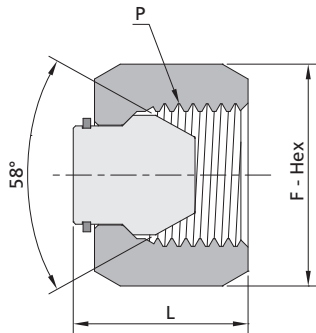
Pipe Cap Assemblies (Moveable Insert)



Moveable Insert Female JIC				
P-SAE/MS Thread Size, in.	Ordering Number	Dimensions, in. (mm)		Working Pressure psig (bar)
		L	F	
7/16-20	SS-HMC-AS4	0.67 (17.1)	0.56 (14.3)	20000 (1379)
9/16-18	SS-HMC-AS6	0.81 (20.5)	0.69 (17.5)	20000 (1379)
3/4-16	SS-HMC-AS8	0.94 (23.9)	0.87 (22.2)	20000 (1379)
7/8-14	SS-HMC-AS10	1.07 (27.1)	1.00 (25.4)	20000 (1379)
1 1/16-12	SS-HMC-AS12	1.24 (31.6)	1.25 (31.8)	15000 (1034)
1 5/16-12	SS-HMC-AS16	1.29 (32.8)	1.50 (38.1)	15000 (1034)

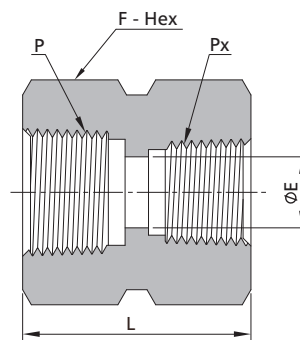
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Pipe Cap Assemblies (Moveable Insert)



Moveable Insert Female Type "M"				
P-SAE/MS Thread Size, in.	Ordering Number	Dimensions, in. (mm)		Working Pressure psig (bar)
		L	F	
9/16-18	SS-HMC-HM9	0.85 (21.6)	0.69 (17.5)	60000 (4137)
3/4-16	SS-HMC-HM12	0.91 (23.1)	1.00 (25.4)	30000 (2068)
7/8-14	SS-HMC-HM14	1.28 (32.5)	1.19 (30.2)	50000 (3447)
1-12	SS-HMC-HM16	1.25 (31.8)	1.25 (31.8)	30000 (2068)
1 5/16-12	SS-HMC-HM21	1.18 (30.0)	1.50 (38.1)	20000 (1379)

Hex Couplings



Female NPT Threads						
P-NPT Size, in.	Px-NPT Size, in.	Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
			L	F	E	
1/8	1/8	SS-HPCG-NS2	0.94 (23.8)	0.63 (15.9)	0.31 (8.0)	15000 (1034)
1/4	1/8	SS-HPCG-NS4-NS2	1.14 (28.9)	0.94 (23.8)	0.31 (8.0)	15000 (1034)
1/4	1/4	SS-HPCG-NS4	1.32 (33.5)	0.94 (23.8)	0.41 (10.4)	15000 (1034)
3/8	1/8	SS-HPCG-NS6-NS2	1.14 (28.9)	1.13 (28.6)	0.31 (8.0)	15000 (1034)
3/8	1/4	SS-HPCG-NS6-NS4	1.32 (33.5)	1.13 (28.6)	0.41 (10.4)	15000 (1034)
3/8	3/8	SS-HPCG-NS6	1.32 (33.5)	1.13 (28.6)	0.54 (13.8)	15000 (1034)
1/2	1/8	SS-HPCG-NS8-NS2	1.35 (34.2)	1.37 (34.9)	0.31 (8.0)	15000 (1034)
1/2	1/4	SS-HPCG-NS8-NS4	1.53 (38.8)	1.37 (34.9)	0.41 (10.4)	15000 (1034)
1/2	3/8	SS-HPCG-NS8-NS6	1.53 (38.8)	1.37 (34.9)	0.54 (13.8)	15000 (1034)
1/2	1/2	SS-HPCG-NS8	1.72 (43.8)	1.37 (34.9)	0.67 (17.0)	15000 (1034)
3/4	1/8	SS-HPCG-NS12-NS2	1.40 (35.5)	1.50 (38.1)	0.31 (8.0)	10000 (690)
3/4	1/4	SS-HPCG-NS12-NS4	1.58 (40.1)	1.50 (38.1)	0.41 (10.4)	10000 (690)
3/4	3/8	SS-HPCG-NS12-NS6	1.58 (40.1)	1.50 (38.1)	0.54 (13.8)	10000 (690)
3/4	1/2	SS-HPCG-NS12-NS8	1.79 (45.4)	1.50 (38.1)	0.67 (17.0)	10000 (690)
3/4	3/4	SS-HPCG-NS12	1.84 (46.7)	1.50 (38.1)	0.88 (22.3)	10000 (690)
1	1/8	SS-HPCG-NS16-NS2	1.59 (40.5)	1.75 (44.5)	0.31 (8.0)	10000 (690)
1	1/4	SS-HPCG-NS16-NS4	1.76 (44.8)	1.75 (44.5)	0.41 (10.4)	10000 (690)
1	3/8	SS-HPCG-NS16-NS6	1.76 (44.8)	1.75 (44.5)	0.54 (13.8)	10000 (690)
1	1/2	SS-HPCG-NS16-NS8	1.96 (49.7)	1.75 (44.5)	0.67 (17.0)	10000 (690)
1	3/4	SS-HPCG-NS16-NS12	2.00 (50.7)	1.75 (44.5)	0.88 (22.3)	10000 (690)
1	1	SS-HPCG-NS16	2.19 (55.5)	1.75 (44.5)	1.11 (28.1)	10000 (690)

Medium & High Pressure Fittings and Tubing

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Line Filters

Sour Service Products

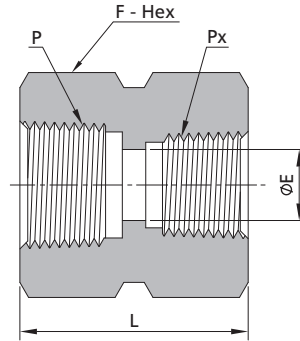
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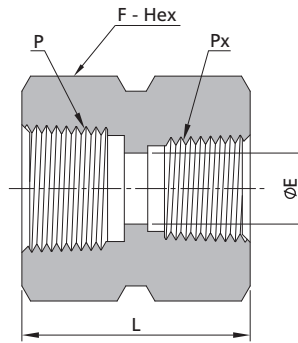
Hex Couplings



Female NPT Threads			Female ISO/BSP Tapered Threads			
P-NPT Size, in.	Px-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
			L	F	E	
1/8	1/8	SS-HPCG-NS2-RT2	0.94 (23.8)	0.63 (15.9)	0.31 (8.0)	15000 (1034)
1/4	1/8	SS-HPCG-NS4-RT2	1.14 (28.9)	0.94 (23.8)	0.31 (8.0)	15000 (1034)
1/4	1/4	SS-HPCG-NS4-RT4	1.32 (33.5)	0.94 (23.8)	0.41 (10.4)	15000 (1034)
3/8	1/8	SS-HPCG-NS6-RT2	1.14 (28.9)	1.13 (28.6)	0.31 (8.0)	15000 (1034)
3/8	1/4	SS-HPCG-NS6-RT4	1.32 (33.5)	1.13 (28.6)	0.41 (10.4)	15000 (1034)
3/8	3/8	SS-HPCG-NS6-RT6	1.32 (33.5)	1.13 (28.6)	0.54 (13.8)	15000 (1034)
1/2	1/8	SS-HPCG-NS8-RT2	1.35 (34.2)	1.37 (34.9)	0.31 (8.0)	15000 (1034)
1/2	1/4	SS-HPCG-NS8-RT4	1.53 (38.8)	1.37 (34.9)	0.41 (10.4)	15000 (1034)
1/2	3/8	SS-HPCG-NS8-RT6	1.53 (38.8)	1.37 (34.9)	0.54 (13.8)	15000 (1034)
1/2	1/2	SS-HPCG-NS8-RT8	1.72 (43.8)	1.37 (34.9)	0.67 (17.0)	15000 (1034)
3/4	1/8	SS-HPCG-NS12-RT2	1.40 (35.5)	1.50 (38.1)	0.31 (8.0)	10000 (690)
3/4	1/4	SS-HPCG-NS12-RT4	1.58 (40.1)	1.50 (38.1)	0.41 (10.4)	10000 (690)
3/4	3/8	SS-HPCG-NS12-RT6	1.58 (40.1)	1.50 (38.1)	0.54 (13.8)	10000 (690)
3/4	1/2	SS-HPCG-NS12-RT8	1.79 (45.4)	1.50 (38.1)	0.69 (17.4)	10000 (690)
3/4	3/4	SS-HPCG-NS12-RT12	1.84 (46.7)	1.50 (38.1)	0.88 (22.3)	10000 (690)
1	1/8	SS-HPCG-NS16-RT2	1.59 (40.5)	1.75 (44.5)	0.31 (8.0)	10000 (690)
1	1/4	SS-HPCG-NS16-RT4	1.76 (44.8)	1.75 (44.5)	0.41 (10.4)	10000 (690)
1	3/8	SS-HPCG-NS16-RT6	1.76 (44.8)	1.75 (44.5)	0.54 (13.8)	10000 (690)
1	1/2	SS-HPCG-NS16-RT8	1.96 (49.7)	1.75 (44.5)	0.69 (17.4)	10000 (690)
1	3/4	SS-HPCG-NS16-RT12	2.00 (50.7)	1.75 (44.5)	0.90 (22.8)	10000 (690)
1	1	SS-HPCG-NS16-RT16	2.19 (55.5)	1.75 (44.5)	1.11 (28.1)	10000 (690)

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Female ISO/BSP Tapered Threads						
P-ISO/BSP Tapered Size, in.	Px-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
			L	F	E	
1/8	1/8	SS-HPCG-RT2	0.94 (23.8)	0.63 (15.9)	0.31 (8.0)	15000 (1034)
1/4	1/8	SS-HPCG-RT4-RT2	1.14 (28.9)	0.94 (23.8)	0.31 (8.0)	15000 (1034)
1/4	1/4	SS-HPCG-RT4	1.32 (33.5)	0.94 (23.8)	0.41 (10.4)	15000 (1034)
3/8	1/8	SS-HPCG-RT6-RT2	1.14 (28.9)	1.13 (28.6)	0.31 (8.0)	15000 (1034)
3/8	1/4	SS-HPCG-RT6-RT4	1.32 (33.5)	1.13 (28.6)	0.41 (10.4)	15000 (1034)
3/8	3/8	SS-HPCG-RT6	1.32 (33.5)	1.13 (28.6)	0.54 (13.8)	15000 (1034)
1/2	1/8	SS-HPCG-RT8-RT2	1.35 (34.2)	1.37 (34.9)	0.31 (8.0)	15000 (1034)
1/2	1/4	SS-HPCG-RT8-RT4	1.53 (38.8)	1.37 (34.9)	0.41 (10.4)	15000 (1034)
1/2	3/8	SS-HPCG-RT8-RT6	1.53 (38.8)	1.37 (34.9)	0.54 (13.8)	15000 (1034)
1/2	1/2	SS-HPCG-RT8	1.72 (43.8)	1.37 (34.9)	0.69 (17.4)	15000 (1034)
3/4	1/8	SS-HPCG-RT12-RT2	1.40 (35.5)	1.50 (38.1)	0.31 (8.0)	10000 (690)
3/4	1/4	SS-HPCG-RT12-RT4	1.58 (40.1)	1.50 (38.1)	0.41 (10.4)	10000 (690)
3/4	3/8	SS-HPCG-RT12-RT6	1.58 (40.1)	1.50 (38.1)	0.54 (13.8)	10000 (690)
3/4	1/2	SS-HPCG-RT12-RT8	1.79 (45.4)	1.50 (38.1)	0.90 (22.8)	10000 (690)
3/4	3/4	SS-HPCG-RT12	1.84 (46.7)	1.50 (38.1)	1.13 (28.7)	10000 (690)
1	1/8	SS-HPCG-RT16-RT2	1.59 (40.5)	1.75 (44.5)	0.31 (8.0)	10000 (690)
1	1/4	SS-HPCG-RT16-RT4	1.76 (44.8)	1.75 (44.5)	0.41 (10.4)	10000 (690)
1	3/8	SS-HPCG-RT16-RT6	1.76 (44.8)	1.75 (44.5)	0.54 (13.8)	10000 (690)
1	1/2	SS-HPCG-RT16-RT8	1.96 (49.7)	1.75 (44.5)	0.69 (17.4)	10000 (690)
1	3/4	SS-HPCG-RT16-RT12	2.00 (50.7)	1.75 (44.5)	0.90 (22.8)	10000 (690)
1	1	SS-HPCG-RT16	2.19 (55.5)	1.75 (44.5)	1.13 (28.7)	10000 (690)

Medium & High Pressure Fittings and Tubing

Quick Couplings

Medium & High Pressure Valves

Line Filters

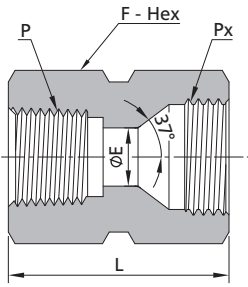
Sour Service Products

Subsea Valves

Tools and Installation Instructions

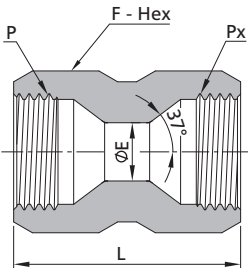
Technical Information

Hex Couplings



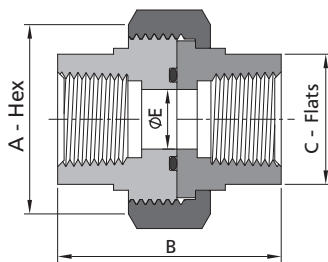
Female NPT Threads			Female JIC			
P-NPT Size, in.	Px-SAE/MS Thread Size, in.	Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
			L	F	E	
1/8	7/16-20	SS-HPCG-NS2-AN4	1.12 (28.4)	0.63 (15.9)	0.17 (4.3)	15000 (1034)
1/4	7/16-20	SS-HPCG-NS4-AN4	1.33 (33.7)	0.94 (23.8)	0.17 (4.3)	15000 (1034)
1/4	9/16-18	SS-HPCG-NS4-AN6	1.36 (34.5)	0.94 (23.8)	0.30 (7.5)	15000 (1034)
3/8	7/16-20	SS-HPCG-NS6-AN4	1.33 (33.7)	1.13 (28.6)	0.17 (4.3)	15000 (1034)
3/8	9/16-18	SS-HPCG-NS6-AN6	1.36 (34.5)	1.13 (28.6)	0.30 (7.5)	15000 (1034)
3/8	3/4-16	SS-HPCG-NS6-AN8	1.44 (36.5)	1.13 (28.6)	0.39 (9.9)	15000 (1034)
1/2	9/16-18	SS-HPCG-NS8-AN6	1.56 (39.7)	1.37 (34.9)	0.30 (7.5)	15000 (1034)
1/2	3/4-16	SS-HPCG-NS8-AN8	1.64 (41.7)	1.37 (34.9)	0.39 (9.9)	15000 (1034)
1/2	7/8-14	SS-HPCG-NS8-AN10	1.74 (44.1)	1.37 (34.9)	0.48 (12.3)	15000 (1034)

Hex Couplings



Female JIC						
P-SAE/MS Thread Size, in.	Px-SAE/MS Thread Size, in.	Ordering Number	Dimensions, in. (mm)			Working Pressure psig (bar)
			L	F	E	
7/16-20	7/16-20	SS-HPCG-AN4	1.24 (31.5)	0.56 (14.3)	0.17 (4.3)	20000 (1379)
9/16-18	7/16-20	SS-HPCG-AN6-AN4	1.27 (32.3)	0.69 (17.5)	0.17 (4.3)	20000 (1379)
9/16-18	9/16-18	SS-HPCG-AN6	1.33 (33.8)	0.69 (17.5)	0.30 (7.5)	20000 (1379)
3/4-16	9/16-18	SS-HPCG-AN8-AN6	1.39 (35.4)	0.87 (22.2)	0.30 (7.5)	20000 (1379)
3/4-16	3/4-16	SS-HPCG-AN8	1.48 (37.6)	0.87 (22.2)	0.39 (9.9)	20000 (1379)
7/8-14	3/4-16	SS-HPCG-AN10-AN8	1.57 (40.0)	1.00 (25.4)	0.39 (9.9)	20000 (1379)
7/8-14	7/8-14	SS-HPCG-AN10	1.68 (42.6)	1.00 (25.4)	0.48 (12.3)	20000 (1379)
1 1/16-12	7/8-14	SS-HPCG-AN12-AN10	1.74 (44.1)	1.37 (34.8)	0.48 (12.3)	15000 (1034)
1 1/16-12	1 1/16-12	SS-HPCG-AN12	1.80 (45.8)	1.25 (31.8)	0.61 (15.5)	15000 (1034)
1 5/16-12	1 1/16-12	SS-HPCG-AN16-AN12	1.89 (48.1)	1.50 (38.1)	0.61 (15.5)	15000 (1034)
1 5/16-12	1 5/16-12	SS-HPCG-AN16	1.97 (50.1)	1.50 (38.1)	0.84 (21.4)	15000 (1034)

Zero-Clearance Unions<sup>①</sup>

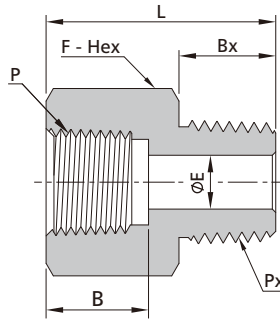


Female NPT Threads						
P-NPT Size, in.	Ordering Number	Dimensions, in. (mm)				Working Pressure psig (bar)
		A	B	C	E	
1/8	SS-HPZC-NS2	1.06 (27.0)	1.75 (44.5)	0.62 (15.8)	0.31 (8.0)	15000 (1034)
1/4	SS-HPZC-NS4	1.50 (38.1)	2.00 (50.8)	0.94 (23.8)	0.41 (10.4)	15000 (1034)
3/8	SS-HPZC-NS6	1.75 (44.5)	2.25 (57.2)	1.12 (28.5)	0.54 (13.8)	15000 (1034)
1/2	SS-HPZC-NS8	2.00 (50.8)	2.50 (63.5)	1.37 (34.9)	0.67 (17.0)	15000 (1034)
3/4	SS-HPZC-NS12	2.25 (57.2)	2.75 (69.9)	1.50 (38.1)	0.88 (22.3)	10000 (690)

① Working temperature range with Fluorocarbon FKM O-rings: 0°F to 400°F (-17.8°C to 204°C), other materials of O-rings available.

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Female NPT Threads			Dimensions, in. (mm)					Male NPT Threads
P-NPT Size, in.	Px-NPT Size, in.	Ordering Number	L	F	B	Bx	E	Working Pressure psig (bar)
1/8	1/8	SS-HPA-NS2	0.96 (24.5)	0.63 (15.9)	0.41 (10.4)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/8	1/4	SS-HPA-NS2-NS4	1.13 (28.8)	0.63 (15.9)	0.41 (10.4)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
1/8	3/8	SS-HPA-NS2-NS6	1.14 (29.0)	0.69 (17.5)	0.41 (10.4)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
1/8	1/2	SS-HPA-NS2-NS8	1.08 (27.4)	0.87 (22.2)	0.41 (10.4)	0.75 (19.1)	0.31 (8.0)	15000 (1034)
1/8	3/4	SS-HPA-NS2-NS12	1.08 (27.4)	1.06 (27.0)	0.41 (10.4)	0.75 (19.1)	0.31 (8.0)	10000 (690)
1/4	1/8	SS-HPA-NS4-NS2	1.25 (31.8)	0.94 (23.8)	0.59 (15.0)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/4	1/4	SS-HPA-NS4	1.37 (34.9)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
1/4	3/8	SS-HPA-NS4-NS6	1.37 (34.9)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
1/4	1/2	SS-HPA-NS4-NS8	1.58 (40.1)	0.94 (23.8)	0.59 (15.0)	0.75 (19.1)	0.38 (9.6)	15000 (1034)
1/4	3/4	SS-HPA-NS4-NS12	1.34 (34.1)	1.06 (27.0)	0.59 (15.0)	0.75 (19.1)	0.41 (10.4)	10000 (690)
1/4	1	SS-HPA-NS4-NS16	1.62 (41.1)	1.37 (34.9)	0.59 (15.0)	0.94 (23.9)	0.41 (10.4)	10000 (690)
3/8	1/4	SS-HPA-NS6-NS4	1.42 (36.0)	1.13 (28.6)	0.59 (15.0)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
3/8	3/8	SS-HPA-NS6	1.42 (36.0)	1.13 (28.6)	0.59 (15.0)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
3/8	1/2	SS-HPA-NS6-NS8	1.61 (41.0)	1.13 (28.6)	0.59 (15.0)	0.75 (19.1)	0.38 (9.6)	15000 (1034)
3/8	3/4	SS-HPA-NS6-NS12	1.61 (41.0)	1.06 (27.0)	0.59 (15.0)	0.75 (19.1)	0.54 (13.8)	10000 (690)
3/8	1	SS-HPA-NS6-NS16	1.47 (37.3)	1.37 (34.9)	0.59 (15.0)	0.94 (23.9)	0.54 (13.8)	10000 (690)
1/2	1/4	SS-HPA-NS8-NS4	1.72 (43.1)	1.37 (34.9)	0.78 (19.8)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
1/2	3/8	SS-HPA-NS8-NS6	1.72 (43.1)	1.37 (34.9)	0.78 (19.8)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
1/2	1/2	SS-HPA-NS8	1.89 (48.0)	1.37 (34.9)	0.78 (19.8)	0.75 (19.1)	0.38 (9.6)	15000 (1034)
1/2	3/4	SS-HPA-NS8-NS12	1.89 (48.0)	1.19 (30.2)	0.78 (19.8)	0.75 (19.1)	0.58 (14.8)	10000 (690)
1/2	1	SS-HPA-NS8-NS16	2.08 (52.8)	1.37 (34.9)	0.78 (19.8)	0.94 (23.9)	0.67 (17.0)	10000 (690)
3/4	1/2	SS-HPA-NS12-NS8	1.89 (48.1)	1.50 (38.1)	0.81 (20.6)	0.75 (19.1)	0.47 (11.9)	10000 (690)
3/4	3/4	SS-HPA-NS12	1.89 (48.1)	1.50 (38.1)	0.81 (20.6)	0.75 (19.1)	0.58 (14.8)	10000 (690)
3/4	1	SS-HPA-NS12-NS16	2.08 (52.9)	1.50 (38.1)	0.81 (20.6)	0.94 (23.9)	0.79 (20.0)	10000 (690)
1	1/2	SS-HPA-NS16-NS8	2.10 (53.3)	1.75 (44.5)	1.00 (25.4)	0.75 (19.1)	0.47 (11.9)	10000 (690)
1	3/4	SS-HPA-NS16-NS12	2.10 (53.3)	1.75 (44.5)	1.00 (25.4)	0.75 (19.1)	0.58 (14.8)	10000 (690)
1	1	SS-HPA-NS16	2.29 (58.1)	1.75 (44.5)	1.00 (25.4)	0.94 (23.9)	0.79 (20.0)	10000 (690)

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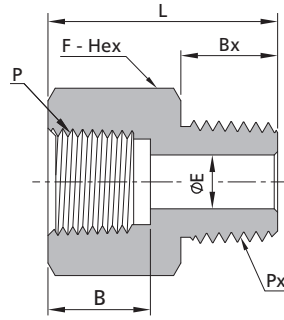
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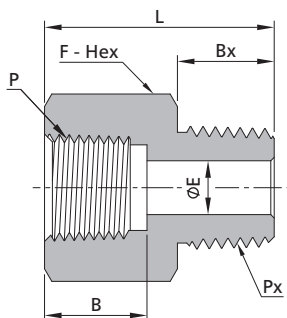
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Female NPT Threads			Male ISO/BSP Tapered Threads						
P-NPT Size, in.	Px-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)					Working Pressure psig (bar)	
			L	F	B	Bx	E		
1/8	1/8	SS-HPA-NS2-RT2	0.96 (24.5)	0.63 (15.9)	0.41 (10.4)	0.38 (9.7)	0.19 (4.8)	15000 (1034)	
1/8	1/4	SS-HPA-NS2-RT4	1.13 (28.8)	0.63 (15.9)	0.41 (10.4)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
1/8	3/8	SS-HPA-NS2-RT6	1.14 (29.0)	0.69 (17.5)	0.41 (10.4)	0.56 (14.2)	0.31 (7.9)	15000 (1034)	
1/8	1/2	SS-HPA-NS2-RT8	1.08 (27.4)	0.87 (22.2)	0.41 (10.4)	0.75 (19.1)	0.31 (8.0)	15000 (1034)	
1/8	3/4	SS-HPA-NS2-RT12	1.08 (27.4)	1.06 (27.0)	0.41 (10.4)	0.75 (19.1)	0.31 (8.0)	10000 (690)	
1/4	1/8	SS-HPA-NS4-RT2	1.25 (31.8)	0.94 (23.8)	0.59 (15.0)	0.38 (9.7)	0.19 (4.8)	15000 (1034)	
1/4	1/4	SS-HPA-NS4-RT4	1.37 (34.9)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
1/4	3/8	SS-HPA-NS4-RT6	1.37 (34.9)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	0.31 (7.9)	15000 (1034)	
1/4	1/2	SS-HPA-NS4-RT8	1.58 (40.1)	0.94 (23.8)	0.59 (15.0)	0.75 (19.1)	0.38 (9.6)	15000 (1034)	
1/4	3/4	SS-HPA-NS4-RT12	1.34 (34.1)	1.06 (27.0)	0.59 (15.0)	0.75 (19.1)	0.41 (10.4)	10000 (690)	
1/4	1	SS-HPA-NS4-RT16	1.37 (34.8)	1.37 (34.9)	0.59 (15.0)	0.94 (23.9)	0.41 (10.4)	10000 (690)	
3/8	1/4	SS-HPA-NS6-RT4	1.42 (36.0)	1.13 (28.6)	0.59 (15.0)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
3/8	3/8	SS-HPA-NS6-RT6	1.42 (36.0)	1.13 (28.6)	0.59 (15.0)	0.56 (14.2)	0.31 (7.9)	15000 (1034)	
3/8	1/2	SS-HPA-NS6-RT8	1.61 (41.0)	1.13 (28.6)	0.59 (15.0)	0.75 (19.1)	0.38 (9.6)	15000 (1034)	
3/8	3/4	SS-HPA-NS6-RT12	1.61 (41.0)	1.06(27.0)	0.59 (15.0)	0.75 (19.1)	0.54 (13.8)	10000 (690)	
3/8	1	SS-HPA-NS6-RT16	1.47 (37.3)	1.37 (34.9)	0.59 (15.0)	0.94 (23.9)	0.54 (13.8)	10000 (690)	
1/2	1/4	SS-HPA-NS8-RT4	1.72 (43.1)	1.37 (34.9)	0.78 (19.8)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
1/2	3/8	SS-HPA-NS8-RT6	1.72 (43.1)	1.37 (34.9)	0.78 (19.8)	0.56 (14.2)	0.31 (7.9)	15000 (1034)	
1/2	1/2	SS-HPA-NS8-RT8	1.89 (48.0)	1.37 (34.9)	0.78 (19.8)	0.75 (19.1)	0.38 (9.6)	15000 (1034)	
1/2	3/4	SS-HPA-NS8-RT12	1.89 (48.0)	1.19 (30.2)	0.78 (19.8)	0.75 (19.1)	0.58 (14.8)	10000 (690)	
1/2	1	SS-HPA-NS8-RT16	2.08 (52.8)	1.37 (34.9)	0.78 (19.8)	0.94 (23.9)	0.67 (17.0)	10000 (690)	
3/4	1/2	SS-HPA-NS12-RT8	1.89 (48.1)	1.50 (38.1)	0.81 (20.6)	0.75 (19.1)	0.47 (11.9)	10000 (690)	
3/4	3/4	SS-HPA-NS12-RT12	1.89 (48.1)	1.50 (38.1)	0.81 (20.6)	0.75 (19.1)	0.58 (14.8)	10000 (690)	
3/4	1	SS-HPA-NS12-RT16	2.08 (52.9)	1.50 (38.1)	0.81 (20.6)	0.94 (23.9)	0.79 (20.0)	10000 (690)	
1	1/2	SS-HPA-NS16-RT8	2.10 (53.3)	1.75 (44.5)	1.00 (25.4)	0.75 (19.1)	0.47 (11.9)	10000 (690)	
1	3/4	SS-HPA-NS16-RT12	2.10 (53.3)	1.75 (44.5)	1.00 (25.4)	0.75 (19.1)	0.58 (14.8)	10000 (690)	
1	1	SS-HPA-NS16-RT16	2.29 (58.1)	1.75 (44.5)	1.00 (25.4)	0.94 (23.9)	0.79 (20.0)	10000 (690)	

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Female ISO/BSP Tapered Threads			Male ISO/BSP Tapered Threads					
P-ISO/BSP Tapered Size, in.	Px-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)					Working Pressure psig (bar)
			L	F	B	Bx	E	
1/8	1/8	SS-HPA-RT2	0.96 (24.5)	0.63 (15.9)	0.41 (10.4)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/8	1/4	SS-HPA-RT2-RT4	1.13 (28.8)	0.63 (15.9)	0.41 (10.4)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
1/8	3/8	SS-HPA-RT2-RT6	1.14 (29.0)	0.69 (17.5)	0.41 (10.4)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
1/8	1/2	SS-HPA-RT2-RT8	1.08 (27.4)	0.87 (22.2)	0.41 (10.4)	0.75 (19.1)	0.31 (8.0)	15000 (1034)
1/8	3/4	SS-HPA-RT2-RT12	1.08 (27.4)	1.06 (27.0)	0.41 (10.4)	0.75 (19.1)	0.31 (8.0)	10000 (690)
1/4	1/8	SS-HPA-RT4-RT2	1.25 (31.8)	0.94 (23.8)	0.59 (15.0)	0.38 (9.7)	0.19 (4.8)	15000 (1034)
1/4	1/4	SS-HPA-RT4	1.37 (34.9)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
1/4	3/8	SS-HPA-RT4-RT6	1.37 (34.9)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
1/4	1/2	SS-HPA-RT4-RT8	1.58 (40.1)	0.94 (23.8)	0.59 (15.0)	0.75 (19.1)	0.38 (9.6)	15000 (1034)
1/4	3/4	SS-HPA-RT4-RT12	1.34 (34.1)	1.06 (27.0)	0.59 (15.0)	0.75 (19.1)	0.41 (10.4)	10000 (690)
1/4	1	SS-HPA-RT4-RT16	1.37 (34.8)	1.37 (34.9)	0.59 (15.0)	0.94 (23.9)	0.41 (10.4)	10000 (690)
3/8	1/4	SS-HPA-RT6-RT4	1.42 (36.0)	1.13 (28.6)	0.59 (15.0)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
3/8	3/8	SS-HPA-RT6	1.42 (36.0)	1.13 (28.6)	0.59 (15.0)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
3/8	1/2	SS-HPA-RT6-RT8	1.61 (41.0)	1.13 (28.6)	0.59 (15.0)	0.75 (19.1)	0.38 (9.6)	15000 (1034)
3/8	3/4	SS-HPA-RT6-RT12	1.61 (41.0)	1.06 (27.0)	0.59 (15.0)	0.75 (19.1)	0.54 (13.8)	10000 (690)
3/8	1	SS-HPA-RT6-RT16	1.47 (37.3)	1.37 (34.9)	0.59 (15.0)	0.94 (23.9)	0.54 (13.8)	10000 (690)
1/2	1/4	SS-HPA-RT8-RT4	1.72 (43.1)	1.37 (34.9)	0.78 (19.8)	0.56 (14.2)	0.25 (6.4)	15000 (1034)
1/2	3/8	SS-HPA-RT8-RT6	1.72 (43.1)	1.37 (34.9)	0.78 (19.8)	0.56 (14.2)	0.31 (7.9)	15000 (1034)
1/2	1/2	SS-HPA-RT8	1.89 (48.0)	1.37 (34.9)	0.78 (19.8)	0.75 (19.1)	0.38 (9.6)	15000 (1034)
1/2	3/4	SS-HPA-RT8-RT12	1.89 (48.0)	1.19 (30.2)	0.78 (19.8)	0.75 (19.1)	0.58 (14.8)	10000 (690)
1/2	1	SS-HPA-RT8-RT16	2.08 (52.8)	1.37 (34.9)	0.78 (19.8)	0.94 (23.9)	0.69 (17.4)	10000 (690)
3/4	1/2	SS-HPA-RT12-RT8	1.89 (48.1)	1.50 (38.1)	0.81 (20.6)	0.75 (19.1)	0.47 (11.9)	10000 (690)
3/4	3/4	SS-HPA-RT12	1.89 (48.1)	1.50 (38.1)	0.81 (20.6)	0.75 (19.1)	0.58 (14.8)	10000 (690)
3/4	1	SS-HPA-RT12-RT16	2.08 (52.9)	1.50 (38.1)	0.81 (20.6)	0.94 (23.9)	0.79 (20.0)	10000 (690)
1	1/2	SS-HPA-RT16-RT8	2.10 (53.3)	1.75 (44.5)	1.00 (25.4)	0.75 (19.1)	0.47 (11.9)	10000 (690)
1	3/4	SS-HPA-RT16-RT12	2.10 (53.3)	1.75 (44.5)	1.00 (25.4)	0.75 (19.1)	0.58 (14.8)	10000 (690)
1	1	SS-HPA-RT16	2.29 (58.1)	1.75 (44.5)	1.00 (25.4)	0.94 (23.9)	0.79 (20.0)	10000 (690)

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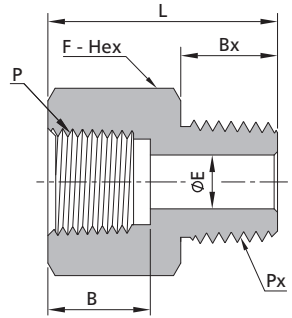
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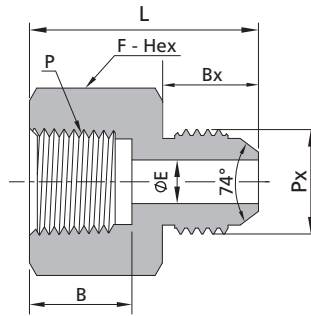
Adapters



Female ISO/BSP Tapered Threads			Dimensions, in. (mm)					Male NPT Threads	Working Pressure psig (bar)
P-ISO/BSP Tapered Size, in.	Px-NPT Size, in.	Ordering Number	L	F	B	Bx	E		
1/8	1/8	SS-HPA-RT2-NS2	0.96 (24.5)	0.63 (15.9)	0.41 (10.4)	0.38 (9.7)	0.19 (4.8)	15000 (1034)	
1/8	1/4	SS-HPA-RT2-NS4	1.13 (28.8)	0.63 (15.9)	0.41 (10.4)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
1/8	3/8	SS-HPA-RT2-NS6	1.14 (29.0)	0.69 (17.5)	0.41 (10.4)	0.56 (14.2)	0.31 (7.9)	15000 (1034)	
1/8	1/2	SS-HPA-RT2-NS8	1.08 (27.4)	0.87 (22.2)	0.41 (10.4)	0.75 (19.1)	0.31 (8.0)	15000 (1034)	
1/8	3/4	SS-HPA-RT2-NS12	1.08 (27.4)	1.06 (27.0)	0.41 (10.4)	0.75 (19.1)	0.31 (8.0)	10000 (690)	
1/4	1/8	SS-HPA-RT4-NS2	1.25 (31.8)	0.94 (23.8)	0.59 (15.0)	0.38 (9.7)	0.19 (4.8)	15000 (1034)	
1/4	1/4	SS-HPA-RT4-NS4	1.37 (34.9)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
1/4	3/8	SS-HPA-RT4-NS6	1.37 (34.9)	0.94 (23.8)	0.59 (15.0)	0.56 (14.2)	0.31 (7.9)	15000 (1034)	
1/4	1/2	SS-HPA-RT4-NS8	1.58 (40.1)	0.94 (23.8)	0.59 (15.0)	0.75 (19.1)	0.38 (9.6)	15000 (1034)	
1/4	3/4	SS-HPA-RT4-NS12	1.34 (34.1)	1.06 (27.0)	0.59 (15.0)	0.75 (19.1)	0.41 (10.4)	10000 (690)	
1/4	1	SS-HPA-RT4-NS16	1.37 (34.8)	1.37 (34.9)	0.59 (15.0)	0.94 (23.9)	0.41 (10.4)	10000 (690)	
3/8	1/4	SS-HPA-RT6-NS4	1.42 (36.0)	1.13 (28.6)	0.59 (15.0)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
3/8	3/8	SS-HPA-RT6-NS6	1.42 (36.0)	1.13 (28.6)	0.59 (15.0)	0.56 (14.2)	0.31 (7.9)	15000 (1034)	
3/8	1/2	SS-HPA-RT6-NS8	1.61 (41.0)	1.13 (28.6)	0.59 (15.0)	0.75 (19.1)	0.38 (9.6)	15000 (1034)	
3/8	3/4	SS-HPA-RT6-NS12	1.61 (41.0)	1.06 (27.0)	0.59 (15.0)	0.75 (19.1)	0.54 (13.8)	10000 (690)	
3/8	1	SS-HPA-RT6-NS16	1.47 (37.3)	1.37 (34.9)	0.59 (15.0)	0.94 (23.9)	0.54 (13.8)	10000 (690)	
1/2	1/4	SS-HPA-RT8-NS4	1.72 (43.1)	1.37 (34.9)	0.78 (19.8)	0.56 (14.2)	0.25 (6.4)	15000 (1034)	
1/2	3/8	SS-HPA-RT8-NS6	1.72 (43.1)	1.37 (34.9)	0.78 (19.8)	0.56 (14.2)	0.31 (7.9)	15000 (1034)	
1/2	1/2	SS-HPA-RT8-NS8	1.89 (48.0)	1.37 (34.9)	0.78 (19.8)	0.75 (19.1)	0.38 (9.6)	15000 (1034)	
1/2	3/4	SS-HPA-RT8-NS12	1.89 (48.0)	1.19 (30.2)	0.78 (19.8)	0.75 (19.1)	0.58 (14.8)	10000 (690)	
1/2	1	SS-HPA-RT8-NS16	2.08 (52.8)	1.37 (34.9)	0.78 (19.8)	0.94 (23.9)	0.69 (17.4)	10000 (690)	
3/4	1/2	SS-HPA-RT12-NS8	1.89 (48.1)	1.50 (38.1)	0.81 (20.6)	0.75 (19.1)	0.47 (11.9)	10000 (690)	
3/4	3/4	SS-HPA-RT12-NS12	1.89 (48.1)	1.50 (38.1)	0.81 (20.6)	0.75 (19.1)	0.58 (14.8)	10000 (690)	
3/4	1	SS-HPA-RT12-NS16	2.08 (52.9)	1.50 (38.1)	0.81 (20.6)	0.94 (23.9)	0.79 (20.0)	10000 (690)	
1	1/2	SS-HPA-RT16-NS8	2.10 (53.3)	1.75 (44.5)	1.00 (25.4)	0.75 (19.1)	0.47 (11.9)	10000 (690)	
1	3/4	SS-HPA-RT16-NS12	2.10 (53.3)	1.75 (44.5)	1.00 (25.4)	0.75 (19.1)	0.58 (14.8)	10000 (690)	
1	1	SS-HPA-RT16-NS16	2.29 (58.1)	1.75 (44.5)	1.00 (25.4)	0.94 (23.9)	0.79 (20.0)	10000 (690)	

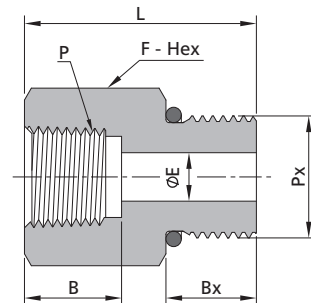
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Female NPT Threads			Dimensions, in. (mm)						Male JIC
P-NPT Size, in.	Px-SAE/MS Thread Size, in.	Ordering Number	L	F	B	Bx	E	Working Pressure psig (bar)	
			1/8	7/16-20	SS-HPA-NS2-AN4	1.09 (27.8)	0.63 (15.9)		0.41 (10.4)
1/4	7/16-20	SS-HPA-NS4-AN4	1.37 (34.9)	0.94 (23.8)	0.59 (15.0)	0.55 (14.0)	0.17 (4.4)	15000 (1034)	
1/4	9/16-18	SS-HPA-NS4-AN6	1.32 (33.5)	0.94 (23.8)	0.59 (15.0)	0.56 (14.1)	0.23 (5.8)	15000 (1034)	
3/8	9/16-18	SS-HPA-NS6-AN6	1.37 (34.8)	1.13 (28.6)	0.59 (15.0)	0.56 (14.1)	0.23 (5.8)	15000 (1034)	
3/8	3/4-16	SS-HPA-NS6-AN8	1.47 (37.4)	1.13 (28.6)	0.59 (15.0)	0.66 (16.7)	0.31 (8.0)	15000 (1034)	
1/2	3/4-16	SS-HPA-NS8-AN8	1.72 (43.6)	1.37 (34.9)	0.78 (19.8)	0.66 (16.7)	0.31 (8.0)	15000 (1034)	
1/2	7/8-14	SS-HPA-NS8-AN10	1.82 (46.2)	1.37 (34.9)	0.78 (19.8)	0.76 (19.3)	0.41 (10.4)	15000 (1034)	
1/2	1 1/16-12	SS-HPA-NS8-AN12	1.92 (48.8)	1.37 (34.9)	0.78 (19.8)	0.86 (21.9)	0.46 (11.6)	15000 (1034)	
3/4	1 1/16-12	SS-HPA-NS12-AN12	1.89 (47.9)	1.50 (38.1)	0.81 (20.6)	0.86 (21.9)	0.61 (15.5)	10000 (690)	
1	1 5/16-12	SS-HPA-NS16-AN16	2.18 (55.3)	1.75 (44.5)	1.00 (25.4)	0.91 (23.1)	0.84 (21.4)	10000 (690)	

Adapters<sup>①</sup>

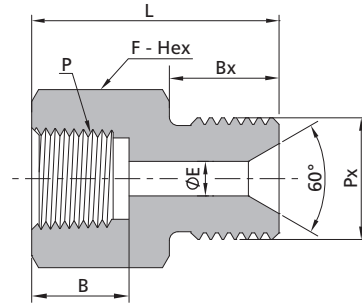


Female NPT Threads			Male SAE/MS Straight Threads					
P-NPT Size, in.	Px-SAE/MS Thread Size, in.	Ordering Number	Dimensions, in. (mm)					Working Pressure psig (bar)
			L	F	B	Bx	E	
1/4	7/16-20	SS-HPA-NS4-SH7	1.20 (30.5)	0.75 (19.1)	0.59 (15.0)	0.43 (11.0)	0.18 (4.5)	10000 (690)
3/8	9/16-18	SS-HPA-NS6-SH9	1.29 (32.7)	0.94 (23.8)	0.59 (15.0)	0.47 (12.0)	0.30 (7.5)	10000 (690)
1/2	3/4-16	SS-HPA-NS8-SH12	1.61 (40.9)	1.19 (30.2)	0.78 (19.8)	0.55 (14.0)	0.39 (10.0)	10000 (690)
3/4	7/8-14	SS-HPA-NS12-SH14	1.67 (42.5)	1.50 (38.1)	0.81 (20.6)	0.63 (16.0)	0.49 (12.5)	10000 (690)

① SAE/MS Heavy-Duty Stud Ends are supplied with a Fluorocarbon FKM O-ring as standard, other materials of O-rings available.

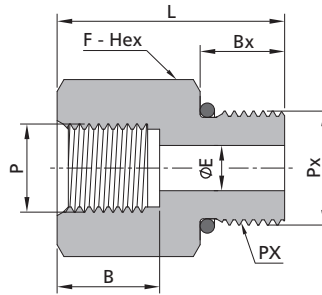


Adapters



Female NPT Threads			Male Type "M"					
P-NPT Size, in.	Px-SAE/MS Thread Size, in.	Ordering Number	Dimensions, in. (mm)					Working Pressure psig (bar)
			L	F	B	Bx	E	
1/8	9/16-18	SS-HPA-NS2-HM9	1.13 (28.6)	0.63 (15.9)	0.41 (10.4)	0.50 (12.7)	0.09 (2.4)	15000 (1034)
1/4	9/16-18	SS-HPA-NS4-HM9	1.37 (34.9)	0.94 (23.8)	0.59 (15.0)	0.50 (12.7)	0.09 (2.4)	15000 (1034)
1/4	3/4-16	SS-HPA-NS4-HM12	1.50 (38.1)	0.94 (23.8)	0.59 (15.0)	0.63 (16.0)	0.29 (7.4)	15000 (1034)
3/8	9/16-18	SS-HPA-NS6-HM9	1.44 (36.5)	1.13 (28.6)	0.59 (15.0)	0.50 (12.7)	0.09 (2.4)	15000 (1034)
3/8	3/4-16	SS-HPA-NS6-HM12	1.56 (39.7)	1.13 (28.6)	0.59 (15.0)	0.63 (16.0)	0.29 (7.4)	15000 (1034)
1/2	9/16-18	SS-HPA-NS8-HM9	1.63 (41.3)	1.37 (34.9)	0.78 (19.8)	0.50 (12.7)	0.09 (2.4)	15000 (1034)
1/2	3/4-16	SS-HPA-NS8-HM12	1.75 (44.4)	1.37 (34.9)	0.78 (19.8)	0.63 (16.0)	0.29 (7.4)	15000 (1034)
1/2	7/8-14	SS-HPA-NS8-HM14	1.87 (47.6)	1.37 (34.9)	0.78 (19.8)	0.76 (19.2)	0.15 (3.8)	15000 (1034)
3/4	1-12	SS-HPA-NS12-HM16	1.87 (47.6)	1.50 (38.1)	0.81 (20.6)	0.64 (16.3)	0.39 (10.0)	10000 (690)
1	1 5/16-12	SS-HPA-NS16-HM21	2.06 (52.4)	1.75 (44.5)	1.00 (25.4)	0.62 (15.7)	0.69 (17.5)	10000 (690)

Adapters<sup>①</sup>

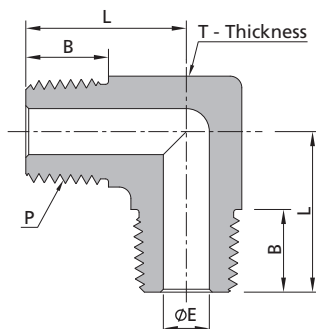


Female SAE/MS Straight Threads			Male SAE/MS Straight Threads					
P-SAE/MS Thread Size, in.	Px-SAE/MS Thread Size, in.	Ordering Number	Dimensions, in. (mm)					Working Pressure psig (bar)
			L	F	B	Bx	E	
7/16-20	9/16-18	SS-HPA-US7-SH9	1.25 (31.8)	0.81 (20.6)	0.55 (14.0)	0.47 (12.0)	0.18 (4.5)	10000 (690)
7/16-20	3/4-16	SS-HPA-US7-SH12	1.25 (31.8)	0.87 (22.2)	0.55 (14.0)	0.55 (14.0)	0.18 (4.5)	10000 (690)
9/16-18	3/4-16	SS-HPA-US9-SH12	1.42 (36.0)	1.00 (25.4)	0.61 (15.5)	0.55 (14.0)	0.30 (7.5)	10000 (690)
9/16-18	7/8-14	SS-HPA-US9-SH14	1.42 (36.0)	1.00 (25.4)	0.61 (15.5)	0.63 (16.0)	0.30 (7.5)	10000 (690)
3/4-16	7/8-14	SS-HPA-US12-SH14	1.65 (41.8)	30.2 (30.2)	0.69 (17.5)	0.63 (16.0)	0.39 (10.0)	10000 (690)

① SAE/MS Heavy-Duty Stud Ends are supplied with a Fluorocarbon FKM O-ring as standard, other materials of O-rings available.

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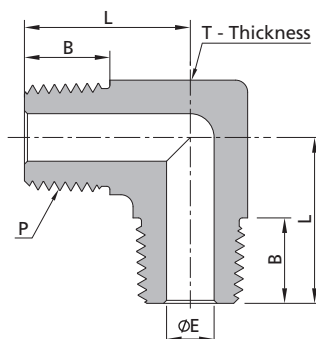
## Male Elbows



## Male NPT Threads

P-NPT Size, in.	Ordering Number	Dimensions, in. (mm)				Working Pressure psig (bar)
		L	B	E	T	
1/8	SS-HPME-NS2	0.75 (19.1)	0.38 (9.7)	0.19 (4.8)	0.50 (12.7)	15000 (1034)
1/4	SS-HPME-NS4	1.00 (25.4)	0.56 (14.2)	0.25 (6.4)	0.63 (15.9)	15000 (1034)
3/8	SS-HPME-NS6	1.10 (28.0)	0.56 (14.2)	0.31 (7.9)	0.75 (19.1)	15000 (1034)
1/2	SS-HPME-NS8	1.44 (36.6)	0.75 (19.1)	0.38 (9.6)	1.00 (25.4)	15000 (1034)
3/4	SS-HPME-NS12	1.56 (39.6)	0.75 (19.1)	0.58 (14.8)	1.37 (34.9)	10000 (690)
1	SS-HPME-NS16	1.89 (48.0)	0.94 (23.9)	0.79 (20.0)	1.50 (38.1)	10000 (690)

## Male Elbows



## Male ISO/BSP Tapered Pipe Threads

P-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)				Working Pressure psig (bar)
		L	B	E	T	
1/8	SS-HPME-RT2	0.75 (19.1)	0.38 (9.7)	0.19 (4.8)	0.50 (12.7)	15000 (1034)
1/4	SS-HPME-RT4	1.00 (25.4)	0.56 (14.2)	0.25 (6.4)	0.63 (15.9)	15000 (1034)
3/8	SS-HPME-RT6	1.10 (28.0)	0.56 (14.2)	0.31 (7.9)	0.75 (19.1)	15000 (1034)
1/2	SS-HPME-RT8	1.44 (36.6)	0.75 (19.1)	0.38 (9.6)	1.00 (25.4)	15000 (1034)
3/4	SS-HPME-RT12	1.56 (39.6)	0.75 (19.1)	0.58 (14.8)	1.37 (34.9)	10000 (690)
1	SS-HPME-RT16	1.89 (48.0)	0.94 (23.9)	0.79 (20.0)	1.50 (38.1)	10000 (690)

Medium &amp; High Pressure Fittings and Tubing

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Medium &amp; High Pressure Valves

Line Filters

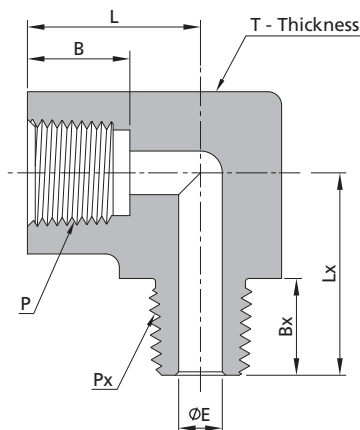
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Female NPT Threads			Male NPT Threads						
P-NPT Size, in.	Px-NPT Size, in.	Ordering Number	Dimensions, in. (mm)						Working Pressure psig (bar)
			L	B	E	Lx	Bx	T	
1/8	1/8	SS-HPSE-NS2	0.75 (19.1)	0.41 (10.4)	0.19 (4.8)	0.75 (19.1)	0.38 (9.7)	0.63 (15.9)	15000 (1034)
1/8	1/4	SS-HPSE-NS2-NS4	0.78 (19.8)	0.41 (10.4)	0.25 (6.4)	1.00 (25.4)	0.56 (14.2)	0.63 (15.9)	15000 (1034)
1/8	3/8	SS-HPSE-NS2-NS6	0.95 (24.2)	0.41 (10.4)	0.31 (7.9)	1.07 (27.2)	0.56 (14.2)	0.75 (19.1)	15000 (1034)
1/4	1/4	SS-HPSE-NS4	1.00 (25.4)	0.59 (15.0)	0.25 (6.4)	1.06 (27.0)	0.56 (14.2)	0.75 (19.1)	15000 (1034)
1/4	3/8	SS-HPSE-NS4-NS6	1.00 (25.4)	0.59 (15.0)	0.31 (7.9)	1.06 (27.0)	0.56 (14.2)	0.75 (19.1)	15000 (1034)
1/4	1/2	SS-HPSE-NS4-NS8	1.15 (29.1)	0.59 (15.0)	0.38 (9.6)	1.40 (35.5)	0.75 (19.1)	1.00 (25.4)	15000 (1034)
3/8	3/8	SS-HPSE-NS6	1.20 (30.6)	0.59 (15.0)	0.31 (7.9)	1.20 (30.6)	0.56 (14.2)	1.00 (25.4)	15000 (1034)
3/8	1/2	SS-HPSE-NS6-NS8	1.20 (30.6)	0.59 (15.0)	0.38 (9.6)	1.38 (35.0)	0.75 (19.1)	1.00 (25.4)	15000 (1034)
3/8	3/4	SS-HPSE-NS6-NS12	1.23 (31.2)	0.59 (15.0)	0.54 (13.8)	1.56 (39.6)	0.75 (19.1)	1.37 (34.9)	10000 (690)
1/2	1/2	SS-HPSE-NS8	1.50 (38.1)	0.78 (19.8)	0.38 (9.6)	1.61 (40.8)	0.75 (19.1)	1.37 (34.9)	15000 (1034)
1/2	3/4	SS-HPSE-NS8-NS12	1.43 (36.2)	0.78 (19.8)	0.58 (14.8)	1.61 (40.8)	0.75 (19.1)	1.37 (34.9)	10000 (690)
1/2	1	SS-HPSE-NS8-NS16	1.45 (36.9)	0.78 (19.8)	0.67 (17.0)	1.86 (47.3)	0.94 (23.9)	1.37 (34.9)	10000 (690)
3/4	3/4	SS-HPSE-NS12	1.50 (38.1)	0.81 (20.6)	0.58 (14.8)	1.77 (44.9)	0.75 (19.1)	1.50 (38.1)	10000 (690)
3/4	1	SS-HPSE-NS12-NS16	1.63 (41.4)	0.81 (20.6)	0.79 (20.0)	1.86 (47.3)	0.94 (23.9)	1.50 (38.1)	10000 (690)
1	1	SS-HPSE-NS16	1.91 (48.5)	1.00 (25.4)	0.79 (20.0)	2.07 (52.5)	0.94 (23.9)	1.75 (44.5)	10000 (690)

Medium & High Pressure Fittings and Tubing

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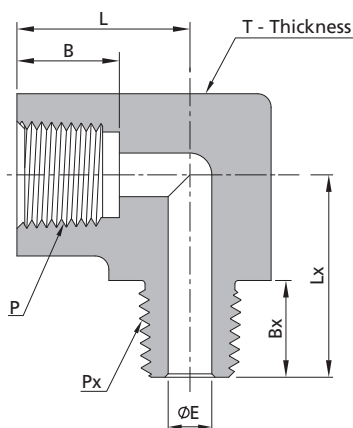
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Female ISO/BSP Tapered Pipe Threads			Male ISO/BSP Tapered Threads						
P-ISO/BSP Tapered Size, in.	Px-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)						Working Pressure psig (bar)
			L	B	E	Lx	Bx	T	
1/8	1/8	SS-HPSE-RT2	0.75 (19.1)	0.41 (10.4)	0.19 (4.8)	0.75 (19.1)	0.38 (9.7)	0.63 (15.9)	15000 (1034)
1/8	1/4	SS-HPSE-RT2-RT4	0.78 (19.8)	0.41 (10.4)	0.25 (6.4)	1.00 (25.4)	0.56 (14.2)	0.63 (15.9)	15000 (1034)
1/8	3/8	SS-HPSE-RT2-RT6	0.95 (24.2)	0.41 (10.4)	0.31 (7.9)	1.07 (27.2)	0.56 (14.2)	0.75 (19.1)	15000 (1034)
1/4	1/4	SS-HPSE-RT4	1.00 (25.4)	0.59 (15.0)	0.25 (6.4)	1.06 (27.0)	0.56 (14.2)	0.75 (19.1)	15000 (1034)
1/4	3/8	SS-HPSE-RT4-RT6	1.00 (25.4)	0.59 (15.0)	0.31 (7.9)	1.06 (27.0)	0.56 (14.2)	0.75 (19.1)	15000 (1034)
1/4	1/2	SS-HPSE-RT4-RT8	1.15 (29.1)	0.59 (15.0)	0.38 (9.6)	1.40 (35.5)	0.75 (19.1)	1.00 (25.4)	15000 (1034)
3/8	3/8	SS-HPSE-RT6	1.20 (30.6)	0.59 (15.0)	0.31 (7.9)	1.20 (30.6)	0.56 (14.2)	1.00 (25.4)	15000 (1034)
3/8	1/2	SS-HPSE-RT6-RT8	1.20 (30.6)	0.59 (15.0)	0.38 (9.6)	1.38 (35.0)	0.75 (19.1)	1.00 (25.4)	15000 (1034)
3/8	3/4	SS-HPSE-RT6-RT12	1.23 (31.2)	0.59 (15.0)	0.54 (13.8)	1.56 (39.6)	0.75 (19.1)	1.37 (34.9)	10000 (690)
1/2	1/2	SS-HPSE-RT8	1.50 (38.1)	0.78 (19.8)	0.38 (9.6)	1.61 (40.8)	0.75 (19.1)	1.37 (34.9)	15000 (1034)
1/2	3/4	SS-HPSE-RT8-RT12	1.43 (36.2)	0.78 (19.8)	0.58 (14.8)	1.61 (40.8)	0.75 (19.1)	1.37 (34.9)	10000 (690)
1/2	1	SS-HPSE-RT8-RT16	1.45 (36.9)	0.78 (19.8)	0.67 (17.0)	1.86 (47.3)	0.94 (23.9)	1.37 (34.9)	10000 (690)
3/4	3/4	SS-HPSE-RT12	1.50 (38.1)	0.81 (20.6)	0.58 (14.8)	1.77 (44.9)	0.75 (19.1)	1.50 (38.1)	10000 (690)
3/4	1	SS-HPSE-RT12-RT16	1.63 (41.4)	0.81 (20.6)	0.79 (20.0)	1.86 (47.3)	0.94 (23.9)	1.50 (38.1)	10000 (690)
1	1	SS-HPSE-RT16	1.91 (48.5)	1.00 (25.4)	0.79 (20.0)	2.07 (52.5)	0.94 (23.9)	1.75 (44.5)	10000 (690)

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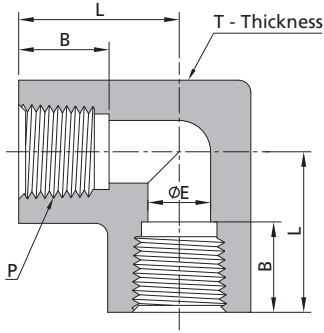
Sour Service Products

Subsea Valves

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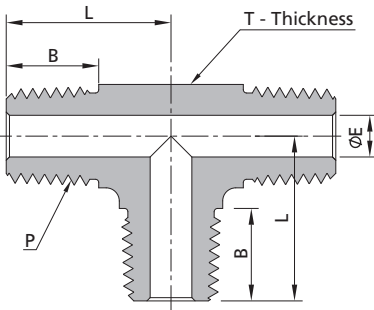
Female Elbows



Female NPT Threads						
P-NPT Size, in.	Ordering Number	Dimensions, in. (mm)				Working Pressure psig (bar)
		L	B	E	T	
1/8	SS-HPE-NS2	0.75 (19.1)	0.41 (10.4)	0.31 (8.0)	0.63 (15.9)	15000 (1034)
1/4	SS-HPE-NS4	1.00 (25.4)	0.59 (15.0)	0.41 (10.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPE-NS6	1.20 (30.6)	0.59 (15.0)	0.54 (13.8)	1.00 (25.4)	15000 (1034)
1/2	SS-HPE-NS8	1.50 (38.1)	0.78 (19.8)	0.67 (17.0)	1.37 (34.9)	15000 (1034)
3/4	SS-HPE-NS12	1.50 (38.1)	0.81 (20.6)	0.88 (22.3)	1.50 (38.1)	10000 (690)
1	SS-HPE-NS16	1.91 (48.5)	1.00 (25.4)	1.11 (28.1)	1.75 (44.5)	10000 (690)

Female ISO/BSP Tapered Threads						
P-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)				Working Pressure psig (bar)
		L	B	E	T	
1/8	SS-HPE-RT2	0.75 (19.1)	0.41 (10.4)	0.31 (8.0)	0.63 (15.9)	15000 (1034)
1/4	SS-HPE-RT4	1.00 (25.4)	0.59 (15.0)	0.41 (10.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPE-RT6	1.20 (30.6)	0.59 (15.0)	0.54 (13.8)	1.00 (25.4)	15000 (1034)
1/2	SS-HPE-RT8	1.50 (38.1)	0.78 (19.8)	0.69 (17.4)	1.37 (34.9)	15000 (1034)
3/4	SS-HPE-RT12	1.50 (38.1)	0.81 (20.6)	0.90 (22.8)	1.50 (38.1)	10000 (690)
1	SS-HPE-RT16	1.91 (48.5)	1.00 (25.4)	1.13 (28.7)	1.75 (44.5)	10000 (690)

Male Tees

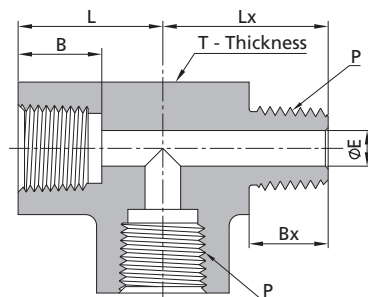


Male NPT Threads						
P-NPT Size, in.	Ordering Number	Dimensions, in. (mm)				Working Pressure psig (bar)
		L	B	E	T	
1/8	SS-HPMT-NS2	0.75 (19.1)	0.38 (9.7)	0.19 (4.8)	0.50 (12.7)	15000 (1034)
1/4	SS-HPMT-NS4	1.00 (25.4)	0.56 (14.2)	0.25 (6.4)	0.63 (15.9)	15000 (1034)
3/8	SS-HPMT-NS6	1.10 (28.0)	0.56 (14.2)	0.31 (7.9)	0.75 (19.1)	15000 (1034)
1/2	SS-HPMT-NS8	1.44 (36.6)	0.75 (19.1)	0.38 (9.6)	1.00 (25.4)	15000 (1034)
3/4	SS-HPMT-NS12	1.56 (39.6)	0.75 (19.1)	0.58 (14.8)	1.37 (34.9)	10000 (690)
1	SS-HPMT-NS16	1.89 (48.0)	0.94 (23.9)	0.79 (20.0)	1.50 (38.1)	10000 (690)

Male ISO/BSP Tapered Threads						
P-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)				Working Pressure psig (bar)
		L	B	E	T	
1/8	SS-HPMT-RT2	0.75 (19.1)	0.38 (9.7)	0.19 (4.8)	0.50 (12.7)	15000 (1034)
1/4	SS-HPMT-RT4	1.00 (25.4)	0.56 (14.2)	0.25 (6.4)	0.63 (15.9)	15000 (1034)
3/8	SS-HPMT-RT6	1.10 (28.0)	0.56 (14.2)	0.31 (7.9)	0.75 (19.1)	15000 (1034)
1/2	SS-HPMT-RT8	1.44 (36.6)	0.75 (19.1)	0.38 (9.6)	1.00 (25.4)	15000 (1034)
3/4	SS-HPMT-RT12	1.56 (39.6)	0.75 (19.1)	0.58 (14.8)	1.37 (34.9)	10000 (690)
1	SS-HPMT-RT16	1.89 (48.0)	0.94 (23.9)	0.79 (20.0)	1.50 (38.1)	10000 (690)

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## Male Street Tees



NPT Threads								
P-NPT Size, in.	Ordering Number	Dimensions, in. (mm)						Working Pressure psig (bar)
		L	B	Lx	Bx	E	T	
1/8	SS-HPST-NS2	0.75 (19.1)	0.41 (10.4)	0.75 (19.1)	0.38 (9.7)	0.19 (4.8)	0.63 (15.9)	15000 (1034)
1/4	SS-HPST-NS4	1.00 (25.4)	0.59 (15.0)	1.06 (27.0)	0.56 (14.2)	0.25 (6.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPST-NS6	1.20 (30.6)	0.59 (15.0)	1.20 (30.6)	0.56 (14.2)	0.31 (7.9)	1.00 (25.4)	15000 (1034)
1/2	SS-HPST-NS8	1.50 (38.1)	0.78 (19.8)	1.61 (40.8)	0.75 (19.1)	0.38 (9.6)	1.37 (34.9)	15000 (1034)
3/4	SS-HPST-NS12	1.50 (38.1)	0.81 (20.6)	1.77 (44.9)	0.75 (19.1)	0.58 (14.8)	1.50 (38.1)	10000 (690)
1	SS-HPST-NS16	1.91 (48.5)	1.00 (25.4)	2.07 (52.5)	0.94 (23.9)	0.79 (20.0)	1.75 (44.5)	10000 (690)

ISO/BSP Tapered Pipe Threads								
P-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)						Working Pressure psig (bar)
		L	B	Lx	Bx	E	T	
1/8	SS-HPST-RT2	0.75 (19.1)	0.41 (10.4)	0.75 (19.1)	0.38 (9.7)	0.19 (4.8)	0.63 (15.9)	15000 (1034)
1/4	SS-HPST-RT4	1.00 (25.4)	0.59 (15.0)	1.06 (27.0)	0.56 (14.2)	0.25 (6.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPST-RT6	1.20 (30.6)	0.59 (15.0)	1.20 (30.6)	0.56 (14.2)	0.31 (7.9)	1.00 (25.4)	15000 (1034)
1/2	SS-HPST-RT8	1.50 (38.1)	0.78 (19.8)	1.61 (40.8)	0.75 (19.1)	0.38 (9.6)	1.37 (34.9)	15000 (1034)
3/4	SS-HPST-RT12	1.50 (38.1)	0.81 (20.6)	1.77 (44.9)	0.75 (19.1)	0.58 (14.8)	1.50 (38.1)	10000 (690)
1	SS-HPST-RT16	1.91 (48.5)	1.00 (25.4)	2.07 (52.5)	0.94 (23.9)	0.79 (20.0)	1.75 (44.5)	10000 (690)

Medium &amp; High Pressure Fittings and Tubing

Quick Couplings

Medium &amp; High Pressure Valves

Line Filters

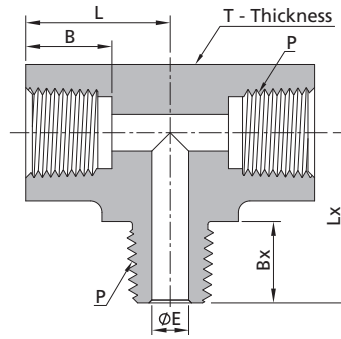
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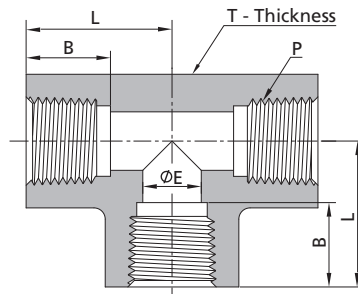
Male Branch Tees



NPT Threads								
P-NPT Size, in.	Ordering Number	Dimensions, in. (mm)						Working Pressure psig (bar)
		L	B	Lx	Bx	E	T	
1/8	SS-HPBT-NS2	0.75 (19.1)	0.41 (10.4)	0.75 (19.1)	0.38 (9.7)	0.19 (4.8)	0.63 (15.9)	15000 (1034)
1/4	SS-HPBT-NS4	1.00 (25.4)	0.59 (15.0)	1.06 (27.0)	0.56 (14.2)	0.25 (6.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPBT-NS6	1.20 (30.6)	0.59 (15.0)	1.20 (30.6)	0.56 (14.2)	0.31 (7.9)	1.00 (25.4)	15000 (1034)
1/2	SS-HPBT-NS8	1.50 (38.1)	0.78 (19.8)	1.61 (40.8)	0.75 (19.1)	0.38 (9.6)	1.37 (34.9)	15000 (1034)
3/4	SS-HPBT-NS12	1.50 (38.1)	0.81 (20.6)	1.77 (44.9)	0.75 (19.1)	0.58 (14.8)	1.50 (38.1)	10000 (690)
1	SS-HPBT-NS16	1.91 (48.5)	1.00 (25.4)	2.07 (52.5)	0.94 (23.9)	0.79 (20.0)	1.75 (44.5)	10000 (690)

ISO/BSP Tapered Pipe Threads								
P-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)						Working Pressure psig (bar)
		L	B	Lx	Bx	E	T	
1/8	SS-HPBT-RT2	0.75 (19.1)	0.41 (10.4)	0.75 (19.1)	0.38 (9.7)	0.19 (4.8)	0.63 (15.9)	15000 (1034)
1/4	SS-HPBT-RT4	1.00 (25.4)	0.59 (15.0)	1.06 (27.0)	0.56 (14.2)	0.25 (6.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPBT-RT6	1.20 (30.6)	0.59 (15.0)	1.20 (30.6)	0.56 (14.2)	0.31 (7.9)	1.00 (25.4)	15000 (1034)
1/2	SS-HPBT-RT8	1.50 (38.1)	0.78 (19.8)	1.61 (40.8)	0.75 (19.1)	0.38 (9.6)	1.37 (34.9)	15000 (1034)
3/4	SS-HPBT-RT12	1.50 (38.1)	0.81 (20.6)	1.77 (44.9)	0.75 (19.1)	0.58 (14.8)	1.50 (38.1)	10000 (690)
1	SS-HPBT-RT16	1.91 (48.5)	1.00 (25.4)	2.07 (52.5)	0.94 (23.9)	0.79 (20.0)	1.75 (44.5)	10000 (690)

Female Tees

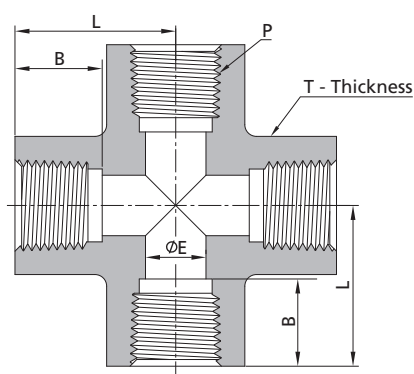


Female NPT Threads						
P-NPT Size, in.	Ordering Number	Dimensions, in. (mm)				Working Pressure psig (bar)
		L	B	E	T	
1/8	SS-HPT-NS2	0.75 (19.1)	0.41 (10.4)	0.31 (8.0)	0.63 (15.9)	15000 (1034)
1/4	SS-HPT-NS4	1.00 (25.4)	0.59 (15.0)	0.41 (10.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPT-NS6	1.20 (30.6)	0.59 (15.0)	0.54 (13.8)	1.00 (25.4)	15000 (1034)
1/2	SS-HPT-NS8	1.50 (38.1)	0.78 (19.8)	0.67 (17.0)	1.37 (34.9)	15000 (1034)
3/4	SS-HPT-NS12	1.50 (38.1)	0.81 (20.6)	0.88 (22.3)	1.50 (38.1)	10000 (690)
1	SS-HPT-NS16	1.91 (48.5)	1.00 (25.4)	1.11 (28.1)	1.75 (44.5)	10000 (690)

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Female ISO/BSP Tapered Pipe Threads						
P-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)				Working Pressure psig (bar)
		L	B	E	T	
1/8	SS-HPT-RT2	0.75 (19.1)	0.41 (10.4)	0.31 (8.0)	0.63 (15.9)	15000 (1034)
1/4	SS-HPT-RT4	1.00 (25.4)	0.59 (15.0)	0.41 (10.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPT-RT6	1.20 (30.6)	0.59 (15.0)	0.54 (13.8)	1.00 (25.4)	15000 (1034)
1/2	SS-HPT-RT8	1.50 (38.1)	0.78 (19.8)	0.69 (17.4)	1.37 (34.9)	15000 (1034)
3/4	SS-HPT-RT12	1.50 (38.1)	0.81 (20.6)	0.90 (22.8)	1.50 (38.1)	10000 (690)
1	SS-HPT-RT16	1.91 (48.5)	1.00 (25.4)	1.13 (28.7)	1.75 (44.5)	10000 (690)

## Female Crosses



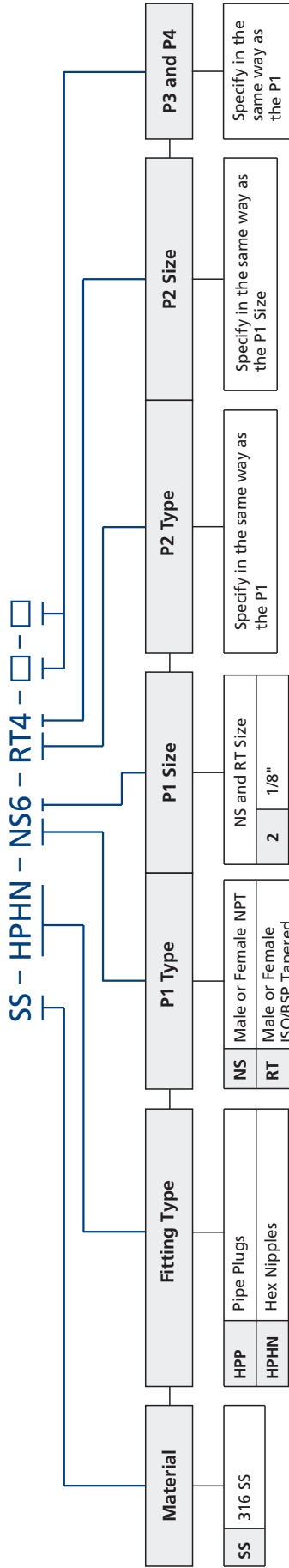
Female NPT Threads						
P-NPT Size, in.	Ordering Number	Dimensions, in. (mm)				Working Pressure psig (bar)
		L	B	E	T	
1/8	SS-HPCR-NS2	0.75 (19.1)	0.41 (10.4)	0.31 (8.0)	0.63 (15.9)	15000 (1034)
1/4	SS-HPCR-NS4	1.00 (25.4)	0.59 (15.0)	0.41 (10.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPCR-NS6	1.20 (30.6)	0.59 (15.0)	0.54 (13.8)	1.00 (25.4)	15000 (1034)
1/2	SS-HPCR-NS8	1.50 (38.1)	0.78 (19.8)	0.67 (17.0)	1.37 (34.9)	15000 (1034)
3/4	SS-HPCR-NS12	1.50 (38.1)	0.81 (20.6)	0.88 (22.3)	1.50 (38.1)	10000 (690)
1	SS-HPCR-NS16	1.91 (48.5)	1.00 (25.4)	1.11 (28.1)	1.75 (44.5)	10000 (690)

Female ISO/BSP Tapered Pipe Threads						
P-ISO/BSP Tapered Size, in.	Ordering Number	Dimensions, in. (mm)				Working Pressure psig (bar)
		L	B	E	T	
1/8	SS-HPCR-RT2	0.75 (19.1)	0.41 (10.4)	0.31 (8.0)	0.63 (15.9)	15000 (1034)
1/4	SS-HPCR-RT4	1.00 (25.4)	0.59 (15.0)	0.41 (10.4)	0.75 (19.1)	15000 (1034)
3/8	SS-HPCR-RT6	1.20 (30.6)	0.59 (15.0)	0.54 (13.8)	1.00 (25.4)	15000 (1034)
1/2	SS-HPCR-RT8	1.50 (38.1)	0.78 (19.8)	0.69 (17.4)	1.37 (34.9)	15000 (1034)
3/4	SS-HPCR-RT12	1.50 (38.1)	0.81 (20.6)	0.90 (22.8)	1.50 (38.1)	10000 (690)
1	SS-HPCR-RT16	1.91 (48.5)	1.00 (25.4)	1.13 (28.7)	1.75 (44.5)	10000 (690)

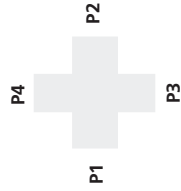
NOTE: All dimensions are for reference only and subject to change.



### Ordering Number Description



NOTE: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.



P1 Type		P1 Size	
<b>NS</b>	Male or Female NPT	<b>2</b>	1/8"
<b>RT</b>	Male or Female ISO/BSP Tapered	<b>4</b>	1/4"
<b>SH</b>	Heavy-Duty Stud Ends (SAE J1926-2, ISO 11926-2)	<b>6</b>	3/8"
<b>US</b>	Ports with O-ring seal in truncated housing (SAE J1926-1, ISO 11926-1)	<b>8</b>	1/2"
<b>AN</b>	Male or Female JIC (37° Flare)	<b>12</b>	3/4"
<b>AS</b>	Female Swivel JIC (37° Flare)	<b>16</b>	1"
<b>HM</b>	Male Type "M"	<b>SH, US and HM Thread Size</b>	
		<b>7</b>	7/16-20
		<b>9</b>	9/16-18
		<b>12</b>	3/4-16
		<b>14</b>	7/8-14
		<b>16</b>	1-12
		<b>21</b>	1 5/16-12
		<b>AN and AS Thread Size</b>	
		<b>4</b>	7/16-20
		<b>6</b>	9/16-18
		<b>8</b>	3/4-16
		<b>10</b>	7/8-14
		<b>12</b>	1 1/16-12
		<b>16</b>	1 5/16-12

P1, P2, P3 and P4 shall be described in the following orders:

- ☉ Describe the female thread end first if there is any
- ☉ For male connections: NPT - ISO/BSP Tapered - Heavy-Duty Stud Ends - JIC (37° Flare) - Male Type "M"
- ☉ For female connections: NPT - ISO/BSP Tapered - Ports with O-ring seal in truncated housing - JIC (37° Flare)
- ☉ Describe in descending order as per size if the end connection types are the same
- ☉ Describe the end of P1 if all end connections are the same