Quick-Connects

QC, QF, QV, QM, QTM and QP Series

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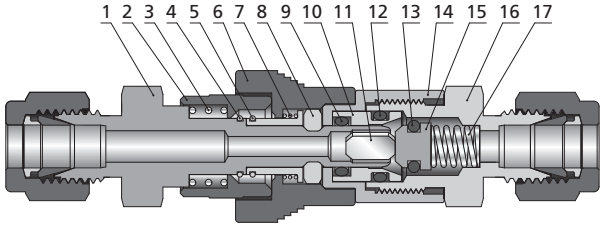
General Service Quick-Connects

QC Series

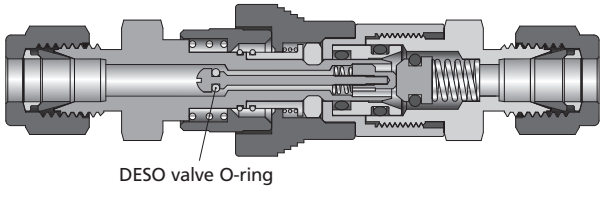
Features

- Working pressure up to: 3000 psig (207 bar)
- Materials: Stainless steel or brass
- Reliable, leak-tight O-ring seal for vacuum or pressure systems
- Interchangeable with other key manufacturers' products
- Single-end shutoff, double-end shutoff and full-flow model available
- Push-to-connect coupling to enable quick and easy operation
- Locking mechanism with large contact area to ensure reliable stem retainment
- Stem protector, body protector and keyed options available

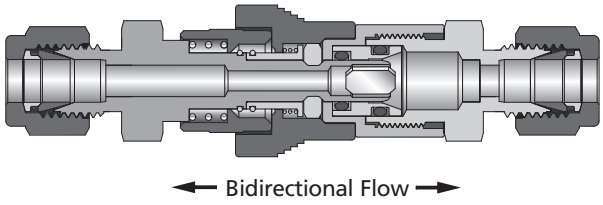
Single-end Shutoff (SESO)



Double-end Shutoff (DESO) - Red Stem Sleeve



Full-flow Quick-Connects



Standard Materials of Construction

Item	Component	Stainless Steel	Brass
		Material Grade/ASTM Specification	
1	Stem	316 SS/A479	Brass C36000/B16
2	DESO stem sleeve	PTFE-coated 316L SS/A479	PTFE-coated Brass C36000/B16
	SESO stem sleeve	316L SS/A479	Brass C36000/B16
3	Springs	316 SS/A313	
4	Snap rings	316 SS/A313	
5			
6	Body sleeve	316L SS/A479	Brass C36000/B16
7	Springs	316 SS/A313	
8	Locking dogs	Xylan®-coated 316 SS powdered metal	
9	O-rings	Fluorocarbon FKM	Buna N
10	Sliding sleeve	316 SS/A479	Brass C36000/B16
11	SESO stem insert	316 SS/A240	Brass C26000/B36
12	O-rings	Fluorocarbon FKM	Buna N
13	O-rings	Fluorocarbon FKM	Buna N
14	Housing	316L SS/A479	Brass C36000/B16
15	Plug	316 SS/A479	Brass C36000/B16
16	Body	316 SS/A479	Brass C36000/B16
17	Springs	316 SS/A313	
18	Lubricants	Silicone-based	

Insertion Depth

Series	Insertion Depth	
	SESO	DESO
	in. (mm)	in. (mm)
QC4	1.09 (27.7)	1.15 (29.2)
QC6	1.18 (30.0)	1.30 (33.0)
QC8	1.48 (37.6)	1.68 (42.7)

In order to measure overall length in the coupled position, the insertion depth should be deducted from any overall stem and body combination length.

Spillage and Air Inclusion

Spillage - the amount of system fluid that escapes when a quick-connect is uncoupled (DESO only)
Air Inclusion - the amount of air trapped between the body and stem that enters the system when a quick-connect is coupled (DESO only)

Series	Spillage, cm^3	Air Inclusion, cm^3
QC4	0.3	0.3
QC6	1.0	1.0
QC8	3.0	3.0

Pressure-Temperature Ratings

Pressure rating restrictions apply when coupling and uncoupling (DESO only). Refer to the tables below for specific data.

QC4 Series

Material	316 SS			Brass
O-Ring Material	Fluorocarbon FKM	Ethylene propylene	Perfluoro-carbon FFKM	Buna N
Tempera-ture °F (°C)	Pressure Rating, psig (bar)			
Coupled				
-50 (-45)	—	3000 (206)	—	—
0 (-17)	3000 (206)	3000 (206)	3000 (206)	2000 (137)
10 (-12)	3000 (206)	3000 (206)	3000 (206)	2000 (137)
60 (15)	3000 (206)	3000 (206)	3000 (206)	2000 (137)
100 (37)	3000 (206)	3000 (206)	3000 (206)	2000 (137)
150 (65)	2750 (189)	2750 (189)	2750 (189)	1300 (89.5)
200 (93)	2300 (158)	2300 (158)	2300 (158)	700 (48)
250 (121)	1850 (127)	1850 (127)	1850 (127)	300 (20.6)
300 (148)	1400 (96.4)	1400 (96.4)	1400 (96.4)	—
350 (176)	950 (65.4)	—	950 (65.4)	—
400 (204)	500 (34.4)	—	500 (34.4)	—
500 (260)	—	—	150 (10.3)	—
Uncoupled and When Coupling and Uncoupling				
70 (20)	250 (17.2)			

QC6 Series

Material	316 SS			Brass
O-Ring Material	Fluorocarbon FKM	Ethylene propylene	Perfluoro-carbon FFKM	Buna N
Tempera-ture °F (°C)	Pressure Rating, psig (bar)			
Coupled				
-50 (-45)	—	1500 (103)	—	—
0 (-17)	1500 (103)	1500 (103)	1500 (103)	1000 (68.9)
10 (-12)	1500 (103)	1500 (103)	1500 (103)	1000 (68.9)
60 (15)	1500 (103)	1500 (103)	1500 (103)	1000 (68.9)
100 (37)	1500 (103)	1500 (103)	1500 (103)	1000 (68.9)
150 (65)	1350 (93.0)	1350 (93.0)	1350 (93.0)	700 (48.2)
200 (93)	1150 (79.2)	1150 (79.2)	1150 (79.2)	450 (31.0)
250 (121)	970 (66.8)	970 (66.8)	970 (66.8)	300 (20.6)
300 (148)	750 (51.6)	750 (51.6)	750 (51.6)	—
350 (176)	580 (39.9)	—	580 (39.9)	—
400 (204)	400 (27.5)	—	400 (27.5)	—
500 (260)	—	—	150 (10.3)	—
Uncoupled and When Coupling and Uncoupling				
70 (20)	250 (17.2)			

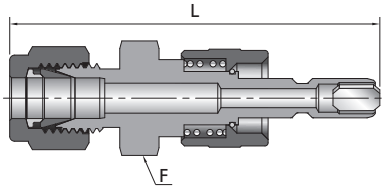
QC8 Series

Material	316 SS			Brass
O-Ring Material	Fluorocarbon FKM	Ethylene propylene	Perfluoro-carbon FFKM	Buna N
Tempera-ture °F (°C)	Pressure Rating, psig (bar)			
Coupled				
-50 (-45)	—	750 (51.6)	—	—
0 (-17)	750 (51.6)	750 (51.6)	750 (51.6)	500 (34.4)
10 (-12)	750 (51.6)	750 (51.6)	750 (51.6)	500 (34.4)
60 (15)	750 (51.6)	750 (51.6)	750 (51.6)	500 (34.4)
100 (37)	750 (51.6)	750 (51.6)	750 (51.6)	500 (34.4)
150 (65)	680 (46.8)	680 (46.8)	680 (46.8)	400 (27.5)
200 (93)	600 (41.3)	600 (41.3)	600 (41.3)	350 (24.1)
250 (121)	520 (35.8)	520 (35.8)	520 (35.8)	300 (20.6)
300 (148)	440 (30.3)	440 (30.3)	440 (30.3)	—
350 (176)	360 (24.8)	—	360 (24.8)	—
400 (204)	300 (20.6)	—	300 (20.6)	—
500 (260)	—	—	150 (10.3)	—
Uncoupled and When Coupling and Uncoupling				
70 (20)	250 (17.2)			

Dimensions

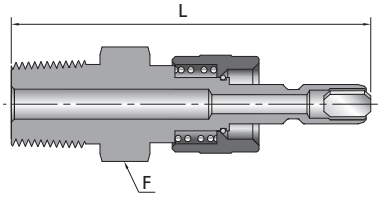
SESO Stems

Tube Fitting



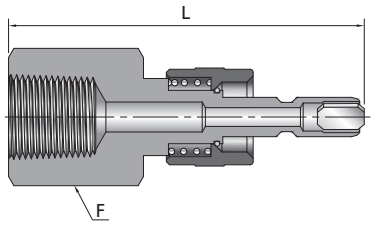
Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions F in.	Dimensions L in. (mm)
1/8	-QC4-FL2-S	0.08	5/8	2.32 (58.9)
1/4	-QC4-FL4-S	0.3	5/8	2.36 (59.9)
3/8	-QC6-FL6-S	1.0	3/4	2.52 (64.0)
1/2	-QC8-FL8-S	2.4	15/16	2.96 (75.2)
mm	——	——	mm	mm (in.)
6	-QC4-ML6-S	0.3	16	59.9 (2.36)
10	-QC6-ML10-S	1.0	19	67.3 (2.65)
12	-QC8-ML12-S	2.4	24	75.2 (2.96)

Male NPT



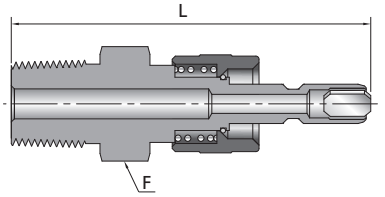
NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions F in.	Dimensions L in. (mm)
1/8	-QC4-NS2-S	0.3	5/8	2.07 (52.6)
1/4	-QC4-NS4-S	0.3	5/8	2.22 (56.4)
1/4	-QC6-NS4-S	0.8	3/4	2.32 (58.9)
3/8	-QC6-NS6-S	0.8	3/4	2.35 (59.7)
1/2	-QC8-NS8-S	2.0	15/16	2.84 (72.1)

Female NPT



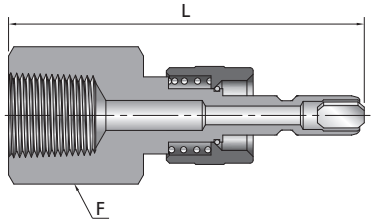
NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions F in.	Dimensions L in. (mm)
1/8	-QC4-FNS2-S	0.3	5/8	2.01 (51.1)
1/4	-QC4-FNS4-S	0.3	3/4	2.26 (57.4)
1/4	-QC6-FNS4-S	0.8	3/4	2.35 (59.7)
3/8	-QC6-FNS6-S	0.8	7/8	2.35 (59.7)
1/2	-QC8-FNS8-S	2.0	1 1/16	2.82 (71.6)

Male BSPT



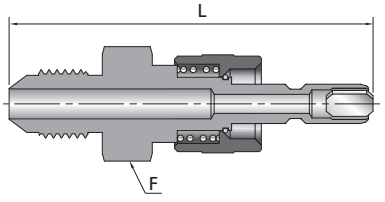
BSPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions F in.	Dimensions L in. (mm)
1/8	-QC4-RT2-S	0.3	5/8	2.07 (52.6)
1/4	-QC4-RT4-S	0.3	5/8	2.22 (56.4)
1/4	-QC6-RT4-S	0.8	3/4	2.32 (58.9)
3/8	-QC6-RT6-S	0.8	3/4	2.35 (59.7)
1/2	-QC8-RT8-S	2.0	15/16	2.84 (72.1)

Female BSPT



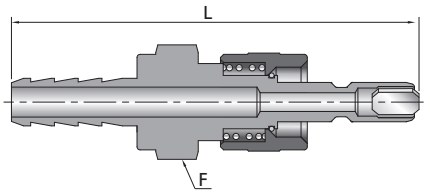
BSPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions F in.	Dimensions L in. (mm)
1/8	-QC4-FRT2-S	0.3	5/8	2.01 (51.1)
1/4	-QC4-FRT4-S	0.3	3/4	2.26 (57.4)
1/4	-QC6-FRT4-S	0.8	3/4	2.35 (59.7)
3/8	-QC6-FRT6-S	0.8	7/8	2.35 (59.7)
1/2	-QC8-FRT8-S	2.0	1 1/16	2.82 (71.6)

Male JIC(AN) 37° Flare



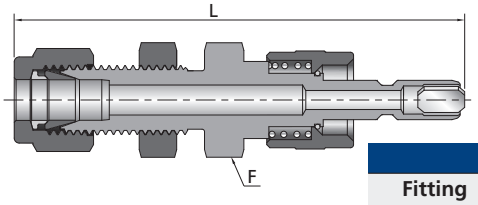
Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions F in.	Dimensions L in. (mm)
1/4	-QC4-AN4-S	0.2	5/8	2.23 (56.6)
3/8	-QC6-AN6-S	1.0	3/4	2.35 (59.7)
1/2	-QC8-AN8-S	2.4	15/16	2.79 (70.9)

Hose Connector



Hose Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions F in.	Dimensions L in. (mm)
1/4	-QC4-HC4-S	0.2	5/8	2.47 (62.7)
3/8	-QC6-HC6-S	1.0	3/4	2.66 (67.6)
1/2	-QC8-HC8-S	2.4	15/16	3.07 (78.0)

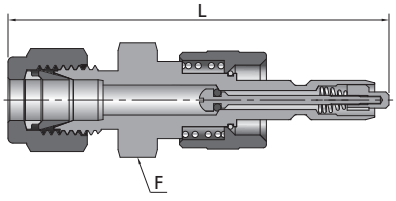
Bulkhead Tube Fitting



Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions F in.	Dimensions L in. (mm)	Min. Panel Orifice in. (mm)	Max. Panel Thickness in. (mm)
1/4	-QC4-BFL4-S	0.3	5/8	2.74 (69.6)	0.47 (11.9)	0.25 (6.4)
3/8	-QC6-BFL6-S	1.0	3/4	2.92 (74.2)	0.60 (15.2)	0.27 (6.9)
1/2	-QC8-BFL8-S	2.4	15/16	3.43 (87.1)	0.78 (19.8)	0.26 (6.6)
mm	——	——	mm	mm (in.)	mm (in.)	mm (in.)
6	-QC4-BML6-S	0.3	16	69.6 (2.74)	11.7 (0.46)	6.4 (0.25)
10	-QC6-BML10-S	1.0	22	77.7 (3.06)	16.8 (0.66)	6.9 (0.27)
12	-QC8-BML12-S	2.4	24	87.1 (3.43)	19.6 (0.77)	6.6 (0.26)

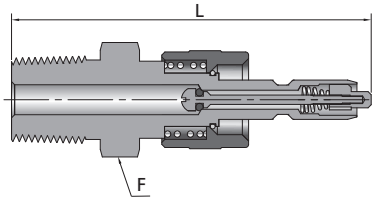
DESO Stems

Tube Fitting



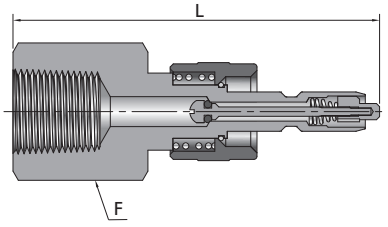
Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions F in.	Dimensions L in. (mm)
1/8	-QC4-FL2-D	0.08	5/8	2.77 (70.4)
1/4	-QC4-FL4-D	0.2	5/8	2.42 (61.5)
3/8	-QC6-FL6-D	0.5	3/4	2.64 (67.1)
1/2	-QC8-FL8-D	1.5	15/16	3.16 (80.3)
mm	——	——	mm	mm (in.)
6	-QC4-ML6-D	0.2	16	61.5 (2.42)
10	-QC6-ML10-D	0.5	19	70.4 (2.77)
12	-QC8-ML12-D	1.5	24	80.3 (3.16)

Male NPT



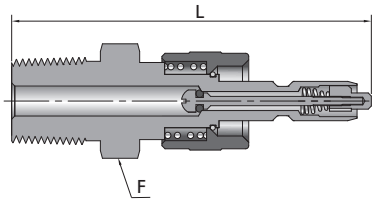
NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions F in.	Dimensions L in. (mm)
1/8	-QC4-NS2-D	0.2	5/8	2.13 (54.1)
1/4	-QC4-NS4-D	0.2	5/8	2.28 (57.8)
1/4	-QC6-NS4-D	0.5	3/4	2.44 (61.9)
3/8	-QC6-NS6-D	0.5	3/4	2.47 (62.7)
1/2	-QC8-NS8-D	1.3	15/16	3.04 (77.2)

Female NPT



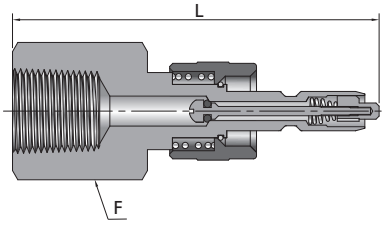
NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions F in.	Dimensions L in. (mm)
1/8	-QC4-FNS2-D	0.2	5/8	2.07 (52.6)
1/4	-QC4-FNS4-D	0.2	3/4	2.32 (58.9)
1/4	-QC6-FNS4-D	0.5	3/4	2.47 (62.7)
3/8	-QC6-FNS6-D	0.5	7/8	2.47 (62.7)
1/2	-QC8-FNS8-D	1.3	1 1/16	3.04 (77.2)

Male BSPT



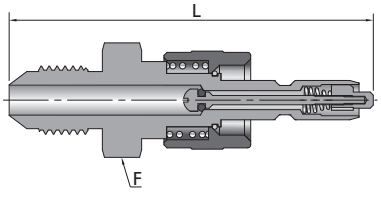
BSPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			F	L
			in.	in. (mm)
1/8	-QC4-RT2-D	0.2	5/8	2.13 (54.1)
1/4	-QC4-RT4-D	0.2	5/8	2.28 (57.8)
1/4	-QC6-RT4-D	0.5	3/4	2.44 (61.9)
3/8	-QC6-RT6-D	0.5	3/4	2.47 (62.7)
1/2	-QC8-RT8-D	1.3	15/16	3.04 (77.2)

Female BSPT



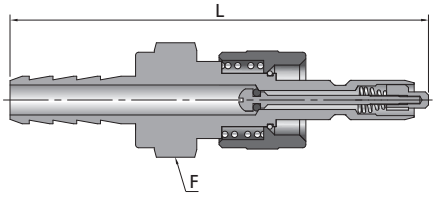
BSPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			F	L
			in.	in. (mm)
1/8	-QC4-FRT2-D	0.2	5/8	2.07 (52.6)
1/4	-QC4-FRT4-D	0.2	3/4	2.32 (58.9)
1/4	-QC6-FRT4-D	0.5	3/4	2.47 (62.7)
3/8	-QC6-FRT6-D	0.5	7/8	2.47 (62.7)
1/2	-QC8-FRT8-D	1.3	1 1/16	3.04 (77.2)

Male JIC(AN) 37° Flare



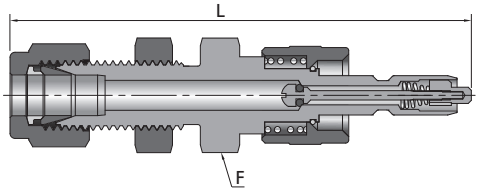
Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			F	L
			in.	in. (mm)
1/4	-QC4-AN4-D	0.2	5/8	2.29 (58.2)
3/8	-QC6-AN6-D	0.5	3/4	2.47 (62.7)
1/2	-QC8-AN8-D	1.5	15/16	2.99 (75.9)

Hose Connector



Hose Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			F	L
			in.	in. (mm)
1/4	-QC4-HC4-D	0.2	5/8	2.53 (64.3)
3/8	-QC6-HC6-D	0.5	3/4	2.78 (70.6)
1/2	-QC8-HC8-D	1.5	15/16	3.27 (83.1)

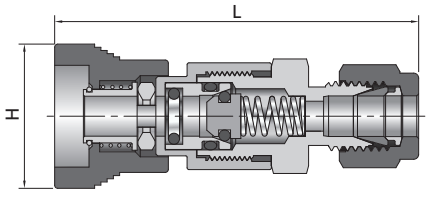
Bulkhead Tube Fitting



Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions		Min. Panel Orifice	Max. Panel Thickness
			F	L		
			in.	in. (mm)	in. (mm)	in. (mm)
1/4	-QC4-BFL4-D	0.2	5/8	2.80 (71.1)	0.47 (11.9)	0.25 (6.4)
3/8	-QC6-BFL6-D	0.5	3/4	3.07 (78.0)	0.60 (15.2)	0.27 (6.9)
1/2	-QC8-BFL8-D	1.5	15/16	3.63 (92.2)	0.78 (19.8)	0.26 (6.6)
mm	——	——	mm	mm (in.)	mm (in.)	mm (in.)
6	-QC4-BML6-D	0.2	16	71.1 (2.80)	11.7 (0.46)	6.4 (0.25)
10	-QC6-BML10-D	0.5	22	78.7 (3.10)	16.8 (0.66)	6.9 (0.27)
12	-QC8-BML12-D	1.5	24	92.2 (3.63)	19.6 (0.77)	6.6 (0.26)

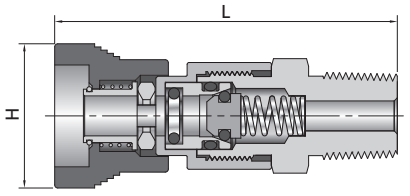
Bodies

Tube Fitting



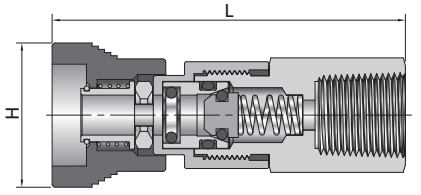
Fitting Size in.	Basic Ordering Number	Dimensions	
		H	L
		in.(mm)	in. (mm)
1/8	-QC4-FL2-B	0.91 (23.1)	2.26 (57.4)
1/4	-QC4-FL4-B	0.91 (23.1)	2.30 (58.4)
3/8	-QC6-FL6-B	1.02 (26.0)	2.58 (65.5)
1/2	-QC8-FL8-B	1.21 (30.7)	3.09 (78.5)
mm	——	mm (in.)	mm (in.)
6	-QC4-ML6-B	23.1 (0.91)	58.4 (2.30)
10	-QC6-ML10-B	26.0 (1.02)	68.1 (2.68)
12	-QC8-ML12-B	30.7 (1.21)	78.5 (3.09)

Male NPT



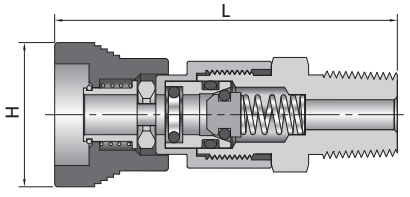
NPT Size in.	Basic Ordering Number	Dimensions	
		H	L
		in.(mm)	in. (mm)
1/8	-QC4-NS2-B	0.91 (23.1)	2.01 (51.1)
1/4	-QC4-NS4-B	0.91 (23.1)	2.16 (54.9)
1/4	-QC6-NS4-B	1.02 (26.0)	2.38 (60.5)
3/8	-QC6-NS6-B	1.02 (26.0)	2.38 (60.5)
1/2	-QC8-NS8-B	1.21 (30.7)	2.97 (75.4)

Female NPT



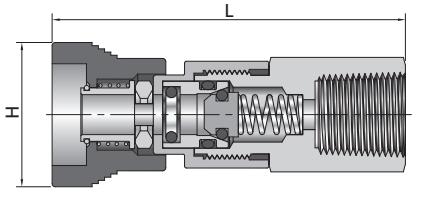
NPT Size in.	Basic Ordering Number	Dimensions	
		H	L
		in. (mm)	in. (mm)
1/8	-QC4-FNS2-B	0.91 (23.1)	2.16 (54.9)
1/4	-QC4-FNS4-B	0.91 (23.1)	2.42 (61.5)
1/4	-QC6-FNS4-B	1.02 (26.0)	2.54 (64.5)
3/8	-QC6-FNS6-B	1.02 (26.0)	2.57 (65.3)
1/2	-QC8-FNS8-B	1.21 (30.7)	3.22 (81.8)

Male BSPT



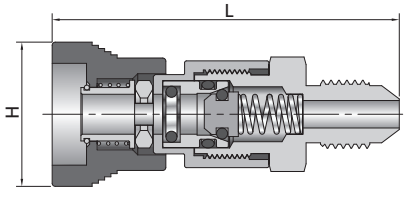
BSPT Size in.	Basic Ordering Number	Dimensions	
		H	L
		in. (mm)	in. (mm)
1/8	-QC4-RT2-B	0.91 (23.1)	2.01 (51.1)
1/4	-QC4-RT4-B	0.91 (23.1)	2.16 (54.9)
1/4	-QC6-RT4-B	1.02 (26.0)	2.38 (60.5)
3/8	-QC6-RT6-B	1.02 (26.0)	2.38 (60.5)
1/2	-QC8-RT8-B	1.21 (30.7)	2.97 (75.4)

Female BSPT



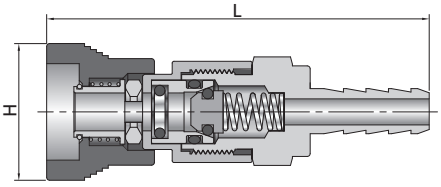
BSPT Size in.	Basic Ordering Number	Dimensions	
		H	L
		in. (mm)	in. (mm)
1/8	-QC4-FRT2-B	0.91 (23.1)	2.16 (54.9)
1/4	-QC4-FRT4-B	0.91 (23.1)	2.42 (61.5)
1/4	-QC6-FRT4-B	1.02 (26.0)	2.54 (64.5)
3/8	-QC6-FRT6-B	1.02 (26.0)	2.57 (65.3)
1/2	-QC8-FRT8-B	1.21 (30.7)	3.22 (81.8)

Male JIC (AN) 37° Flare



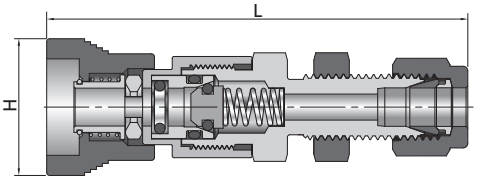
Fitting Size in.	Basic Ordering Number	Dimensions	
		H	L
		in. (mm)	in. (mm)
1/4	-QC4-AN4-B	0.91 (23.1)	2.17 (55.1)
3/8	-QC6-AN6-B	1.02 (26.0)	2.41 (61.2)
1/2	-QC8-AN8-B	1.21 (30.7)	2.92 (74.2)

Hose Connector



Hose Size in.	Basic Ordering Number	Dimensions H in. (mm)	Dimensions L in. (mm)
1/4	-QC4-HC4-B	0.91 (23.1)	2.41 (61.2)
3/8	-QC6-HC6-B	1.02 (26.0)	2.72 (69.1)
1/2	-QC8-HC8-B	1.21 (30.7)	3.20 (81.3)

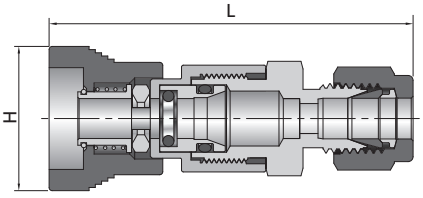
Bulkhead Tube Fitting



Fitting Size in.	Basic Ordering Number	Dimensions H	Dimensions L	Min. Panel Orifice	Max. Panel Thickness
		in. (mm)	in. (mm)	in. (mm)	in. (mm)
1/4	-QC4-BFL4-B	0.91 (23.1)	2.67 (67.8)	0.47 (11.9)	0.25 (6.4)
3/8	-QC6-BFL6-B	1.02 (26.0)	2.98 (75.7)	0.60 (15.2)	0.27 (6.9)
1/2	-QC8-BFL8-B	1.21 (30.7)	3.56 (90.4)	0.78 (19.8)	0.26 (6.6)
mm	——	mm (in.)	mm (in.)	mm (in.)	mm (in.)
6	-QC4-BML6-B	23.1 (0.91)	67.8 (2.67)	11.7 (0.46)	6.4 (0.25)
10	-QC6-BML10-B	26.0 (1.02)	75.9 (2.99)	16.8 (0.66)	6.9 (0.27)
12	-QC8-BML12-B	30.7 (1.21)	90.4 (3.56)	19.6 (0.77)	6.6 (0.26)

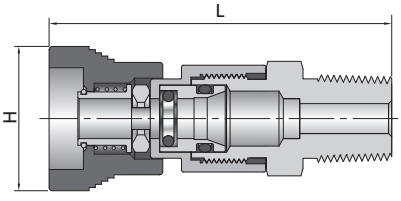
Full-flow Bodies

Tube Fitting



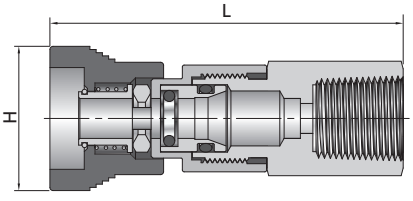
Fitting Size in.	Basic Ordering Number	Dimensions H	Dimensions L
		in. (mm)	in. (mm)
1/8	-QC4-FL2-F	0.91 (23.1)	2.26 (57.4)
1/4	-QC4-FL4-F	0.91 (23.1)	2.30 (58.4)
3/8	-QC6-FL6-F	1.02 (26.0)	2.58 (65.5)
1/2	-QC8-FL8-F	1.21 (30.7)	3.09 (78.5)
mm	——	mm (in.)	mm (in.)
6	-QC4-ML6-F	23.1 (0.91)	58.4 (2.30)
10	-QC6-ML10-F	26.0 (1.02)	68.1 (2.68)
12	-QC8-ML12-F	30.7 (1.21)	78.5 (3.09)

Male NPT



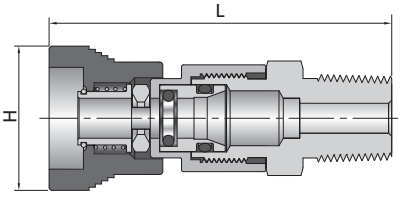
NPT Size in.	Basic Ordering Number	Dimensions H	Dimensions L
		in. (mm)	in. (mm)
1/8	-QC4-NS2-F	0.91 (23.1)	2.01 (51.1)
1/4	-QC4-NS4-F	0.91 (23.1)	2.16 (54.9)
1/4	-QC6-NS4-F	1.02 (26.0)	2.38 (60.5)
3/8	-QC6-NS6-F	1.02 (26.0)	2.38 (60.5)
1/2	-QC8-NS8-F	1.21 (30.7)	2.97 (75.4)

Female NPT



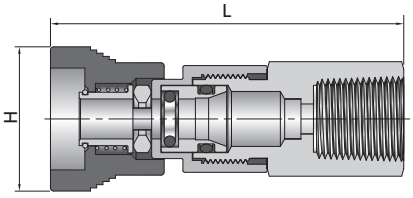
NPT Size in.	Basic Ordering Number	Dimensions H	Dimensions L
		in. (mm)	in. (mm)
1/8	-QC4-FNS2-F	0.91 (23.1)	2.16 (54.9)
1/4	-QC4-FNS4-F	0.91 (23.1)	2.42 (61.5)
1/4	-QC6-FNS4-F	1.02 (26.0)	2.54 (65.4)
3/8	-QC6-FNS6-F	1.02 (26.0)	2.57 (65.3)
1/2	-QC8-FNS8-F	1.21 (30.7)	3.22 (81.8)

Male BSPT



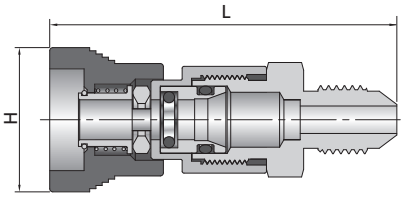
BSPT Size in.	Basic Ordering Number	Dimensions H	Dimensions L
		in. (mm)	in. (mm)
1/8	-QC4-RT2-F	0.91 (23.1)	2.01 (51.1)
1/4	-QC4-RT4-F	0.91 (23.1)	2.16 (54.9)
1/4	-QC6-RT4-F	1.02 (26.0)	2.38 (60.5)
3/8	-QC6-RT6-F	1.02 (26.0)	2.38 (60.5)
1/2	-QC8-RT8-F	1.21 (30.7)	2.97 (75.4)

Female BSPT



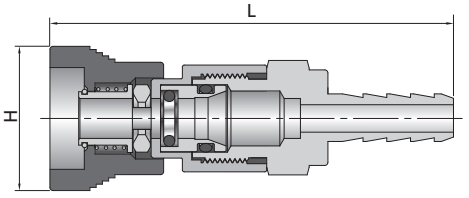
BSPT Size in.	Basic Ordering Number	Dimensions	
		H	L
		in. (mm)	in. (mm)
1/8	-QC4-FRT2-F	0.91 (23.1)	2.16 (54.9)
1/4	-QC4-FRT4-F	0.91 (23.1)	2.42 (61.5)
1/4	-QC6-FRT4-F	1.02 (26.0)	2.54 (64.5)
3/8	-QC6-FRT6-F	1.02 (26.0)	2.57 (65.3)
1/2	-QC8-FRT8-F	1.21 (30.7)	3.22 (81.8)

Male JIC (AN) 37° Flare



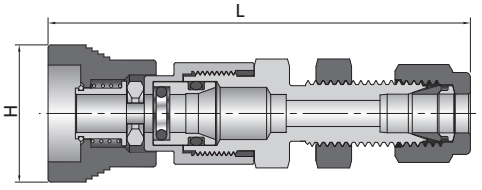
Fitting Size in.	Basic Ordering Number	Dimensions	
		H	L
		in. (mm)	in. (mm)
1/4	-QC4-AN4-F	0.91 (23.1)	2.17 (55.1)
3/8	-QC6-AN6-F	1.02 (26.0)	2.41 (61.2)
1/2	-QC8-AN8-F	1.21 (30.7)	2.92 (74.2)

Hose Connector



Hose Size in.	Basic Ordering Number	Dimensions	
		H	L
		in. (mm)	in. (mm)
1/4	-QC4-HC4-F	0.91 (23.1)	2.41 (61.2)
3/8	-QC6-HC6-F	1.02 (26.0)	2.72 (69.1)
1/2	-QC8-HC8-F	1.21 (30.7)	3.20 (81.3)

Bulkhead Tube Fitting



Fitting Size in.	Basic Ordering Number	Dimensions		Min. Panel Orifice	Max. Panel Thickness
		H	L		
		in. (mm)	in. (mm)	in. (mm)	in. (mm)
1/4	-QC4-BFL4-F	0.91 (23.1)	2.67 (67.8)	0.47 (11.9)	0.25 (6.4)
3/8	-QC6-BFL6-F	1.02 (26.0)	2.98 (75.7)	0.60 (15.2)	0.27 (6.9)
1/2	-QC8-BFL8-F	1.21 (30.7)	3.56 (90.4)	0.78 (19.8)	0.26 (6.6)
mm	——	mm (in.)	mm (in.)	mm (in.)	mm (in.)
6	-QC4-BML6-F	23.1 (0.91)	67.8 (2.67)	11.7 (0.46)	6.4 (0.25)
10	-QC6-BML10-F	26.0 (1.02)	75.9 (2.99)	16.8 (0.66)	6.9 (0.27)
12	-QC8-BML12-F	30.7 (1.21)	90.4 (3.56)	19.6 (0.77)	6.6 (0.26)

Options, QC Series

Keyed QC Series

FITOK keyed quick-connects provide a reliable mechanical lockout system to prevent accidental intermixing of different lines in multifluid or multipressure systems.

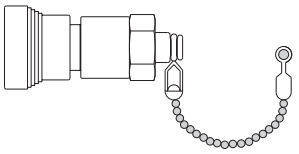
QC Series Key Numbers and Sleeve Outside Diameters

Key Number	Color	QC4		QC6		QC8	
		Body Sleeve	Stem Sleeve	Body Sleeve	Stem Sleeve	Body Sleeve	Stem Sleeve
		in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)
K1	Black	0.96 (24.4)	0.82 (20.8)	1.13 (28.7)	0.99 (25.1)	1.26 (32.0)	1.10 (27.9)
K2	Orange	0.99 (25.1)	0.85 (21.6)	1.16 (29.5)	1.02 (25.9)	1.29 (32.8)	1.14 (29.0)
K3	Green	1.02 (25.9)	0.88 (22.4)	1.19 (30.2)	1.05 (26.7)	1.32 (33.5)	1.17 (29.7)
K4	Yellow	1.05 (26.7)	0.91 (23.1)	1.22 (31.0)	1.08 (27.4)	1.35 (34.3)	1.20 (30.5)
K5	Blue	1.08 (27.4)	0.94 (23.9)	1.24 (31.5)	1.11 (28.2)	1.38 (35.1)	1.23 (31.2)
K6	White	1.11 (28.2)	0.97 (24.6)	1.28 (32.5)	1.14 (29.0)	1.41 (35.8)	1.26 (32.0)
K7	Purple	1.14 (29.0)	1.00 (25.4)	1.31 (33.3)	1.17 (29.7)	1.44 (36.6)	1.29 (32.8)
K8	Brown	1.17 (29.7)	1.03 (26.2)	1.34 (34.0)	1.20 (30.5)	1.47 (37.3)	1.32 (33.5)

Stem and Body Protector

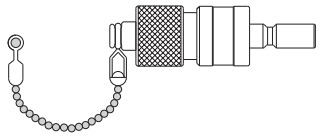
Stem and body protector can prevent the stem and the body from being damaged and polluted when uncoupling.

Stem Protector



Series	Basic Ordering Number
QC4	-QC4-SP
QC6	-QC6-SP
QC8	-QC8-SP

Body Protector



Series	Basic Ordering Number
QC4	-QC4-BP
QC6	-QC6-BP
QC8	-QC8-BP

◎ Ordering number description of the protector: material designator (SS for stainless steel or B for brass) + basic ordering number.
Example: **SS-QC4-BP**

◎ Ordering number description of the keyed protector: material designator (SS for stainless steel or B for brass) + basic ordering number+key number.
Example: **SS-QC4-BP-K2**

◎ The protector is not a pressure sustaining device. To order pressure sustaining device, please contact FITOK Group or our authorized distributors.

Ordering Number Description

SS - QC4 - FNS4 - D - K1 - B - CE

Material	
SS	316 SS
B	Brass

Series	
QC4	1/4" (6.4 mm)
QC6	3/8" (9.5 mm)
QC8	1/2" (12.7 mm)

End Connection Type	
FNS	Female NPT
NS	Male NPT
FRT	Female BSPT
RT	Male BSPT
FMS	Female Metric Thread (for RG-M)
MS	Male Metric Thread (for RG-M)
FL	Fractional Tube Fitting
ML	Metric Tube Fitting
FT	Fractional Tube Adapter
MT	Metric Tube Adapter
AN	Male JIC 37° Flare
BFL	Fractional Bulkhead Tube Fitting
BML	Metric Bulkhead Tube Fitting

End Connection Size	
4	1/4"
6	3/8" or 6 mm
8	1/2" or 8 mm
10	5/8" or 10 mm
12	3/4" or 12 mm
14	M14 x 1.5
16	1" or 16 mm
18	M18 x 1.5
20	M20 x 1.5

Stem or Body	
S	Stem without valve remains open when uncoupled
D	Stem with valve shuts off when uncoupled
B	Body with valve shuts off when uncoupled
F	Full-flow body

Key Number and Color	
	Without key
K1	Black
K2	Orange
K3	Green
K4	Yellow
K5	Blue
K6	White
K7	Purple
K8	Brown

O-ring Material	
	Fluorocarbon FKM
B	Buna N
E	EPDM
N	Neoprene
Z	FFKM

Special Application	
	No
CE	NACE MR0175
SI	SilcoNert® 2000 (Sulfinert®) Coating

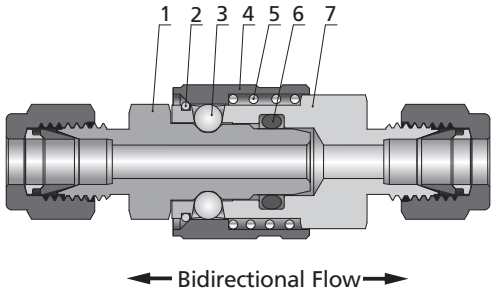
Notes:
1. "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.
2. Dimensions are for reference only and are subject to change.
3. Special Application
   Wetted metal components SilcoNert® 2000 (Sulfinert®) coated.

Full Flow Quick-Connects

QF Series

Features

- Working pressure up to: 6000 psig (414 bar)
- Materials: stainless steel or brass
- Full flow
- Quick, easy operation
- Smooth and open bores without valve on either end to minimize pressure drop and allow easy cleaning



Standard Materials of Construction

Item	Component	Stainless Steel	Brass
		Material Grade/ASTM Specification	
1	Stem	316 SS/A479	Brass C36000/B16
2	Snap rings	316 SS/A313	
3	Locking balls	440C/A276	
4	Sliding sleeve	316L SS/A479	C36000/B16
5	Springs	316 SS/A313	
6	O-rings	Fluorocarbon FKM	Buna N
7	Body	316 SS/A479	Brass C36000/B16
8	Lubricants	Silicone-based	

Insertion Depth

Series	Insertion Depth in. (mm)
QF4	0.78 (19.8)
QF8	0.81 (20.6)
QF12	0.90 (22.9)
QF16	0.94 (23.9)

In order to measure overall length in the coupled position, insertion depth should be deducted from any overall stem and body combination length.

Pressure-Temperature Ratings

1. Pressure ratings may be limited by end connections.
2. Quick-Connects in compliance with NACE MR0175 are subject to a lower pressure rating. For more information, please contact FITOK Group or our authorized distributors.
3. Do not uncouple under pressure.

QF4 Series and QF8 Series

Material	316 SS			Brass	
O-Ring Material	Fluorocarbon FKM	Ethylene propylene	Perfluorocarbon FFKM	Buna N	
Series	QF4 and QF8			QF4	QF8
Temperature °F (°C)	Pressure Rating, psig (bar)				
Coupled					
-50 (-45)	—	6000 (413)	—	—	—
0 (-17)	6000 (413)	6000 (413)	6000 (413)	4000 (275)	3000 (206)
10 (-12)	6000 (413)	6000 (413)	6000 (413)	4000 (275)	3000 (206)
40 (4)	6000 (413)	6000 (413)	6000 (413)	4000 (275)	3000 (206)
100 (37)	6000 (413)	6000 (413)	6000 (413)	4000 (275)	3000 (206)
150 (65)	5000 (344)	4000 (275)	5000 (344)	2700 (186)	2000 (137)
200 (93)	4000 (275)	2700 (186)	4000 (275)	1400 (96.4)	1000 (68.9)
250 (121)	3000 (206)	1400 (96.4)	3000 (206)	300 (20.6)	300 (20.6)
300 (148)	2000 (137)	400 (27.5)	2000 (137)	—	—
350 (176)	1200 (82.6)	—	1200 (82.6)	—	—
400 (204)	400 (27.5)	—	400 (27.5)	—	—
500 (260)	—	—	200 (13.7)	—	—

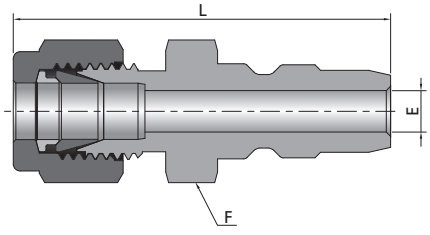
QF12 Series and QF16 Series

Material	316 SS			Brass
O-Ring Material	Fluorocarbon FKM	Ethylene propylene	Perfluorocarbon FFKM	Buna N
Temperature °F (°C)	Pressure Rating, psig (bar)			
	Coupled			
-50 (-45)	—	4000 (275)	—	—
0 (-17)	4000 (275)	4000 (275)	4000 (275)	2000 (137)
10 (-12)	4000 (275)	4000 (275)	4000 (275)	2000 (137)
40 (4)	4000 (275)	4000 (275)	4000 (275)	2000 (137)
100 (37)	4000 (275)	4000 (275)	4000 (275)	2000 (137)
150 (65)	3500 (241)	2000 (137)	3500 (241)	1300 (89.5)
200 (93)	2800 (192)	1300 (89.5)	2800 (192)	700 (48.2)
250 (121)	2100 (144)	700 (48.2)	2100 (144)	200 (13.7)
300 (148)	1400 (96.4)	200 (13.7)	1400 (96.4)	—
350 (176)	800 (55.1)	—	800 (55.1)	—
400 (204)	200 (13.7)	—	200 (13.7)	—
500 (260)	—	—	150 (10.3)	—

Dimensions

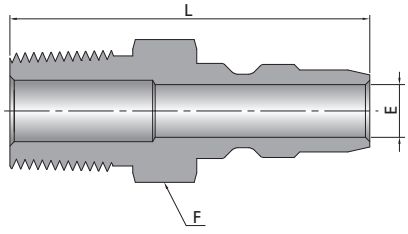
Stems

Tube Fitting



Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions E in. (mm)	F in.	L in. (mm)
1/4	-QF4-FL4-S	2.2	0.19 (4.8)	9/16	1.77 (45.0)
3/8	-QF4-FL6-S	2.8	0.24 (6.1)	11/16	1.77 (45.0)
3/8	-QF8-FL6-S	2.8	0.28 (7.1)	7/8	1.88 (47.8)
1/2	-QF8-FL8-S	13.0	0.41 (10.4)	7/8	1.99 (50.5)
3/4	-QF12-FL12-S	26.0	0.62 (15.7)	1 1/16	2.15 (54.6)
1	-QF16-FL16-S	45.0	0.88 (22.4)	1 3/8	2.45 (62.2)
mm	——	——	(mm) in.	mm	(mm) in.
6	-QF4-ML6-S	2.2	4.8 (0.19)	15	45.0 (1.77)
10	-QF8-ML10-S	2.8	7.1 (0.28)	22	48.5 (1.91)
12	-QF8-ML12-S	13.0	9.5 (0.37)	22	51.3 (2.02)
20	-QF12-ML20-S	26.0	15.7 (0.62)	30	54.6 (2.15)
25	-QF16-ML25-S	45.0	22.4 (0.88)	36	63.5 (2.50)

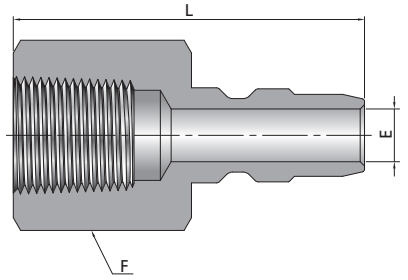
Male NPT



NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions E in. (mm)	F in.	L in. (mm)
1/4	-QF4-NS4-S	1.7	0.24 (6.1)	9/16	1.59 (40.4)
3/8	-QF4-NS6-S	1.7	0.24 (6.1)	11/16	1.59 (40.4)
3/8	-QF8-NS6-S	7.1	0.41 (10.4)	7/8	1.65 (41.9)
1/2	-QF8-NS8-S	11.5	0.50 (12.7)	7/8	1.84 (46.7)
3/4	-QF12-NS12-S	23.6	0.72 (18.3)	1 1/16	2.03 (51.6)
1	-QF16-NS16-S	39.0	0.88 (22.4)	1 3/8	2.35 (59.7)

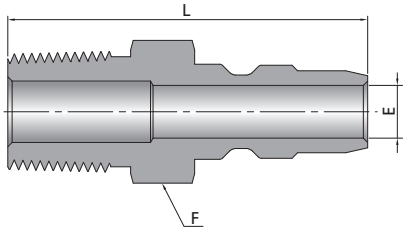
Stems

Female NPT



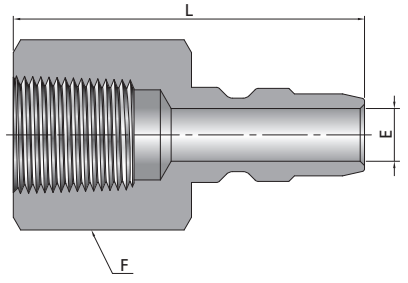
NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions		
			E	F	L
			in. (mm)	in.	in. (mm)
1/4	-QF4-FNS4-S	1.7	0.24 (6.1)	3/4	1.60 (40.6)
3/8	-QF4-FNS6-S	1.7	0.24 (6.1)	7/8	1.67 (42.4)
3/8	-QF8-FNS6-S	7.1	0.41 (10.4)	1 1/16	1.59 (40.4)
1/2	-QF8-FNS8-S	11.5	0.50 (12.7)	1 1/16	1.82 (46.2)
3/4	-QF12-FNS12-S	23.6	0.72 (18.3)	1 5/16	2.08 (52.8)
1	-QF16-FNS16-S	39.0	0.88 (22.4)	1 5/8	2.49 (63.2)

Male BSPT



BSPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions		
			E	F	L
			in. (mm)	in.	in. (mm)
1/4	-QF4-RT4-S	1.7	0.24 (6.1)	9/16	1.59 (40.4)
3/8	-QF4-RT6-S	1.7	0.24 (6.1)	11/16	1.59 (40.4)
3/8	-QF8-RT6-S	7.1	0.41 (10.4)	7/8	1.65 (41.9)
1/2	-QF8-RT8-S	11.5	0.50 (12.7)	7/8	1.84 (46.7)
3/4	-QF12-RT12-S	23.6	0.72 (18.3)	1 1/16	2.03 (51.6)
1	-QF16-RT16-S	39.0	0.88 (22.4)	1 3/8	2.35 (59.7)

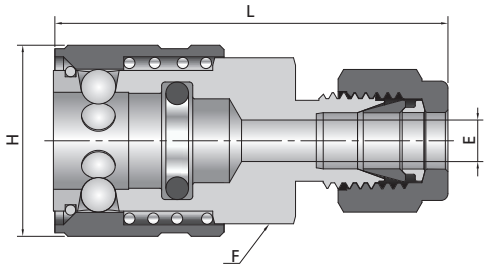
Female BSPT



BSPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions		
			E	F	L
			in. (mm)	in.	in. (mm)
1/4	-QF4-FRT4-S	1.7	0.24 (6.1)	3/4	1.60 (40.6)
3/8	-QF4-FRT6-S	1.7	0.24 (6.1)	7/8	1.67 (42.4)
3/8	-QF8-FRT6-S	7.1	0.41 (10.4)	1 1/16	1.59 (40.4)
1/2	-QF8-FRT8-S	11.5	0.50 (12.7)	1 1/16	1.82 (46.2)
3/4	-QF12-FRT12-S	23.6	0.72 (18.3)	1 5/16	2.08 (52.8)
1	-QF16-FRT16-S	39.0	0.88 (22.4)	1 5/8	2.49 (63.2)

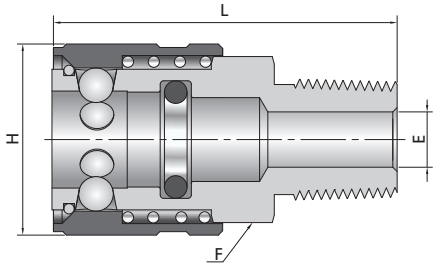
Bodies

Tube Fitting



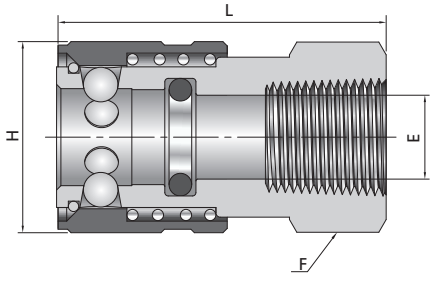
Fitting Size in.	Basic Ordering Number	Dimensions E in. (mm)	F in.	H in. (mm)	L in. (mm)
1/4	-QF4-FL4-B	0.19 (4.8)	11/16	0.87 (22.1)	1.80 (45.7)
3/8	-QF4-FL6-B	0.28 (7.1)	11/16	0.87 (22.1)	1.81 (46.0)
3/8	-QF8-FL6-B	0.28 (7.1)	1 1/16	1.30 (33.0)	2.17 (55.1)
1/2	-QF8-FL8-B	0.47 (11.9)	1 1/16	1.30 (33.0)	2.23 (56.6)
3/4	-QF12-FL12-B	0.62 (15.7)	1 1/2	1.66 (42.2)	2.45 (62.2)
1	-QF16-FL16-B	0.88 (22.4)	1 11/16	1.88 (47.8)	2.75 (69.9)
mm	——	(mm) in.	mm	(mm) in.	(mm) in.
6	-QF4-ML6-B	4.8 (0.19)	18	22.1 (0.87)	45.7 (1.80)
10	-QF8-ML10-B	7.1 (0.28)	27	33.0 (1.30)	55.9 (2.20)
12	-QF8-ML12-B	10.4 (0.41)	27	33.0 (1.30)	57.4 (2.26)
20	-QF12-ML20-B	15.9 (0.63)	38	42.2 (1.66)	63.5 (2.50)
25	-QF16-ML25-B	21.8 (0.86)	46	47.8 (1.88)	70.0 (2.76)

Male NPT



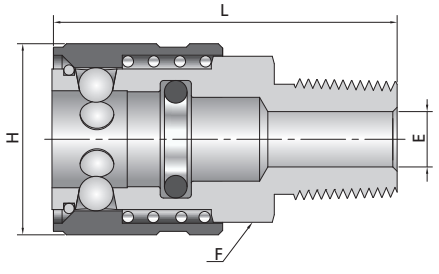
NPT Size in.	Basic Ordering Number	Dimensions E in. (mm)	F in.	H in. (mm)	L in. (mm)
1/4	-QF4-NS4-B	0.25 (6.4)	11/16	0.87 (22.1)	1.57 (39.9)
3/8	-QF4-NS6-B	0.37 (9.4)	11/16	0.87 (22.1)	1.57 (39.9)
3/8	-QF8-NS6-B	0.41 (10.4)	1 1/16	1.30 (33.0)	1.83 (46.5)
1/2	-QF8-NS8-B	0.50 (12.7)	1 1/16	1.30 (33.0)	2.08 (52.8)
3/4	-QF12-NS12-B	0.72 (18.3)	1 1/2	1.66 (42.2)	2.33 (59.2)
1	-QF16-NS16-B	0.88 (22.4)	1 11/16	1.88 (47.8)	2.65 (67.3)

Female NPT



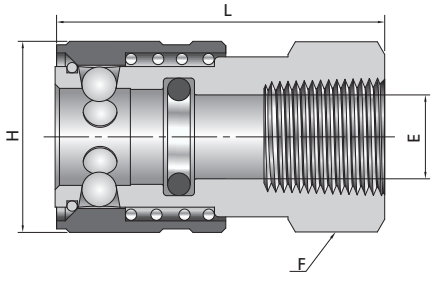
NPT Size in.	Basic Ordering Number	Dimensions E in. (mm)	F in.	H in. (mm)	L in. (mm)
1/4	-QF4-FNS4-B	0.38 (9.7)	3/4	0.87 (22.1)	1.50 (38.1)
3/8	-QF4-FNS6-B	0.38 (9.7)	7/8	0.87 (22.1)	1.63 (41.4)
3/8	-QF8-FNS6-B	0.59 (15.0)	1 1/16	1.30 (33.0)	1.73 (43.9)
1/2	-QF8-FNS8-B	0.63 (16.0)	1 1/16	1.30 (33.0)	1.73 (43.9)
3/4	-QF12-FNS12-B	0.88 (22.4)	1 1/2	1.66 (42.2)	1.89 (48.0)
1	-QF16-FNS16-B	1.06 (26.9)	1 11/16	1.88 (47.8)	2.12 (53.8)

Male BSPT



BSPT Size in.	Basic Ordering Number	Dimensions E in. (mm)	F in.	H in. (mm)	L in. (mm)
1/4	-QF4-RT4-B	0.25 (6.4)	11/16	0.87 (22.1)	1.57 (39.9)
3/8	-QF4-RT6-B	0.37 (9.4)	11/16	0.87 (22.1)	1.57 (39.9)
3/8	-QF8-RT6-B	0.41 (10.4)	1 1/16	1.30 (33.0)	1.83 (46.5)
1/2	-QF8-RT8-B	0.50 (12.7)	1 1/16	1.30 (33.0)	2.08 (52.8)
3/4	-QF12-RT12-B	0.72 (18.3)	1 1/2	1.66 (42.2)	2.33 (59.2)
1	-QF16-RT16-B	0.88 (22.4)	1 11/16	1.88 (47.8)	2.65 (67.3)

Female BSPT



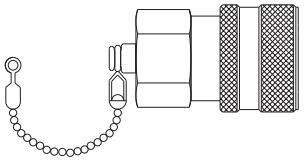
BSPT Size in.	Basic Ordering Number	Dimensions E in. (mm)	F in.	H in. (mm)	L in. (mm)
1/4	-QF4-FRT4-B	0.38 (9.7)	3/4	0.87 (22.1)	1.50 (38.1)
3/8	-QF4-FRT6-B	0.38 (9.7)	7/8	0.87 (22.1)	1.63 (41.4)
3/8	-QF8-FRT6-B	0.59 (15.0)	1 1/16	1.30 (33.0)	1.73 (43.9)
1/2	-QF8-FRT8-B	0.63 (16.0)	1 1/16	1.30 (33.0)	1.73 (43.9)
3/4	-QF12-FRT12-B	0.88 (22.4)	1 1/2	1.66 (42.2)	1.89 (48.0)
1	-QF16-FRT16-B	1.06 (26.9)	1 11/16	1.88 (47.8)	2.12 (53.8)

Options, QF Series

Stem and Body Protector

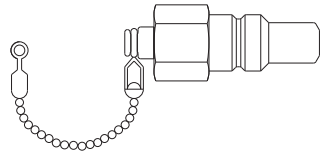
Stem and body protector can prevent the stem and the body from being damaged and polluted when uncoupling.

Stem Protector



Series	Basic Ordering Number
QF4	-QF4-SP
QF8	-QF8-SP
QF12	-QF12-SP
QF16	-QF16-SP

Body Protector



Series	Basic Ordering Number
QF4	-QF4-BP
QF8	-QF8-BP
QF12	-QF12-BP
QF16	-QF16-BP

◎ Ordering number description of the protector: material designator (SS for stainless steel or B for brass) + basic ordering number.
Example: **SS-QF4-BP**

◎ The protector is not a pressure sustaining device. To order pressure sustaining device, please contact FITOK Group or our authorized distributors.

Ordering Number Description

SS - QF4 - FNS4 - B - B - CE

Material	
SS	316SS
B	Brass

Series	
QF4	1/4" (6.4 mm)
QF8	1/2" (12.7 mm)
QF12	3/4" (19.0 mm)
QF16	1" (25.4 mm)

End Connection Type	
FNS	Female NPT
NS	Male NPT
FRT	Female BSPT
RT	Male BSPT
FMS	Female Metric Thread (for RG-M)
MS	Male Metric Thread (for RG-M)
FL	Fractional Tube Fitting
ML	Metric Tube Fitting
FT	Fractional Tube Adapter
MT	Metric Tube Adapter
AN	Male JIC 37° Flare

End Connection Size	
4	1/4"
6	3/8" or 6 mm
8	1/2" or 8 mm
10	5/8" or 10 mm
12	3/4" or 12 mm
14	M14 x 1.5
16	1" or 16 mm
18	M18 x 1.5
20	M20 x 1.5

Stem or Body	
S	Stem
B	Body

O-ring Material	
	Fluorocarbon FKM
B	Buna N
E	EPDM
N	Neoprene
Z	FFKM

Special Application	
	No
CE	NACE MR0175
SI	SilcoNert® 2000 (Sulfinert®) Coating

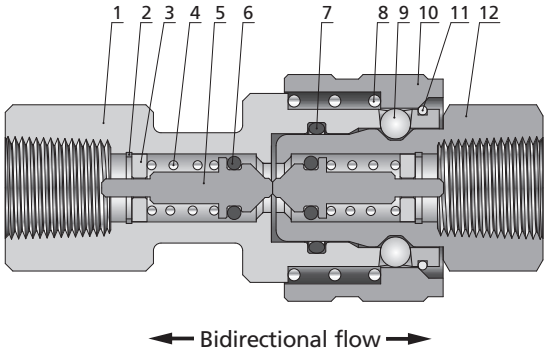
Notes: 1. "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.
2. Dimensions are for reference only and are subject to change.
3. Special Application
Wetted metal components SilcoNert® 2000 (Sulfinert®) coated.

Double-End Shutoff, High Flow Quick-Connects

QV Series

Features

- Working pressure up to: 2000 psig (137 bar)
- Large flow area to ensure high flow capacity
- Positive valve stop to maintain valve alignment and to provide metal to metal valve stop to ensure that the valves are fully open
- Hardened nipples and sleeves as well as solid barstock construction to make for a quality coupling with maximum resistance to damage from hydraulic and mechanical shock
- Designed to withstand high pressure with reliable sealing
- Durable ball-locking mechanism to assure reliable connection



Standard Materials of Construction

Item	Component	Stainless Steel	Brass
		Material Grade/ASTM Specification	
1	Body	316 SS/A479	C36000/B16
2	Locating ring	304 SS	
3	Locating block	316 SS/A276	Brass C36000/B16
4	Springs	316 SS/A313	
5	Valve Stem	316 SS/A479	C36000/B16
6	O-rings	Fluorocarbon FKM	Buna N
7			
8	Springs	316 SS/A313	
9	Locking balls	440C/A276	
10	Body sleeve	316L SS/A479	Brass C36000/B16
11	Snap rings	316 SS/A313	
12	Stem	316 SS/A479	C36000/B16
13	Lubricants	Silicone-based	

Pressure-Temperature Ratings

Do not couple or uncouple under pressure.

Body Material	Stainless Steel						Brass					
Series	QV2	QV4	QV6	QV8	QV12	QV16	QV2	QV4	QV6	QV8	QV12	QV16
O-ring	FKM						Buna N					
Temperature Range	-10°F to 400°F (-23°C to 204°C)						-10°F to 250°F (-23°C to 121°C)					
Working Pressure psig (bar)	2000 (137)		1500 (103)			1000 (69.0)	1000 (69.0)					

Insertion Depth

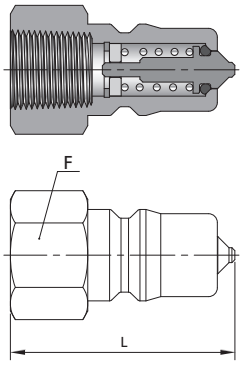
Series	Insertion Depth in. (mm)
QV2	0.81 (20.5)
QV4	0.98 (25)
QV6	1.17 (29.7)
QV8	1.26 (32)
QV12	1.64 (41.6)
QV16	1.93 (49.1)

In order to measure overall length in the coupled position, the insertion depth should be deducted from any overall stem and body combination length.

Dimensions

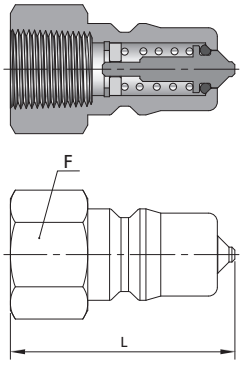
Stems

Female NPT



NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions L in. (mm)	Dimensions F in.
1/8	-QV2-FNS2-D	0.2	1.16 (29.5)	9/16
1/4	-QV4-FNS4-D	0.6	1.39 (35.3)	3/4
3/8	-QV6-FNS6-D	1.2	1.50 (38.1)	7/8
1/2	-QV8-FNS8-D	2.6	1.75 (44.5)	1 1/8
3/4	-QV12-FNS12-D	3.3	2.16 (54.9)	1 3/8
1	-QV16-FNS16-D	6.2	2.91 (73.9)	1 5/8

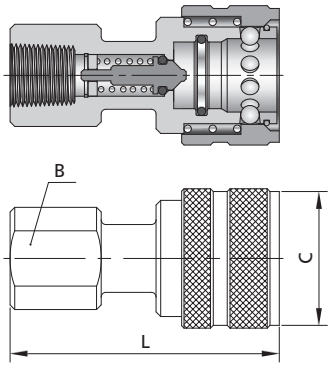
Female BSPT



BSPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions L in. (mm)	Dimensions F in.
1/8	-QV2-FRT2-D	0.2	1.16 (29.5)	9/16
1/4	-QV4-FRT4-D	0.6	1.39 (35.3)	3/4
3/8	-QV6-FRT6-D	1.2	1.50 (38.1)	7/8
1/2	-QV8-FRT8-D	2.6	1.75 (44.5)	1 1/8
3/4	-QV12-FRT12-D	3.3	2.16 (54.9)	1 3/8
1	-QV16-FRT16-D	6.2	2.91 (73.9)	1 5/8

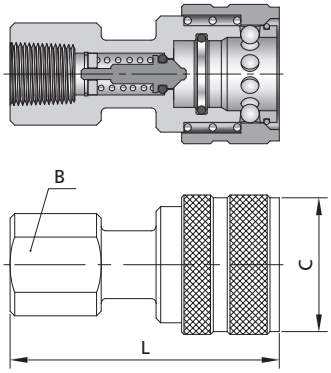
Bodies

Female NPT



NPT Size in.	Basic Ordering Number	Dimensions L in. (mm)	Dimensions B in. (mm)	Dimensions C in. (mm)
1/8	-QV2-FNS2-B	1.90 (48.3)	0.63 (15.9)	0.96 (24.4)
1/4	-QV4-FNS4-B	2.26 (57.4)	0.81 (20.6)	1.14 (29.0)
3/8	-QV6-FNS6-B	2.49 (63.2)	0.88 (22.2)	1.40 (35.6)
1/2	-QV8-FNS8-B	2.87 (72.9)	1.13 (28.6)	1.77 (45.0)
3/4	-QV12-FNS12-B	3.56 (90.4)	1.31 (33.3)	2.14 (54.4)
1	-QV16-FNS16-B	4.18 (106.2)	1.63 (41.3)	2.52 (64.0)

Female BSPT



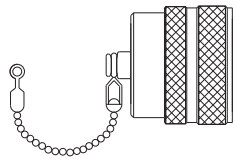
BSPT Size in.	Basic Ordering Number	Dimensions L in. (mm)	Dimensions B in. (mm)	Dimensions C in. (mm)
1/8	-QV2-FRT2-B	1.90 (48.3)	0.69 (17.5)	0.96 (24.4)
1/4	-QV4-FRT4-B	2.26 (57.4)	0.81 (20.6)	1.14 (29.0)
3/8	-QV6-FRT6-B	2.49 (63.2)	0.88 (22.2)	1.40 (35.6)
1/2	-QV8-FRT8-B	2.87 (72.9)	1.13 (28.6)	1.77 (45.0)
3/4	-QV12-FRT12-B	3.56 (90.4)	1.31 (33.3)	2.14 (54.4)
1	-QV16-FRT16-B	4.18 (106.2)	1.63 (41.3)	2.52 (64.0)

Options, QV Series

Stem and Body Protector

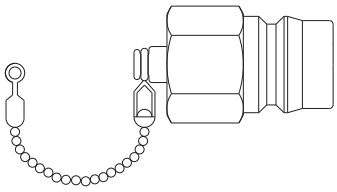
Stem and body protector can prevent the stem and the body from being damaged and polluted when uncoupling.

Stem Protector



Series	Basic Ordering Number
QV2	-QV2-SP
QV4	-QV4-SP
QV6	-QV6-SP
QV8	-QV8-SP
QV12	-QV12-SP
QV16	-QV16-SP

Body Protector



Series	Basic Ordering Number
QV2	-QV2-BP
QV4	-QV4-BP
QV6	-QV6-BP
QV8	-QV8-BP
QV12	-QV12-BP
QV16	-QV16-BP

◎ Ordering number description of the protector: material designator (SS for stainless steel or B for brass) + basic ordering number. Example: **SS-QV4-BP**

◎ The protector is not a pressure sustaining device. To order pressure sustaining device, please contact FITOK Group or our authorized distributors.

Ordering Number Description

SS - QV8 - FNS8 - D - B - CE

Material	
SS	316SS
B	Brass

Series	
QV2	1/8" (3.2 mm)
QV4	1/4" (6.4 mm)
QV8	1/2" (12.7 mm)
QV12	3/4" (19.0 mm)
QV16	1" (25.4 mm)

End Connection Type	
FNS	Female NPT
FRT	Female BSPT

End Connection Size	
2	1/8"
4	1/4"
6	3/8"
8	1/2"
12	3/4"
16	1"

Stem or Body	
D	Stem with valve shuts off when uncoupled
B	Body with valve shuts off when uncoupled

O-ring Material	
	Fluorocarbon FKM
B	Buna N
E	EPDM
N	Neoprene
Z	FFKM

Special Application	
	No
CE	NACE MR0175
SI	SilcoNert® 2000 (Sulfinert®) Coating

Notes: 1. "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.
2. Dimensions are for reference only and are subject to change.
3. Special Application
Wetted metal components SilcoNert® 2000 (Sulfinert®) coated.

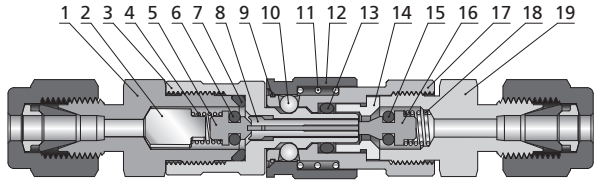
Miniature Quick-Connects

QM Series

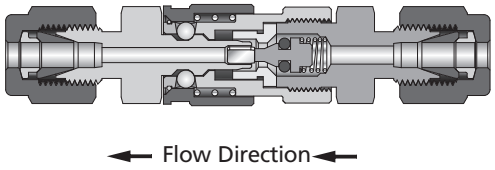
Features

- Working pressure up to: 4000 psig (276 bar)
- Single-end shutoff, double-end shutoff and full-flow model available
- Quick and easy operation

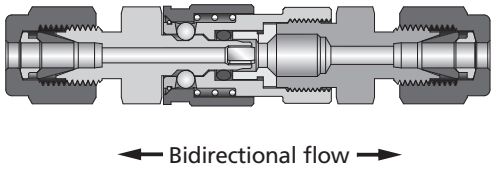
Double-end Shutoff (DESO)



Single-end Shutoff (SESO)



Full-flow Quick-Connects



Standard Materials of Construction

Item.	Component	Stainless Steel	Brass
		Material Grade/ASTM Specification	
1	Stem body	316 SS/A479	Brass C36000/B16
2	Valve block	316 SS/A240	Brass C26000/B36
3	Stem	316 SS/A479	Brass C36000/B16
4	Springs	316 SS/A313	
5	Valve head	316 SS/A479	Brass C36000/B16
6	O-rings	Fluorocarbon FKM	Buna N
7			
8	Stem insert	316 SS/A240	Brass C26000/B36
9	Snap rings	316 SS/A313	
10	Steel ball	440C/A276	
11	Springs	316 SS/A313	
12	Body sleeve	316L SS/A479	Brass C36000/B16
13	O-rings	Fluorocarbon FKM	Buna N
14	Insert	316 SS/A479	Brass C36000/B16
15	O-rings	Fluorocarbon FKM	Buna N
16	Valve head	316 SS/A479	Brass C36000/B16
17	housing	316 SS/A479	Brass C36000/B16
18	Springs	316 SS/A313	
19	Body	316 SS/A479	Brass C36000/B16
20	Lubricants	Silicone-based	

Pressure -Temperature Ratings

Pressure rating restrictions apply when coupling and uncoupling (DESO only). Refer to the table below for specific data.

Material	316 SS			Brass
O-Ring Material	Fluorocarbon FKM	Ethylene propylene	Perfluorocarbon FFKM	Buna N
Temperature °F (°C)	Pressure Rating, psig (bar)			
Coupled				
-50 (-45)	—	4000 (275)	—	—
0 (-17)	4000 (275)	4000 (275)	4000 (275)	2000 (137)
10 (-12)	4000 (275)	4000 (275)	4000 (275)	2000 (137)
40 (4)	4000 (275)	4000 (275)	4000 (275)	2000 (137)
100 (37)	4000 (275)	4000 (275)	4000 (275)	2000 (137)
150 (65)	3500 (241)	3500 (241)	3500 (241)	1300 (89.5)
200 (93)	2800 (192)	2800 (192)	2800 (192)	700 (48)
250 (121)	2100 (144)	2100 (144)	2100 (144)	200 (13.7)
300 (148)	1400 (96.4)	1400 (96.4)	1400 (96.4)	—
350 (176)	800 (55.1)	—	800 (55.1)	—
400 (204)	200 (13.7)	—	200 (13.7)	—
500 (260)	—	—	150 (10.3)	—
Uncoupled and When Coupling and Uncoupling				
70 (20)	100 (6.8)			

Insertion Depth

In order to measure overall length in the coupled position, insertion depth should be deducted from any overall stem and body combination length.

Depth in. (mm)	
SESO	DESO
0.47 (11.9)	0.53 (13.5)

Spillage and Air Inclusion

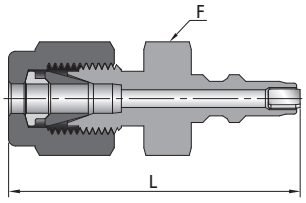
$0.1 cm^3$
(DESO only)

FITOK

Dimensions

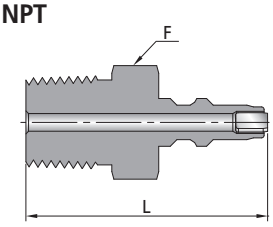
SESO Stems

Tube Fitting



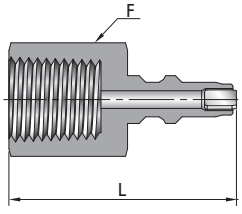
Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			L	F
			in. (mm)	in.
1/16	QM-FL1-S	0.06	1.18 (30.0)	7/16
1/8	QM-FL2-S		1.29 (32.8)	

Male NPT



NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			L	F
			in. (mm)	in.
1/16	QM-NS1-S	0.06	1.03 (26.2)	7/16
1/8	QM-NS2-S			

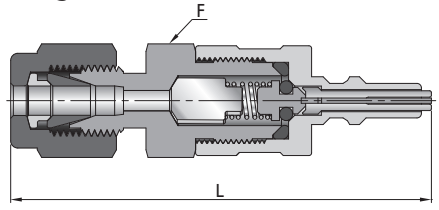
Female NPT



NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			L	F
			in. (mm)	in.
1/16	QM-FNS1-S	0.06	1.03 (26.2)	7/16
1/8	QM-FNS2-S		1.18 (30.0)	9/16

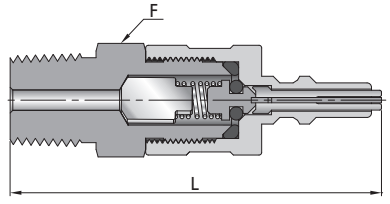
DESO Stems

Tube Fitting



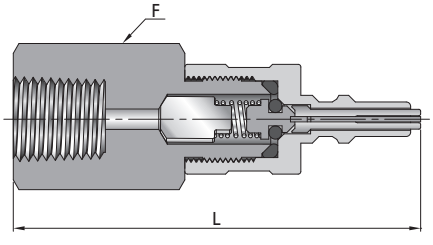
Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			L	F
			in. (mm)	in.
1/16	QM-FL1-D	0.05	1.76 (44.7)	7/16
1/8	QM-FL2-D		1.87 (47.5)	

Male NPT



NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			L	F
			in. (mm)	in.
1/16	QM-NS1-D	0.05	1.61 (40.9)	7/16
1/8	QM-NS2-D			

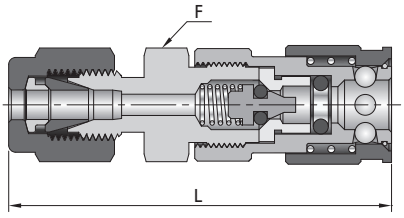
Female NPT



NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			L	F
			in. (mm)	in.
1/16	QM-FNS1-D	0.05	1.61 (40.9)	7/16
1/8	QM-FNS2-D		1.81 (46.0)	9/16

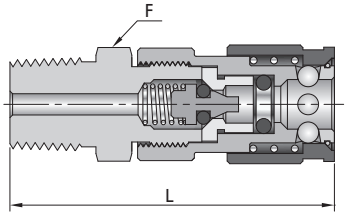
Bodies

Tube Fitting



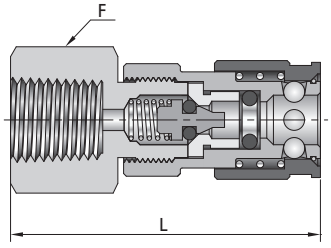
Fitting Size in.	Basic Ordering Number	Dimensions	
		L	F
		in. (mm)	in.
1/16	QM-FL1-B	1.50 (38.1)	7/16
1/8	QM-FL2-B	1.70 (43.2)	

Male NPT



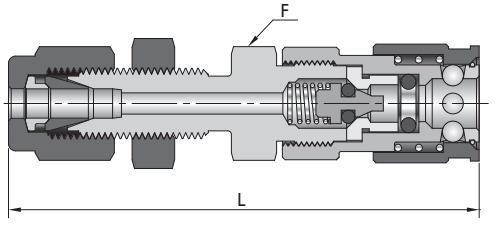
NPT Size in.	Basic Ordering Number	Dimensions	
		L	F
		in. (mm)	in.
1/16	QM-NS1-B	1.42 (36.1)	7/16
1/8	QM-NS2-B	1.44 (36.6)	

Female NPT



NPT Size in.	Basic Ordering Number	Dimensions	
		L	F
		in. (mm)	in.
1/16	QM-FNS1-B	1.43 (36.3)	7/16
1/8	QM-FNS2-B	1.62 (41.1)	9/16

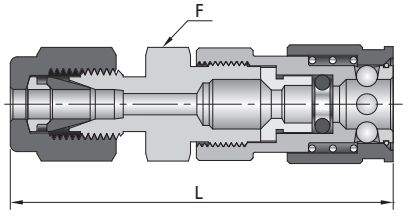
Bulkhead Tube Fitting



Fitting Size in.	Basic Ordering Number	Dimensions		Min. Panel Hole in. (mm)	Max.Panel Thickness in. (mm)
		L	F		
		in. (mm)	in.		
1/8	QM-BFL2-B	2.09 (53.1)	7/16	0.33 (8.3)	0.25 (6.4)

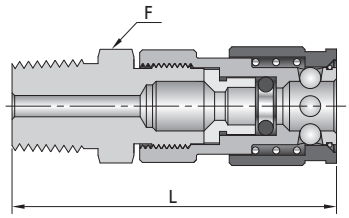
Full-flow Bodies

Tube Fitting



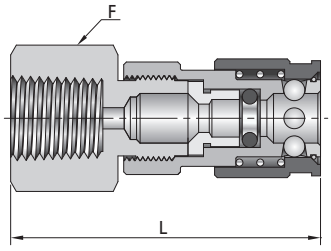
Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			L	F
			in. (mm)	in.
1/16	QM-FL1-F	0.06	1.50 (38.1)	7/16
1/8	QM-FL2-F		1.70 (43.2)	

Male NPT



Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			L	F
			in. (mm)	in.
1/16	QM-NS1-F	0.06	1.42 (36.1)	7/16
1/8	QM-NS2-F		1.44 (36.6)	

Female NPT



NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			L	F
			in. (mm)	in.
1/16	QM-FNS1-F	0.06	1.43 (36.3)	7/16
1/8	QM-FNS2-F		1.62 (41.1)	9/16

Ordering Number Description

SS - QM - FNS2 - D - B - CE

Material	
SS	316 SS
B	Brass

Series	
QM	

End Connection Type	
FNS	Female NPT
NS	Male NPT
FRT	Female BSPT
RT	Male BSPT
FL	Fractional Tube Fitting
ML	Metric Tube fitting
BFL	Fractional Bulkhead Tube Fitting

End Connection Size	
1	1/16"
2	1/8"

Stem or Body	
S	Stem without valve remains open when uncoupled
D	Stem with valve shuts off when uncoupled
B	Body with valve shuts off when uncoupled
F	Full-flow body

O-ring Material	
	Fluorocarbon FKM
B	Buna N
E	EPDM
N	Neoprene
Z	FFKM

Special Application	
	NO
CE	NACE MR 0175

Notes: 1. "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.
2. Dimensions are for reference only and are subject to change.

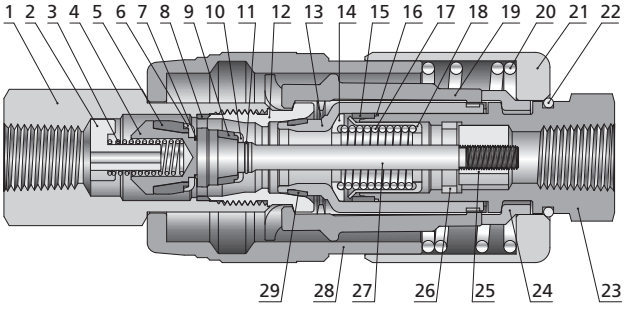
PTFE-Sealed Quick-Connects

QTM Series

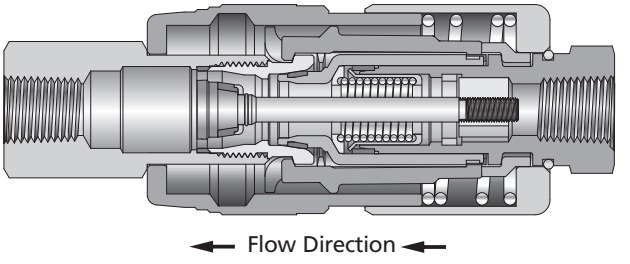
Features

- Working pressure up to: 4500 psig (310 bar)
- Special design to reduce air inclusion and spillage
- PTFE sealing to enable applications for diverse media types
- Push-to-connect design to enable quick and easy operation
- Locking dog mechanism with large contact area retains stem
- Keyed option available

Double-end Shutoff (DESO)



Single-end Shutoff (SESO)



Pressure - Temperature Ratings

Temperature °F (°C)	316 SS			Alloy 400
	QTM2	QTM4	QTM8	QTM2
	Pressure Rating, psig (bar)			
Coupled				
0~120 (-17~48)	4500 (310)	3200 (220)		3200 (220)
120~212 (48~100)	800 (55.1)			
Uncoupled				
0~120 (-17~48)	1000 (68.9)			
120~212 (48~100)	800 (55.1)			
When Coupling and Uncoupling				
70 (20)	250 (17.2)	100 (6.8)	50 (3.4)	250 (17.2)

Note: Pressure ratings may be restricted by end connections.

Standard Materials of Construction

Item	Component	Material	
1	Stem	316 SS/A479	Alloy 400/B164
2	Spring seat	316 SS/A479	Alloy 400/B164
3	Spring	316 SS/313	Alloy X-750/ AMS 5699
4	DESO valve	316 SS/A479	Alloy 400/B164
5	DESO seal ring	PTFE/D1710	PTFE/D1710
6	DESO stem fin	316 SS/A479	Alloy 400/B164
7	Roundwire snap ring for shaft	316 SS/A313	Alloy X-750/ AMS 5699
8	Adapter seal gasket	PTFE/D1710	PTFE/D1710
9	Body valve seal ring	PTFE/D1710	PTFE/D1710
10	Body fin	316 SS/A479	Alloy 400/B164
11	Roundwire snap ring for shaft	316 SS/A313	Alloy X-750/ AMS 5699
12	Stem adapter	316 SS/A479	Alloy 400/B164
13	Body sliding sleeve	316 SS/A479	Alloy 400/B164
14	Spring pad	316 SS/A479	Alloy 400/B164
15	Body packing ring	PTFE/D1710	PTFE/D1710
16	Packing backup ring	PTFE/D1710	PTFE/D1710
17	Spring	Elgiloy Alloy	Elgiloy Alloy
18	Body insert	316 SS/A479	Alloy 400/B164
19	Sliding hooks with spring ring	316 SS/A479	Alloy 400/B164
20	Spring	316 SS/A313	Alloy X-750/ AMS 5699
21	Body valve cap 2	316 SS/A479	Alloy 400/B164
22	Roundwire snap rings for shaft	316 SS/A313	Alloy X-750/ AMS 5699
23	Body	Xylan-coated 316 SS/A479	Xylan-coated alloy 400/B164
24	Locking block	316 SS/A479	Alloy 400/B164
25	Threaded connecting ring	316 SS/A479	Alloy 400/B164
26	Retaining ring	316 SS/A313	Alloy X-750/ AMS 5699
27	Body bolt	316 SS/A479	Alloy 400/B164
28	Body valve cap 1	316 SS/A479	Alloy 400/B164
29	Body valve seal ring	PTFE/D1710	PTFE/D1710
30	Lubricants	PTFE-based	PTFE-based

Spillage and Air Inclusion

DESO only

Series	Spillage cm^3	Air Inclusion cm^3
QTM2	0.1	0.1
QTM4	0.2	0.4
QTM8	1.0	2.0

Insertion Depth

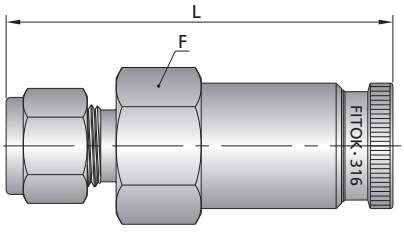
Series	Depth in. (mm)
QTM2	1.26 (32.1)
QTM4	0.95 (24.0)
QTM8	1.15 (29.1)

In order to measure overall length in the coupled position, insertion depth should be deducted from any overall stem and body combination length.

Dimensions

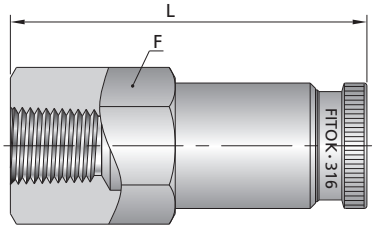
DESO Stems

Tube Fitting



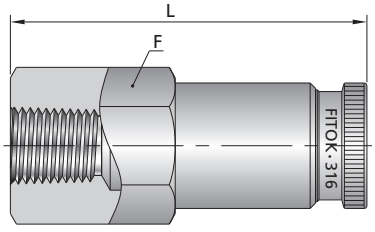
Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions L in. (mm)	Dimensions F in.
1/4	-QTM2-FL4-D	0.6	2.02 (51.3)	5/8
1/4	-QTM4-FL4-D	0.8	2.61 (66.3)	15/16
3/8	-QTM2-FL6-D	0.8	2.08 (52.8)	11/16
3/8	-QTM4-FL6-D	1.6	2.67 (67.8)	15/16
1/2	-QTM8-FL8-D	3.1	3.06 (77.7)	1 5/16
3/4	-QTM8-FL12-D	6.5	3.06 (77.7)	1 5/16
1	-QTM8-FL16-D	7.8	3.27 (83.1)	1 3/8
mm	——	——	mm (in.)	mm
6	-QTM2-ML6-D	0.6	51.3 (2.02)	16
6	-QTM4-ML6-D	0.8	66.3 (2.61)	24
8	-QTM2-ML8-D	0.8	53.1 (2.09)	11/16 in.
10	-QTM4-ML10-D	1.6	68.1 (2.68)	24
12	-QTM8-ML12-D	3.1	77.7 (3.06)	35

Female NPT



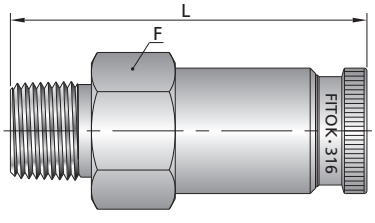
NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions L in. (mm)	Dimensions F in.
1/8	-QTM2-FNS2-D	0.7	1.73 (43.9)	5/8
1/4	-QTM2-FNS4-D	0.7	2.04 (51.8)	3/4
1/4	-QTM4-FNS4-D	1.4	2.36 (59.9)	15/16
3/8	-QTM2-FNS6-D	0.6	2.14 (54.4)	7/8
3/8	-QTM4-FNS6-D	1.7	2.48 (63.0)	15/16
1/2	-QTM8-FNS8-D	4.4	2.66 (67.6)	1 5/16
3/4	-QTM8-FNS12-D	7.8	2.66 (67.6)	1 5/16
1	-QTM8-FNS16-D	—	3.17 (80.5)	1 5/8

Female BSPT



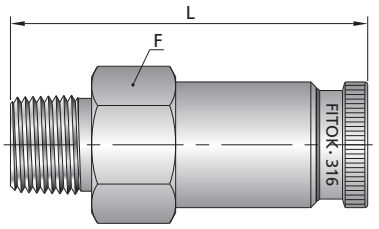
BSPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions L in. (mm)	Dimensions F in.
1/8	-QTM2-FRT2-D	0.7	1.73 (43.9)	5/8
1/4	-QTM2-FRT4-D	0.7	2.04 (51.8)	3/4
1/4	-QTM4-FRT4-D	1.4	2.36 (59.9)	15/16
3/8	-QTM2-FRT6-D	0.6	2.14 (54.4)	7/8
3/8	-QTM4-FRT6-D	1.7	2.48 (63.0)	15/16
1/2	-QTM8-FRT8-D	4.4	2.66 (67.6)	1 5/16
3/4	-QTM8-FRT12-D	7.8	2.66 (67.6)	1 5/16
1	-QTM8-FRT16-D	—	3.17 (80.5)	1 5/8

Male NPT



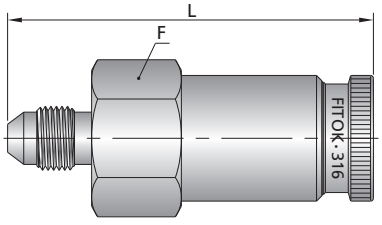
NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions L in. (mm)	Dimensions F in.
1/4	-QTM2-NS4-D	0.2	1.91 (48.5)	5/8
1/4	-QTM4-NS4-D	1.4	2.46 (62.5)	15/16
3/8	-QTM2-NS6-D	0.6	2.04 (51.8)	3/4
3/8	-QTM4-NS6-D	1.7	2.46 (62.5)	15/16
1/2	-QTM8-NS8-D	4.4	2.78 (70.6)	1 5/16
3/4	-QTM8-NS12-D	7.8	2.78 (70.6)	1 5/16
1	-QTM8-NS16-D	—	3.03 (77.0)	1 3/8

Male BSPT



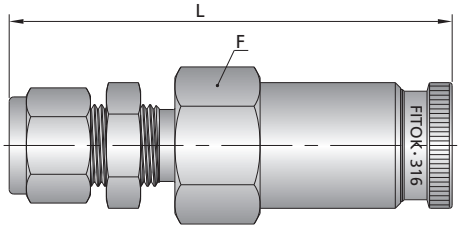
BSPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			L	F
			in. (mm)	in.
1/4	-QTM2-RT4-D	0.2	1.91 (48.5)	5/8
1/4	-QTM4-RT4-D	1.4	2.46 (62.5)	15/16
3/8	-QTM2-RT6-D	0.6	2.04 (51.8)	3/4
3/8	-QTM4-RT6-D	1.7	2.46 (62.5)	15/16
1/2	-QTM8-RT8-D	4.4	2.78 (70.6)	1 5/16
3/4	-QTM8-RT12-D	7.8	2.78 (70.6)	1 5/16
1	-QTM8-RT16-D	—	3.03 (77.0)	1 3/8

Male JIC (AN) 37° Flare



Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			L	F
			in. (mm)	in.
1/4	-QTM4-AN4-D	—	2.52 (64.0)	15/16
1/2	-QTM8-AN8-D	2.7	2.46 (70.6)	1 5/16

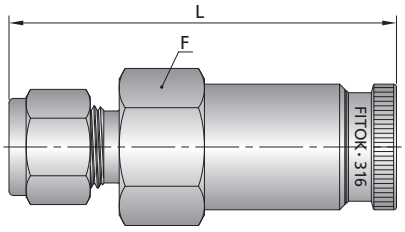
Bulkhead Tube Fitting



Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions		Min. Panel Orifice	Max. Panel Thickness
			L	F		
			in. (mm)	in.	in. (mm)	in. (mm)
1/4	-QTM4-BFL4-D	0.8	3.05 (77.5)	15/16	0.46 (11.7)	0.15 (3.8)
3/8	-QTM4-BFL6-D	1.6	3.05 (77.5)	15/16	0.58 (14.7)	0.15 (3.8)
1/2	-QTM8-BFL8-D	3.1	3.54 (89.9)	1 5/16	0.77 (19.6)	0.19 (4.8)
mm	——	——	mm (in.)	mm	mm (in.)	mm (in.)
6	-QTM4-BML6-D	0.8	77.5 (3.05)	24	11.7 (0.46)	3.8 (0.15)
10	-QTM4-BML10-D	1.6	77.7 (3.06)	24	16.8 (0.66)	3.8 (0.15)
12	-QTM8-BML12-D	3.1	89.9 (3.54)	35	19.6 (0.77)	4.8 (0.19)

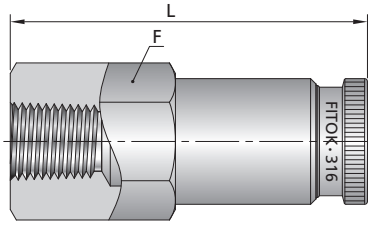
SESO Stem

Tube Fitting



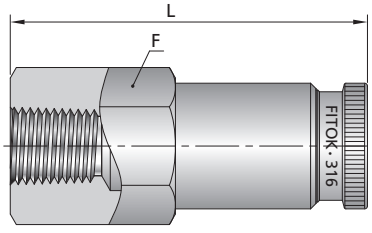
Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions L in. (mm)	Dimensions F in.
1/4	-QTM2-FL4-S	0.7	2.02 (51.3)	5/8
1/4	-QTM4-FL4-S	0.9	2.61 (66.3)	15/16
3/8	-QTM2-FL6-S	0.9	2.08 (52.8)	11/16
3/8	-QTM4-FL6-S	1.7	2.67 (67.8)	15/16
1/2	-QTM8-FL8-S	4.2	3.06 (77.7)	1 5/16
3/4	-QTM8-FL12-S	6.7	3.06 (77.7)	1 5/16
1	-QTM8-FL16-S	9.0	3.27 (83.1)	1 3/8
mm	——	——	mm (in.)	mm
6	-QTM2-ML6-S	0.7	51.3 (2.02)	16
6	-QTM4-ML6-S	0.9	66.3 (2.61)	24
8	-QTM2-ML8-S	0.9	53.1 (2.09)	11/16 in.
10	-QTM4-ML10-S	1.7	68.1 (2.68)	24
12	-QTM8-ML12-S	4.2	77.7 (3.06)	35

Female NPT



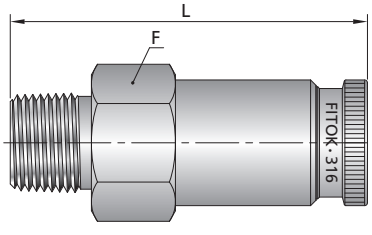
NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions L in. (mm)	Dimensions F in.
1/8	-QTM2-FNS2-S	0.7	1.73 (43.9)	5/8
1/4	-QTM2-FNS4-S	0.7	2.04 (51.8)	3/4
1/4	-QTM4-FNS4-S	1.4	2.36 (59.9)	15/16
3/8	-QTM2-FNS6-S	0.7	2.14 (54.4)	7/8
3/8	-QTM4-FNS6-S	1.8	2.48 (63.0)	15/16
1/2	-QTM8-FNS8-S	5.1	2.66 (67.6)	1 5/16
3/4	-QTM8-FNS12-S	8.5	2.66 (67.6)	1 5/16
1	-QTM8-FNS16-S	—	3.17 (80.5)	1 5/8

Female BSPT



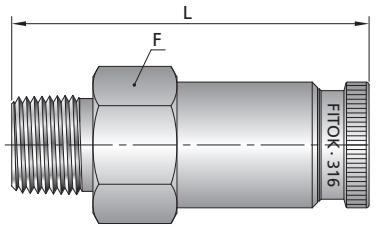
BSPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions L in. (mm)	Dimensions F in.
1/8	-QTM2-FRT2-S	0.7	1.73 (43.9)	5/8
1/4	-QTM2-FRT4-S	0.7	2.04 (51.8)	3/4
1/4	-QTM4-FRT4-S	1.4	2.36 (59.9)	15/16
3/8	-QTM2-FRT6-S	0.7	2.14 (54.4)	7/8
3/8	-QTM4-FRT6-S	1.8	2.48 (63.0)	15/16
1/2	-QTM8-FRT8-S	5.1	2.66 (67.6)	1 5/16
3/4	-QTM8-FRT12-S	8.5	2.66 (67.6)	1 5/16
1	-QTM8-FRT16-S	—	3.17 (80.5)	1 5/8

Male NPT



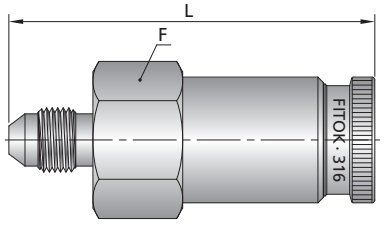
NPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions L in. (mm)	Dimensions F in.
1/4	-QTM2-NS4-S	0.2	1.91 (48.5)	5/8
1/4	-QTM4-NS4-S	1.4	2.46 (62.5)	15/16
3/8	-QTM2-NS6-S	0.7	2.04 (51.8)	3/4
3/8	-QTM4-NS6-S	1.8	2.46 (62.5)	15/16
1/2	-QTM8-NS8-S	5.1	2.78 (70.6)	1 5/16
3/4	-QTM8-NS12-S	8.5	2.78 (70.6)	1 5/16
1	-QTM8-NS16-S	—	3.03 (77.0)	1 3/8

Male BSPT



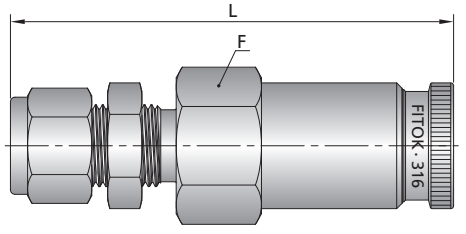
BSPT Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			L	F
			in. (mm)	in.
1/4	-QTM2-RT4-S	0.2	1.91 (48.5)	5/8
1/4	-QTM4-RT4-S	1.4	2.46 (62.5)	15/16
3/8	-QTM2-RT6-S	0.7	2.04 (51.8)	3/4
3/8	-QTM4-RT6-S	1.8	2.46 (62.5)	15/16
1/2	-QTM8-RT8-S	5.1	2.78 (70.6)	1 5/16
3/4	-QTM8-RT12-S	8.5	2.78 (70.6)	1 5/16
1	-QTM8-RT16-S	—	3.03 (77.0)	1 3/8

Male JIC(AN) 37° Flare



Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions	
			L	F
			in. (mm)	in.
1/4	-QTM4-AN4-S	—	2.52 (64.0)	15/16
1/2	-QTM8-AN8-S	4.2	2.46 (70.6)	1 5/16

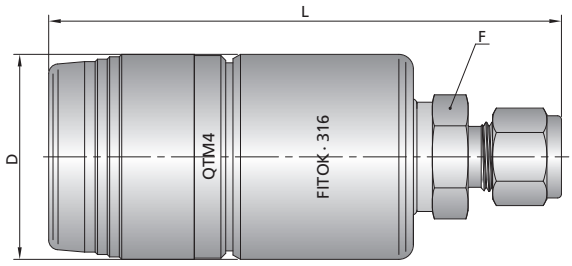
Bulkhead Tube Fitting



Fitting Size in.	Basic Ordering Number	Flow Coefficient (Cv)	Dimensions		Min. Panel Orifice	Max. Panel Thickness
			L	F		
			in. (mm)	in.	in. (mm)	in. (mm)
1/4	-QTM4-BFL4-S	0.9	3.05 (77.5)	15/16	0.46 (11.7)	0.15 (3.8)
3/8	-QTM4-BFL6-S	1.7	3.05 (77.5)	15/16	0.58 (14.7)	0.15 (3.8)
1/2	-QTM8-BFL8-S	4.2	3.54 (89.9)	1 5/16	0.77 (19.6)	0.19 (4.8)
mm	——	——	mm (in.)	mm	mm (in.)	mm (in.)
6	-QTM4-BML6-S	0.9	77.5 (3.05)	24	11.7 (0.46)	3.8 (0.15)
10	-QTM4-BML10-S	1.7	77.7 (3.06)	24	16.8 (0.66)	3.8 (0.15)
12	-QTM8-BML12-S	4.2	89.9 (3.54)	35	19.6 (0.77)	4.8 (0.19)

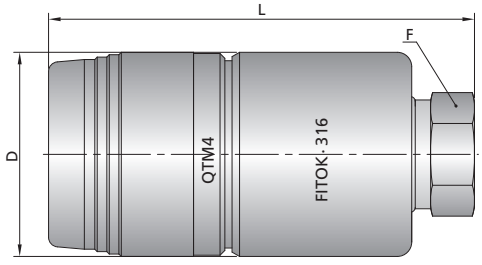
Bodies

Tube Fitting



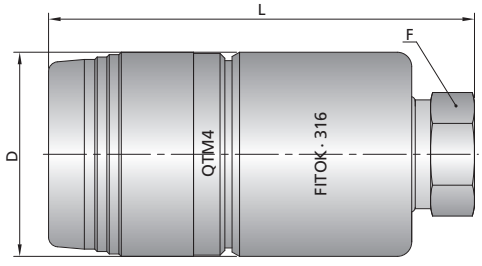
Fitting Size in.	Basic Ordering Number	Dimensions		
		L	D	F
		in. (mm)	in. (mm)	in.
1/4	-QTM2-FL4-B	3.16 (80.3)	1.12 (28.4)	9/16
1/4	-QTM4-FL4-B	4.17 (106)	1.68 (42.7)	7/8
3/8	-QTM2-FL6-B	3.25 (82.6)	1.12 (28.4)	3/4
3/8	-QTM4-FL6-B	4.17 (106)	1.68 (42.7)	7/8
1/2	-QTM8-FL8-B	4.30 (109)	2.00 (50.8)	1 1/8
3/4	-QTM8-FL12-B	4.30 (109)	2.00 (50.8)	1 1/8
1	-QTM8-FL16-B	4.58 (116)	2.00 (50.8)	1 3/8
mm	——	——	mm (in.)	mm
6	-QTM2-ML6-B	80.3 (3.16)	28.4 (1.12)	15
6	-QTM4-ML6-B	106 (4.17)	42.7 (1.68)	24
8	-QTM2-ML8-B	80.3 (3.16)	28.4 (1.12)	15
10	-QTM4-ML10-B	106 (4.17)	42.7 (1.68)	24
12	-QTM8-ML12-B	109 (4.30)	50.8 (2.00)	30

Female NPT



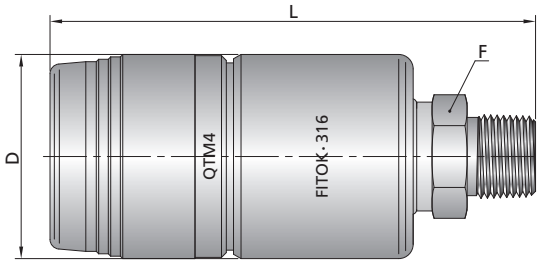
NPT Size in.	Basic Ordering Number	Dimensions		
		L	D	F
		in. (mm)	in. (mm)	in.
1/8	-QTM2-FNS2-B	2.60 (66.0)	1.12 (28.4)	9/16
1/4	-QTM2-FNS4-B	2.99 (75.9)	1.12 (28.4)	3/4
1/4	-QTM4-FNS4-B	3.35 (85.1)	1.68 (42.7)	7/8
3/8	-QTM2-FNS6-B	3.04 (77.2)	1.12 (28.4)	7/8
3/8	-QTM4-FNS6-B	3.35 (85.1)	1.68 (42.7)	7/8
1/2	-QTM8-FNS8-B	3.53 (89.7)	2.00 (50.8)	1 1/8
3/4	-QTM8-FNS12-B	4.02 (102)	2.00(50.8)	1 5/16
1	-QTM8-FNS16-B	4.40 (112)	2.00 (50.8)	1 5/8

Female BSPT



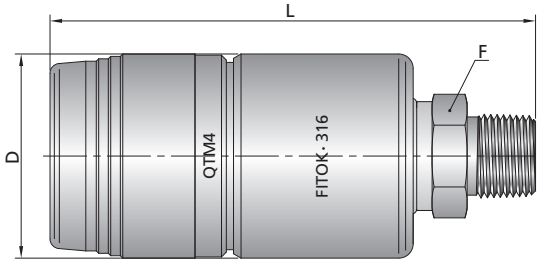
BSPT Size in.	Basic Ordering Number	Dimensions		
		L	D	F
		in. (mm)	in. (mm)	in.
1/8	-QTM2-FRT2-B	2.60 (66.0)	1.12 (28.4)	9/16
1/4	-QTM2-FRT4-B	2.99 (75.9)	1.12 (28.4)	3/4
1/4	-QTM4-FRT4-B	3.35 (85.1)	1.68 (42.7)	7/8
3/8	-QTM2-FRT6-B	3.04 (77.2)	1.12 (28.4)	7/8
3/8	-QTM4-FRT6-B	3.35 (85.1)	1.68 (42.7)	7/8
1/2	-QTM8-FRT8-B	3.53 (89.7)	2.00 (50.8)	1 1/8
3/4	-QTM8-FRT12-B	4.02 (102)	2.00 (50.8)	1 5/16
1	-QTM8-FRT16-B	4.40 (112)	2.00 (50.8)	1 5/8

Male NPT



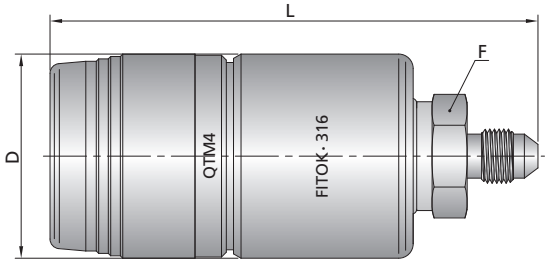
NPT Size in.	Basic Ordering Number	Dimensions		
		L	D	F
		in. (mm)	in. (mm)	in.
1/4	-QTM2-NS4-B	3.02 (76.7)	1.12 (28.4)	9/16
1/4	-QTM4-NS4-B	3.89 (98.8)	1.68 (42.7)	7/8
3/8	-QTM2-NS6-B	3.07 (78.0)	1.12 (28.4)	3/4
3/8	-QTM4-NS6-B	3.97 (100.8)	1.68 (42.7)	7/8
1/2	-QTM8-NS8-B	4.20 (107)	2.00 (50.8)	1 1/8
3/4	-QTM8-NS12-B	4.19 (106)	2.00 (50.8)	1 1/8
1	-QTM8-NS16-B	4.48 (114)	2.00 (50.8)	1 3/8

Male BSPT



BSPT Size in.	Basic Ordering Number	Dimensions		
		L	D	F
		in. (mm)	in. (mm)	in.
1/4	-QTM2-RT4-B	3.02 (76.7)	1.12 (28.4)	9/16
1/4	-QTM4-RT4-B	3.89 (98.8)	1.68 (42.7)	7/8
3/8	-QTM2-RT6-B	3.07 (78.0)	1.12 (28.4)	3/4
3/8	-QTM4-RT6-B	3.97 (100.8)	1.68 (42.7)	7/8
1/2	-QTM8-RT8-B	4.20 (107)	2.00 (50.8)	1 1/8
3/4	-QTM8-RT12-B	4.19 (106)	2.00 (50.8)	1 1/8
1	-QTM8-RT16-B	4.48 (114)	2.00 (50.8)	1 3/8

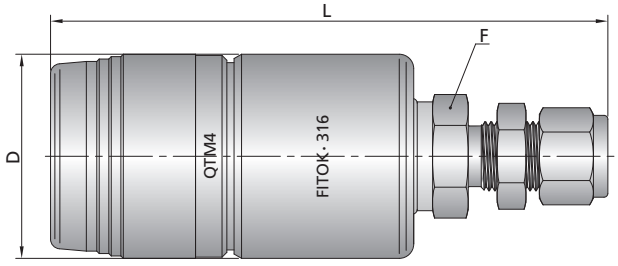
Male JIC (AN) 37° Flare

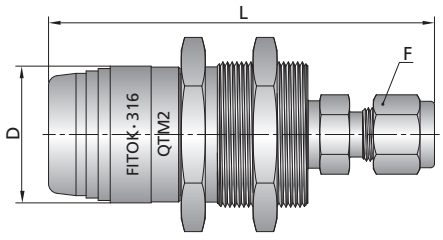


Fitting Size in.	Basic Ordering Number	Dimensions		
		L	D	F
		in. (mm)	in. (mm)	in.
1/4	-QTM4-AN4-B	3.89 (98.8)	1.68 (42.7)	7/8
1/2	-QTM8-AN8-B	4.20 (107)	2.00 (50.8)	1 1/8

Bulkhead Bodies

Bulkhead Tube Fitting

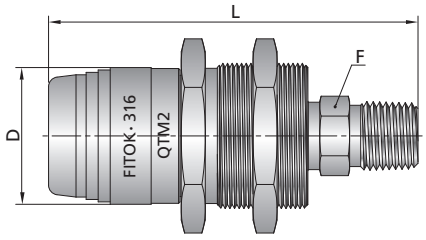




QTM2 Integral Bulkhead

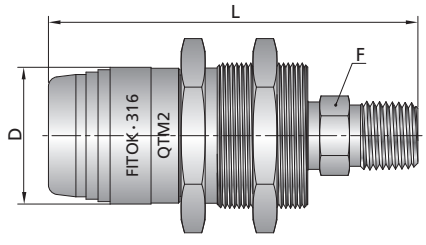
Fitting Size in.	Basic Ordering Number	Dimensions L in. (mm)	Dimensions D in. (mm)	Dimensions F in.	Min. Panel Orifice in. (mm)	Max. Panel Thickness in. (mm)
1/4	-QTM2-BFL4-B	3.16 (80.3)	1.12 (28.4)	9/16	1.20 (30.6)	0.65 (16.5)
1/4	-QTM4-BFL4-B	4.42 (112)	1.68 (42.7)	7/8	0.46 (11.7)	0.15 (3.8)
3/8	-QTM4-BFL6-B	4.51 (115)	1.68 (42.7)	7/8	0.58 (14.7)	0.15 (3.8)
1/2	-QTM8-BFL8-B	4.78 (121)	2.00 (50.8)	1 1/8	0.77 (19.6)	0.19 (4.8)
mm	——	**mm (in.)**	**mm (in.)**	**mm**	**mm (in.)**	**mm (in.)**
6	-QTM2-BML6-B	80.3 (3.16)	28.4 (1.12)	15	30.6 (1.20)	16.5 (0.65)
6	-QTM4-BML6-B	112 (4.42)	42.7 (1.68)	24	11.7 (0.46)	3.8 (0.15)
10	-QTM4-BML10-B	115 (4.52)	42.7 (1.68)	24	16.8 (0.66)	3.8 (0.15)
12	-QTM8-BML12-B	121 (4.77)	50.8 (2.00)	30	19.6 (0.77)	4.8 (0.19)

Bulkhead Male NPT



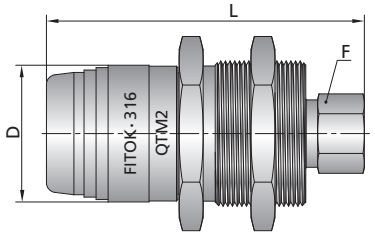
BSPT Size in.	Basic Ordering Number	Dimensions L in. (mm)	Dimensions D in. (mm)	Dimensions F in.	Min. Panel Orifice in. (mm)	Max. Panel Thickness in. (mm)
1/4	-QTM2-BNS4-B	3.02 (76.7)	1.12 (28.4)	9/16	1.20 (30.6)	0.65 (16.5)

Bulkhead Male BSPT



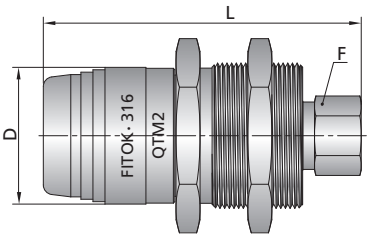
NPT Size in.	Basic Ordering Number	Dimensions L in. (mm)	Dimensions D in. (mm)	Dimensions F in.	Min. Panel Orifice in. (mm)	Max. Panel Thickness in. (mm)
1/4	-QTM2-BRT4-B	3.02 (76.7)	1.12 (28.4)	9/16	1.20 (30.6)	0.65 (16.5)

Bulkhead Female NPT



NPT Size in.	Basic Ordering Number	Dimensions L in. (mm)	Dimensions D in. (mm)	Dimensions F in.	Min. Panel Orifice in. (mm)	Max. Panel Thickness in. (mm)
1/8	-QTM2-BFNS2-B	2.60 (66.0)	1.12 (28.4)	9/16	1.20 (30.6)	0.65 (16.5)
1/4	-QTM2-BFNS4-B	2.96 (75.2)	1.12 (28.4)	3/4	1.20 (30.6)	0.65 (16.5)

Bulkhead Female BSPT



BSPT Size in.	Basic Ordering Number	Dimensions L in. (mm)	Dimensions D in. (mm)	Dimensions F in.	Min. Panel Orifice in. (mm)	Max. Panel Thickness in. (mm)
1/8	-QTM2-BFRT2-B	2.60 (66.0)	1.12 (28.4)	9/16	1.20 (30.6)	0.65 (16.5)
1/4	-QTM2-BFRT4-B	2.96 (75.2)	1.12 (28.4)	3/4	1.20 (30.6)	0.65 (16.5)

Options, QTM Series

Keyed QTM Series

FITOK keyed quick-connects feature foolproof mechanical design to prevent accidental mixing of different working lines in actual working conditions.

Features

◎ Keyed quick-connects will not interchange with any other FITOK keyed quick-connects
◎ If an attempt is made to couple unlike keys, the valve system will not open
◎ Stems and bodies are color coded and numbered for easy identification

QTM Series Key Numbers

QTM2 and QTM4 series quick-connects are available in keys K1 through K8.
QTM8 series quick-connects are available in keys K1 through K4 only (black, orange, green, or yellow).
Each key number and the corresponding color are shown in "Ordering Number Description" below.

Ordering Number Description

SS - QTM4 - FL6 - S - K1

Material	
SS	316 SS
M	Alloy 400

Series
QTM2
QTM4
QTM8

End Connection Type	
FNS	Female NPT
NS	Male NPT
FRT	Female BSPT
RT	Male BSPT
FL	Fractional Tube Fitting
ML	Metric Tube fitting
AN	Male JIC 37° Flare
BFL	Fractional Bulkhead Tube Fitting
BML	Metric Bulkhead Tube Fitting

End Connection Size	
4	1/4"
6	3/8" or 6 mm
8	1/2"or 8 mm
10	5/8"or 10 mm
12	3/4" or 12 mm
16	1"or 16 mm

Stem or Body	
S	Stem without valve remains open when uncoupled
D	Stem with valve shuts off when uncoupled
B	Body with valve shuts off when uncoupled

Key Number and Color	
	None
K1	Black
K2	Orange
K3	Green
K4	Yellow
K5	Blue
K6	White
K7	Purple
K8	Brown

Notes: 1. "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.
2. Dimensions are for reference only and are subject to change.

Flat Face Quick-Connects

QP Series

Introduction

QP series quick-connects enable the quick coupling or uncoupling between various components in a cooling circulation system while minimizing air inclusion and spillage. With a compact design and high flow feature, the QP series quick-connects meet the refrigerants' requirement of rapid circulation and can maintain the optimal sealing capacity and cooling efficiency of the system. Compatible with most fluids such as water glycol, heat transfer oil, cooling water, etc., these quick-connects are widely used in cooling systems in electronics, photovoltaic, information technology, and other industries.

Features

- ◎ Flat head design to reduce air inclusion or spillage during coupling or uncoupling
- ◎ Ball locking design to ensure firm connection and availability for impact and vibrant occasions
- ◎ Unique internal structure design to realize maximum flow capacity
- ◎ Aluminum alloy and stainless steel with specially treated surface optional to provide excellent corrosion resistance
- ◎ Pressure relief valves optional for stems to avoid excessively high circuit pressure and protect the pipeline
- ◎ A variety of sealing ring materials optional to offer good compatibility with most fluids and extensive temperature coverage

Technical Parameters

- ◎ Body Material: Stainless Steel or Aluminum Alloy
- ◎ Working Pressure: 290 psig (20 bar)
- ◎ Working Temperature:
  FKM: -4 °F to 392 °F (-20 °C to 200 °C)
  FFKM: -4 °F to 527 °F (-20 °C to 275 °C)
  NBR: -22 °F to 212 °F (-30 °C to 100 °C)
  EPDM: -40 °F to 300 °F (-40 °C to 148 °C)
  FVMQ: -40 °F to 347 °F (-40 °C to 175 °C)
- ◎ Flow Coefficient (Cv): QP8: 0.9
  QP10: 4.1
  QP12: 5.4

Notes: 1. The above Cv values are for stem-to-body flow and may decline depending on specifications of fittings configured.
2. For coupling and uncoupling under pressure, please contact FITOK Group or our authorized distributors.

Spillage and Air Inclusion

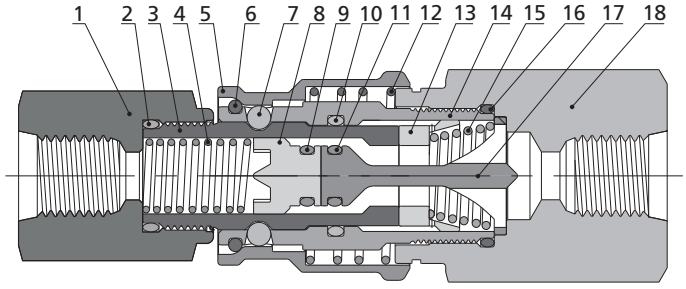
Series	Spillage cm^3	Air Inclusion cm^3
QP8	0.01	0.01
QP10	0.01	0.02
QP12	0.02	0.04

Insertion Depth

Series	Insertion Depth mm (in.)
QP8	26.76 (1.05)
QP10	38.32 (1.51)
QP12	44.45 (1.75)

In order to measure the overall length in the coupled position, the insertion depth should be deducted from any overall stem and body combination length.

Construction Materials



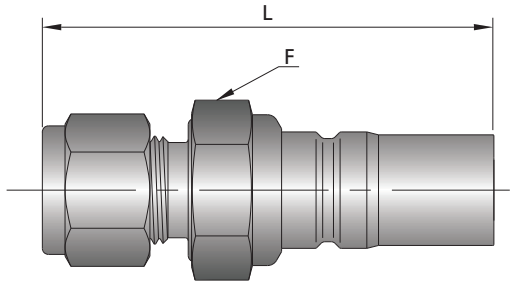
Item	Component	Stainless Steel	Aluminum Alloy
		Material Grade/ASTM Specification	
1	Nuts	316 SS/A479	6061-T6/B211
2	O-rings	FKM/FFKM/NBR/EPDM/FVMQ	
3	Stem body	316 SS/A479	6061-T6/B211
4	Springs	304 SS/A313	
5	Stem sleeve	316 SS/A479	6061-T6/B211
6	Snap rings	304 SS/A313	
7	Balls	304 SS	
8	Stem valve head	316 SS/A479	6061-T6/B211
9	O-rings	FKM/FFKM/NBR/EPDM/FVMQ	
10	O-rings	FKM/FFKM/NBR/EPDM/FVMQ	
11	O-rings	FKM/FFKM/NBR/EPDM/FVMQ	
12	Springs	304 SS/A313	
13	Block	316 SS/A479	6061-T6/B211
14	Housing	316 SS/A479	6061-T6/B211
15	Springs	304 SS/A313	
16	O-rings	FKM/FFKM/NBR/EPDM/FVMQ	
17	Body valve head	316 SS/A479	6061-T6/B211
18	Body	316 SS/A479	6061-T6/B211

Note: For fittings made of other materials, please contact FITOK Group or our authorized distributors.

Dimensions

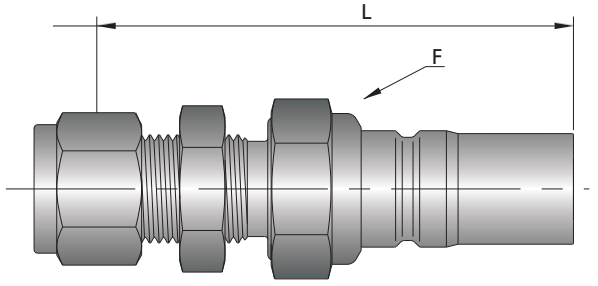
Stems

Tube Fitting



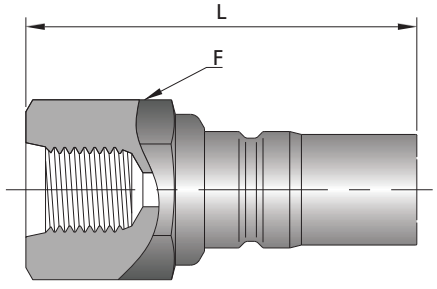
Fitting Size	Basic Ordering Number	L	F
in.		in. (mm)	in.
1/4	-QP8-FL4-D	2.33 (59.1)	13/16
3/8	-QP8-FL6-D	2.39 (60.8)	13/16
1/2	-QP10-FL8-D	3.15 (80)	1-1/8
3/4	-QP12-FL12-D	3.56 (90.4)	1-1/8
mm	—	mm (in.)	mm
6	-QP8-ML6-D	59.5 (2.34)	22
10	-QP8-ML10-D	61 (2.34)	22
12	-QP10-ML12-D	80 (3.15)	30
20	-QP12-ML20-D	92 (3.62)	32

Bulkhead Tube Fitting



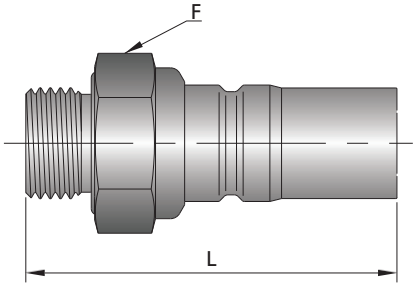
Fitting Size	Basic Ordering Number	L	F
in.		in. (mm)	in.
1/4	-QP8-BFL4-D	2.7 (68.6)	13/16
3/8	-QP8-BFL6-D	2.85 (72.4)	13/16
1/2	-QP10-BFL8-D	3.56 (90.4)	1-1/8
3/4	-QP12-BFL12-D	4.24 (107.7)	1-1/8
mm	—	mm (in.)	mm
6	-QP8-BML6-D	68.2 (2.69)	22
10	-QP8-BML10-D	73.9 (2.91)	22
12	-QP10-BML12-D	89.6 (3.15)	30

SAE Straight Thread Fitting



Fitting Size	Basic Ordering Number	L	F
SAE Thread		in. (mm)	in. (mm)
9/16-18	-QP8-US9-D	2.42 (61.54)	1 (25.4)
3/4-16	-QP8-US12-D	2.59 (65.7)	1.19 (30.2)
1 1/16-12	-QP10-US17-D	3.37 (85.6)	1.63 (41.3)
1 5/16-12	-QP12-US21-D	3.74 (94.9)	1.94 (49.21)

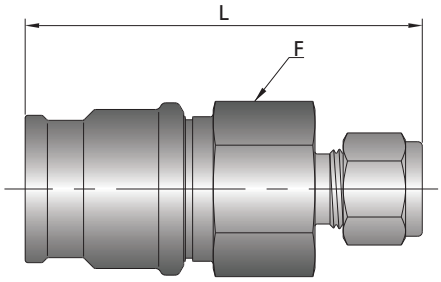
OG Port



Series	Basic Ordering Number	Port Specification	L	F
			mm (in.)	mm (in.)
QP8	-QP8-OG8-D	1/2"	54.5 (2.15)	1.19 (30.2)
QP10	-QP10-OG8-D	1/2"	70.1 (2.76)	1.19 (30.2)
QP12	-QP12-OG8-D	1/2"	79 (3.11)	1.19 (30.2)

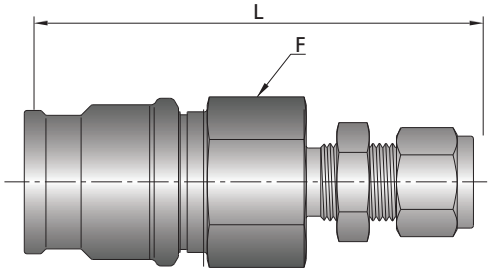
Bodies

Tube Fittings



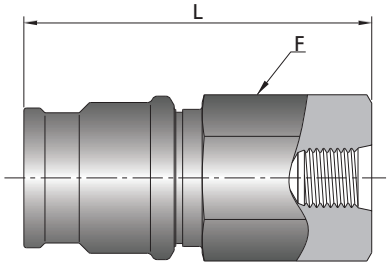
Fitting Size	Basic Ordering Number	L	F
in.		in. (mm)	in.
1/4	-QP8-FL4-B	2.74 (69.6)	1-1/8
3/8	-QP8-FL6-B	2.81 (71.3)	1-1/8
1/2	-QP10-FL8-B	3.81 (96.9)	1-7/16
3/4	-QP12-FL12-B	4.73 (120.1)	1-5/8
mm	—	mm (in.)	mm
6	-QP8-ML6-B	70 (2.76)	30
10	-QP8-ML10-B	71.5 (2.81)	30
12	-QP10-ML12-B	96.9 (3.81)	35
20	-QP12-ML20-B	121.7 (4.79)	41

Bulkhead Tube Fitting



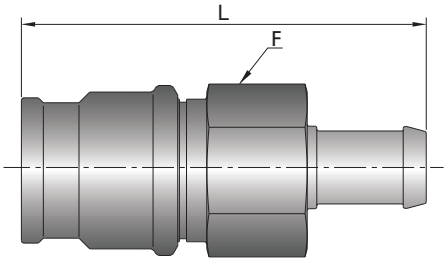
Fitting Size	Basic Ordering Number	L	F
in.		in. (mm)	in. (mm)
1/4	-QP8-BFL4-B	3.11 (79.1)	1-1/8
3/8	-QP8-BFL6-B	3.26 (82.9)	1-1/8
1/2	-QP10-BFL8-B	4.22 (107.29)	1-7/16
3/4	-QP12-BFL12-B	5.41 (137.4)	1-5/8
mm	—	mm (in.)	mm
6	-QP8-BML6-B	78.7 (3.10)	30
10	-QP8-BML10-B	84.4 (3.32)	30
12	-QP10-BML12-B	106.5 (4.19)	35

SAE Straight Thread Fitting



Fitting Size	Basic Ordering Number	L	F
SAE Thread		in. (mm)	in. (mm)
9/16-18	-QP8-US9-B	2.6 (66.14)	1.19 (30.2)
3/4-16	-QP8-US12-B	2.77 (70.3)	1.19 (30.2)
1 1/16-12	-QP10-US17-B	3.92 (99.52)	1.63 (41.3)
1 5/16-12	-QP12-US21-B	4.79 (121.6)	1.94 (49.21)

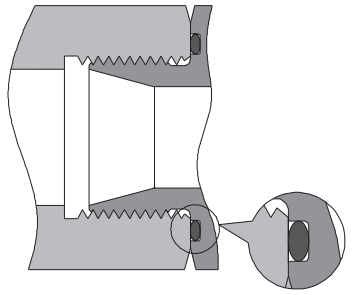
BT Port



Series	Basic Ordering Number	Port Specification	L	F
			mm (in.)	mm (in.)
QP8	-QP8-BT12-B	3/4"	83.1 (3.27)	28.9 (1.13)
QP10	-QP10-BT12-B	3/4"	105 (4.13)	38.1 (1.5)
QP12	-QP12-BT12-B	3/4"	126.7 (4.99)	41.3 (1.63)

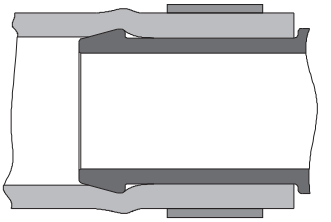
Port Type

1. Male OG Port



◎ Male OG complies with ISO 228-1
◎ O-ring seal

2. BT Port



◎ BT port complies with QC/T 621.3

Ordering Number Description

SS - QP10 – OG8 – D – L – V

Material	
SS	316 SS
AL	Aluminum Alloy

Series
QP8
QP10
QP12

End Connection Type	
FL	Fractional Tube Fitting
ML	Metric Tube Fitting
BFL	Fractional Bulkhead Tube Fitting
BML	Metric Bulkhead Tube Fitting
US	SAE/MS Straight Thread
OG	ISO Male Parallel Thread (For O-ring)
BT	Hose Connector

End Connection Size	
4	1/4"
6	3/8" or 6 mm
8	1/2" or 8 mm
9	9/16-18
10	5/8" or 10 mm
12	3/4" or 12 mm
17	1 1/16-12
19	1 3/16-12
20	20 mm
21	1 5/16-12

Stem or Body	
D	Stem
B	Body

Sealing Material	
	FKM
B	NBR
Z	FFKM
E	EPDM
L	FVMQ

Pressure Relief Valve	
	None
V	Pressure relief valve for stem only

Notes: "Ordering Number Description" is a reference to understanding the combination rules of FITOK product part number.
Not all combinations are available. If you have any questions, please contact FITOK Group or our authorized distributors.

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FK-IC-GF-10-EN-240419