

Q & QF Series Quick Connects

Q Series up to 3000 psig, QF Series up to 6000 psig Stainless Steel, Brass Construction

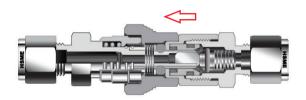
Catalog Number: Q3 Sept. 2015



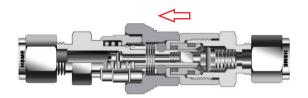
Q Series Quick Connects

Features

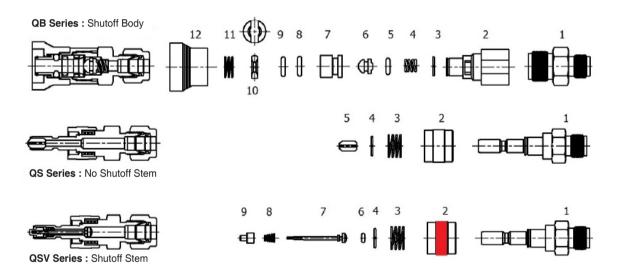
- Easy operation; push for coupling and pull for uncoupling.
- No turn or no tool is required when coupling and uncoupling.
- Two options on stem design: shutoff or no shutoff.
- Two options on body design: standard shutoff or no shutoff for full flow.
- SS316 and brass construction



Single-End Shufoff (SESO)
No Shutoff Stem Coupled with Standard Shutoff Body



Double-End Shutoff (DESO)Shutoff Stem Coupled with Standard Shutoff Body



Materials of construction

		QB Se	ries Body			
	Components	SS316 Brass				
		Material Grade	e/ASTM Standard			
1	Body	SS316/A276	Brass C3604			
2	Housing	33310/A270	/JIS H3250			
3	Snap Ring	66303//	NOTM AG10			
4	Valve Spring	SS302/ASTM A313				
5	Valve O-ring	FKM	NBR			
6	Valve	SS316/A276	Brass C3604			
7	Insert	33310/A270	/JIS H3250			
8	Insert O-ring	FKM	NBR			
9	Stem seal O-ring	FKIVI	INDR			
10	Locking Dog (2)	Xylan TM coate	d Powered SS316			
11	Sleeve Spring	SS302/A	ASTM A313			
12	Sleeve	SS316/A276	C3604/JIS H3250			

		QS & QSV Series Stem					
	Components	SS316 Brass					
		Material Grade	e/ASTM Standard				
1	Stem	SS316/A276	Brass C3604				
2	Stem Sleeve	33310/A270	/JIS H3250				
3	Sleeve Spring	SS302/ASTM A313					
4	Snap Ring	3330Z/F	ASTIVI ASTS				
5	Stem Tip	SS3	16/A276				
6	Valve O-ring	FKM	NBR				
7	Valve	SS3	16/A276				
8	Valve Spring	SS302/ASTM A313					
9	Valve Tip	SS3	16/A276				

Lubricant: Silicon and PTFE based.

Identification: Valved Stem is visually identifiable with the red sleeve

Pressure-Temperature Ratings

O Carias	SS3	16 with FKM O	-ring	Brass with NBR O-ring					
Q Series Stem & Body	QA	QB	QC	Q A	QC				
Stelli & Body	Pressure Rating, psig (bar)								
Temp. F° (C°)		DESO/SESO Coupled							
70 (21)	3000 (206)	1500 (103)	750 (51.6)	2000 (137)	1000 (68.9)	500 (34.4)			
250 (121)		-		250 (17.2)					
400 (204)		250 (17.2)		-					
Temp. F° (C°)			DESO in unco	oupled position	1				
70 (21)			250	(17.2)					
Temp. F° (C°)		DES	O while Coupl	ing and Uncoι	ıpling				
70 (21)			250	(17.2)					

Air Inclusion and Spillage

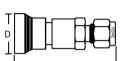
Air inclusion is the amount of air entering the system while DESO is coupled.

Spillage is the system fluid amount escaping while DESO is uncoupled.

UNIT: cm3

Series	Air Inclusion	Spillage
QSV A	0.3	0.3
QSV B	1.0	1.0
QSV C	3.0	3.0

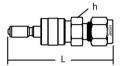
Stem QS Series QSV Series **Bulkhead Stem** QS-BH Series QSV-BH Series

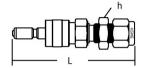


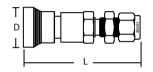
Body

QB Series

Bulkhead Body QB-BH Series







Ordering Information and Dimensions

(Complete (Ordering	Number	End		Cv			Dimensions, mm (in.)			
QS	QSV	QB	Ends	Connections	QS	QSV	Full		L		D	h
Q.O	QOV	QD					Flow	QS	QSV	QB		"
			A2T-SS (1)	1/8 in. M Tube Fitting	0.08	0.08	0.08	58.9 (2.32)	70.4 (2.77)	57.4 (2.26)	_	
			A4T-SS	1/4 in. M Tube Fitting	0.3	0.2	0.4	59.9 (2.36)	61.5 (2.42)	58.4 (2.30)		
			A4T-BH-SS	1/4 in. M Tube Fitting	0.3	0.2	0.4	69.6 (2.74)	71.1 (2.8)	67.8 (2.67)		
			A6M-SS	6mm M Tube Fitting	0.3	0.2	0.4	59.9 (2.36)	61.5 (2.42)	58.4 (2.30)		5/8
QS A-	QSV A-	QB A-	A6M-BH-SS	6mm M Tube Fitting	0.3	0.2	0.4	69.6 (2.74)	71.1 (2.80)	67.8 (2.67)	23.1	3/6
US A-	QSV A-	QD A-	A8M-SS	8mm M Tube Fitting	0.3	0.2	0.4	63.8 (2.51)	65.4 (2.57)	62.3 (2.45)	(0.91)	
			M2N-SS	1/8 in. Male NPT	0.3	0.2	0.4	52.5 (2.07)	54.1 (2.13)	51.0 (2.01)		
			M4N-SS	1/4 in. Male NPT	0.3	0.2	0.4	56.3 (2.22)	57.9 (2.28)	F40 (040)		
			F2N-SS	1/8 in. Female NPT	0.3	0.2	0.4	51.0 (2.01)	52.6 (2.07)	54.9 (2.16)		
			F4N-SS	1/4 in. Female NPT	0.3	0.2	0.4	57.4 (2.26)	58.9 (2.32)	61.5 (2.42)	1	
			A6T-SS	3/8 in. M Tube Fitting	1.0	0.5	1.5	64.0 (2.52)	67.2 (2.64)	65.5 (2.58)		
			A6T-BH-SS	3/8 in. M Tube Fitting	1.0	0.5	1.5	74.2 (2.92)	78.0 (3.07)	75.7 (2.98)]	
			A10M-SS	10mm M Tube Fitting	1.0	0.5	1.5	67.3 (2.65)	70.5 (2.77)	68.1 (2.68)		3/4
00.0	001/ D		A10M-BH-SS	10mm M Tube Fitting	1.0	0.5	1.5	77.7 (3.06)	78.7 (3.10)	75.9 (2.99)	26.2	
QS B-	QSV B-	QB B-	M4N-SS	1/4 in. Male NPT	0.9	0.5	1.5	58.9 (2.32)	62.1 (2.44)	00 5 (0.00)	(1.03)	
			M6N-SS	3/8 in Male NPT	0.8	0.5	1.6			60.5 (2.38)		
			F4N-SS	1/4 in. Female NPT	0.9	0.5	1.5	59.7 (2.35)	62.9 (2.47)	64.5 (2.54)	1	
			F6N-SS	3/8 in. Female NPT	0.8	0.5	1.6			65.3 (2.57)	1	7/8
			A8T-SS	1/2 in. M Tube Fitting	2.4	1.5	3.3	75.2 (2.96)	80.2 (3.16)	78.5 (3.09)		
			A8T-BH-SS	1/2 in. M Tube Fitting	2.4	1.5	3.3	87.1 (3.43)	92.2 (3.63)	90.4 (3.56)	1	
00.0	001/0	0.5 0	A12M-SS	12mm M Tube Fitting	2.2	1.5	3.3	75.2 (2.96)	80.2 (3.16)	78.5 (3.09)	30.7 (1.21)	15/16
QS C-	QSV C-	SV C- QB C-	A12M-BH-SS	12mm M Tube Fitting	2.2	1.5	3.3	87.1 (3.43)	92.2 (3.63)	90.4 (3.56)		
			M8N-SS	1/2 in. Male NPT	2.0	1.3	3.1	72.3 (2.84)	77.2 (3.04)	75.5 (2.97)	1	
			F8N-SS	1/2 in. Female NPT	2.0	1.3	3.1	71.7 (2.82)	76.7 (3.02)	81.9 (3.22)		1 1/16

- (1) QSA- & QSVA-A2T- end is constructed with two piece assembly.
- Cv is based on identical end connections on stem and body. To calculate the Cv on unlike end connections, average the two Cv values.
- Dimensions are reference only and subject to change.

How to Order

To order stainless steel quick connect, select an applicable complete ordering number. Examples: QSA-A4T-SS

To order brass quick connect, replace "SS" with "B" in the ordering number.

Examples: QSA-A4T-B

Bulkhead Panel Information,

mm (in.)

				` ,
	Part Numb	er	Max.	Min.
Body	Stem	End	Thickness	Hole Dia.
QBA-	QSA-	A4T-BH	6.4 (.25)	11.9 (15/32)
QBB-	QSB-	A6T-BH	6.9 (.27)	15.1 (19/32)
QBC-	QSC-	A8T-BH	6.6 (.26)	19.8 (25/32)
QBA-	-	A6M-BH	C 4 (OF)	11.9 (15/32)
-	QSA-	A6M-BH	6.4 (.25)	11.5 (29/64)
QBB-	QSB-	A10M-BH	6.9 (.27)	16.7 (21/32)
QBC-	QSC-	A12M-BH	6.6 (.26)	19.6 (49/64)

Coupled Overall Length

To calculate the overall length of stem and body coupled, subtract the insertion depth from the combination length of the stem and the body.

	Unit: mm (in.)
Stem Series	Insertion Depth
QSA	27.7 (1.09)
QSB	30.0 (1.18)
QSC	37.6 (1.48)
QSVA	29.2 (1.15)
QSVB	33.0 (1.30)
QSVC	42.7 (1.68)

Full Flow Quick Connects

Quick connect body with no shutoff option allows for full flow when coupled with no shutoff stem.

To order full flow body, add " \mathbf{FW} " in the ordering number.

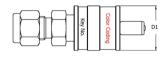
Example: QBA-A4T-FW-SS

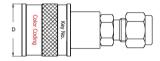
Operation

- For coupling and uncoupling, align body and stem.
- Perform coupling and uncoupling at room temperature.
- Provide supporter on the hanging hoses connected to prevent side load.
- Lubricate the stem seal O-ring in the body periodically.
- Do not uncouple no shutoff stem under pressure.
- Do not couple or uncouple at pressure exceeding 250 psig (17.2 bar).
- Do not rotate quick connects while coupling and uncoupling.

Options

Color Coded & Keyed Q Series





Features

- Coupling keyed quick connect is prevented both visually and mechanically when other keyed quick connect is made to couple.
- Stems and bodies are color coded and numbered for visual identification.
- Applicable to control of multi-fluid and multi-pressure system.

Ordering Number and Sleeve Diameter

Unit: mm (in.)

Kev	Vari	Body	Stem	Body	Stem	Body	Stem
Ordering	Ordering Rey	QB A	QS A, QSV A	QB B	QS B, QSV B	QB C	QS C, QSV C
Number	Color	D	D1	D	D1	D	D1
K1	Black	24.4 (.96)	20.8 (.82)	28.7 (1.13)	25.1 (.99)	32.0 (1.26)	27.9 (1.10)
K2	Orange	25.1 (.99)	21.6 (.85)	29.5 (1.16)	25.9 (1.02)	32.8 (1.29)	29.0 (1.14)
K3	Green	25.9 (1.02)	22.4 (.88)	30.2 (1.19)	26.7 (1.05)	33.5 (1.32)	29.7 (1.17)
K4	Yellow	26.7 (1.05)	23.1 (.91)	31.0 (1.22)	27.4 (1.08)	34.3 (1.35)	30.5 (1.20)
K5	Blue	27.4 (1.08)	23.9 (.94)	31.5 (1.24)	28.2 (1.11)	35.1 (1.38)	31.2 (1.23)
K6	White	28.2 (1.11)	24.6 (.97)	32.5 (1.28)	29.0 (1.14)	35.8 (1.41)	32.0 (1.26)
K7	Purple	29.0 (1.14)	25.4 (1.00)	33.3 (1.31)	29.7 (1.17)	36.6 (1.44)	32.8 (1.29)
K8	Brown	29.7 (1.17)	26.2 (1.03)	34.0 (1.34)	30.5 (1.20)	37.3 (1.47)	33.5 (1.32)

Keyed Q Series Operation

- Select keyed stem and body in the identical A, B, and C Series.
- For coupling, push the stem into the body until it clicks.
- For uncoupling, pull the body sleeve toward stem, and remove stem.

Keyed Q Series Ordering Information

Select an applicable key ordering number, and insert it in the Q Series complete ordering number: QSA-A4T-K1-SS

Protectors



Protectors are required to protect body and stem from contamination and damage while they are uncoupled.

Protector Ordering Number

Body Protector	Stem Protector
QBA-P-SS	QSA-P-SS
QBB-P-SS	QSB-P-SS
QBC-P-SS	QSC-P-SS

To order brass protector, replace "SS" in the ordering number with "B". QBA-P-B

Protectors do not retain pressure. To order pressure retaining protector, insert " ${\bf P}$ " in the ordering number. QBA- ${\bf PP}$ -SS

QF Series Full Flow Quick Connects

Features

- Provides full flow with compact design. .
- . Bi-directional flow.
- . No tool required for coupling and uncoupling.



Materials of Construction

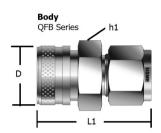
Components	Materials				
Components	SS316	Brass			
Body,	SS316	Brass C3604			
Body Sleeve, Stem	/ASTM A276	/JIS H3250			
Locking Ball,	SS316	SS316			
Snap ring	33310	33310			
Spring	SS302/AS	TM A313			
O-ring	FKM	NBR			
Lubricant	Silicon and PTFE-based				

Pressure-Temperature Ratings

QF Series Stem & Body		SS316 with FKM O-ring				Brass with NBR O-ring				
	QF A	QF B	QF C	QF D	QF A	QF B	QF C	QF D		
	Pressure Rating, psig (bar)									
Temp. °F (°C)					Coupled					
70 (21)	6000	(413)	4000	(275)	4000 (275)	3000 (206)	2000	(137)		
250 (121)	-				250 (17.2)					
400 (204)	250 (17.2)				-					

Ordering Information and Dimensions





Comple	te Ordering	y Number	End	Cv	Min.	Orifice	L	h	L1	h1	D
Stem	Body	Ends	Connection	Stem Body			Hex.	LI	Hex.	D	
		A4T-SS	1/4 in. M Tube Fitting	2.2	4.8 (.19)	4.8 (.19)		9/16	45.7 (1.80)		
		A6T-SS	3/8 in. M Tube Fitting	2.8	6.1 (.24)	7.1 (.28)	45.0 (1.77)	11/16	11/16 46.0 (1.81) 11	11/16	
		A6M-SS	6 mm M Tube Fitting	2.2	4.8 (.19)	4.8 (.19)		9/16	45.7 (1.80)		00.4
QFS A-	QFB A-	F4N-SS	1/4 in. Female NPT			9.7 (.38)	40.6 (1.60)	3/4	38.1 (1.50)	3/4	22.1 (.87)
		F6N-SS	3/8 in. Female NPT	1.7	61 (04)	9.7 (.36)	42.4 (1.67)	7/8	41.4 (1.63)	7/8	(.07)
		M4N-SS	1/4 in. Male NPT	1.7	6.1 (.24)	6.4 (.25)	40.4 (4.50)	9/16	00.0 (4.57)	(1.57) 11/16	
		M6N-SS	3/8 in. Male NPT			9.4 (.37)	40.4 (1.59)	11/16	39.9 (1.57)		
		A6T-SS	3/8 in. M Tube Fitting	2.9	7.1 (.28)	7.1 (.28)	47.8 (1.88)	7/8	55.1 (2.17)		
	QFB B-	A8T-SS	1/2 in. M Tube Fitting	13	10.4 (.41)	11.9 (.47)	50.5 (1.99)	1/0	56.6 (2.23)		
QFS B-		F6N-SS	3/8 in. Female NPT	7.1	11.9 (.47)	15.0 (.59)	40.4 (1.59)	1 1/16	40.0 (1.70)	1 1/16	33.0
QF3 D-	QFB D-	F8N-SS	1/2 in. Female NPT	11.5	12.7 (.50)	16.0 (.63)	46.2 (1.82)	1 1/10	43.9 (1.73)	(1	(1.30)
		M-6N-SS	3/8 in. Male NPT	7.1	10.4 (.41)	10.4 (.41)	41.9 (1.65)	7/8	46.5 (1.83)		
		M-8N-SS	1/2 in. Male NPT	11.5	12.7 (.50)	12.7 (.50)	46.7 (1.84)	1/6	52.8 (2.08)		
		A12T-SS	3/4 in. M Tube Fitting	26	15.7 (.62)	15.7 (.62)	54.6 (2.15)	1 1/16	62.2 (2.45)		40.0
QFS C-	QFB C-	F12N-SS	3/4 in. Female NPT	23.6	10.0 (70)	22.4 (.88)	52.8 (2.08)	1 5/16	48.0 (1.89)	1 11/2 1	42.2 (1.66)
		M12N-SS	3/4 in. Male NPT	23.0	18.3 (.72)	18.3 (.72)	51.6 (2.03)	1 1/16	59.2 (2.33)		(1.00)
		A16T-SS	1 in. M Tube Fitting	45		22.4 (.88)	62.2 (2.45)	1 3/8	69.9 (2.75)		47.0
QFS D-	QFB D-	F16N-SS	1 in. Female NPT	39	22.4 (.88)	26.9 (1.06)	63.2 (2.49)	1 5/8	53.8 (2.12)	1 11/16	47.8 (1.88)
		M16N-SS	1 in. Male NPT	38		22.4 (.88)	59.7 (2.35)	1 3/8	67.3 (2.65)	<u> </u>	(1.00)

[•] Dimensions are reference only and subject to change. Dimensions with M Tube Fitting nut are in finger tight position.

Coupled Overall Length

Unit: mm (in.)

Insertion Depth
19.8 (0.78)
20.6 (0.81)
22.9 (0.90)
23.9 (0.94)

To calculate the overall length of stem and body coupled, subtract the insertion depth from the combination length of the stem and the body.

How to Order

To order stainless steel connect, select an applicable complete ordering number. Examples: QFSA-A4T-SS, QFBA-A4T-SS

To order brass connect, replace "SS" with "B" in the ordering number. Examples: QFSA-A4T-B, QFBA-A4T-B.

Operation

Do not uncouple under pressure.

For coupling, pull the body sleeve back, insert the stem into the body until it bottoms, and loose the body sleeve to get it in coupling position. For uncoupling, completely pull the body sleeve back, and remove the stem from the body.

Safe Valve Selection

The selection of a valve for any application or system must be considered to ensure safe performance. Valve rating, valve function, material compatibility, proper installation, operation and maintenance remain the sole responsibility of the system designer and the user. HSME Corporation accepts no liability for any improper selection, compatibility, installation, operation or maintenance.

