

Quick Connector

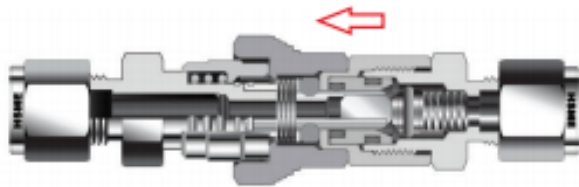
Q & QF Series



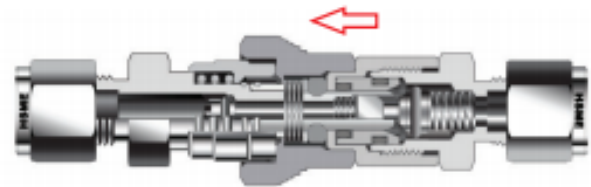
Q Series Quick Connects

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

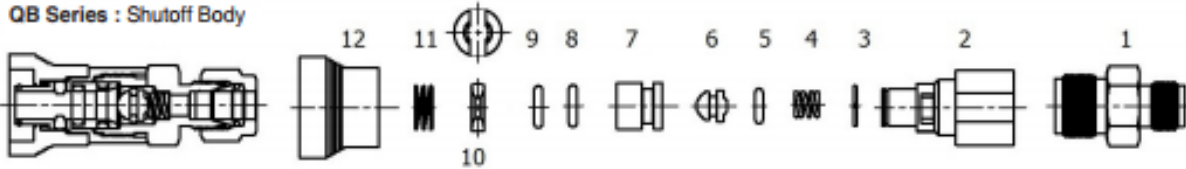


Single-End Shutoff (SES)
No Shutoff Stem Coupled with Standard Shutoff Body

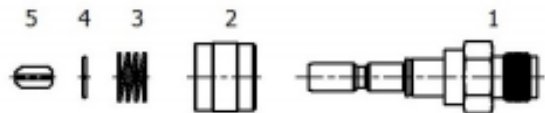


Double-End Shutoff (DES)
Shutoff Stem Coupled with Standard Shutoff Body

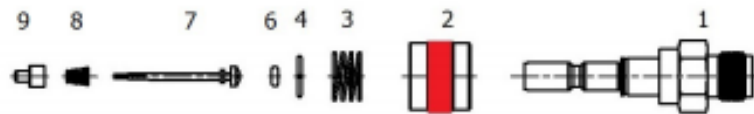
QB Series : Shutoff Body



QS Series : No Shutoff Stem



QSV Series : Shutoff Stem



Materials of construction

Components	QB Series Body		
	SS316	Brass	
	Material Grade/ASTM Standard		
1	Body	SS316/A276	Brass C3604 /JIS H3250
2	Housing	SS302/ASTM A313	
3	Snap Ring	SS302/ASTM A313	
4	Valve Spring	SS302/ASTM A313	
5	Valve O-ring	FKM	NBR
6	Valve	SS316/A276	Brass C3604 /JIS H3250
7	Insert	SS302/ASTM A313	
8	Insert O-ring	FKM	NBR
9	Stem seal O-ring	SS302/ASTM A313	
10	Locking Dog (2)	Xylan™ coated Powered SS316	
11	Sleeve Spring	SS302/ASTM A313	
12	Sleeve	SS316/A276	C3604/JIS H3250

Components		QS & QSV Series Stem	
		SS316	Brass
		Material Grade/ASTM Standard	
1	Stem	SS316/A276	Brass C3604 /JIS H3250
2	Stem Sleeve	SS302/ASTM A313	
3	Sleeve Spring	SS302/ASTM A313	
4	Snap Ring	SS302/ASTM A313	
5	Stem Tip	SS316/A276	
6	Valve O-ring	FKM	NBR
7	Valve	SS316/A276	
8	Valve Spring	SS302/ASTM A313	
9	Valve Tip	SS316/A276	

Lubricant: Silicon and PTFE based.

Identification: Valved Stem is visually identifiable with the red sleeve

Quick Connector

Q & QF Series

Pressure-Temperature Ratings

Q Series Stem & Body	SS316 with FKM O-ring			Brass with NBR O-ring		
	Q A	Q B	Q C	Q A	Q B	Q C
Pressure Rating, psig (bar)						
DES0/SES0 Coupled						
Temp. F° (C°)	3000 (206)	1500 (103)	750 (51.6)	2000 (137)	1000 (68.9)	500 (34.4)
70 (21)					250 (17.2)	
250 (121)						
400 (204)		250 (17.2)				
DES0 in uncoupled position						
Temp. F° (C°)						
70 (21)			250 (17.2)			
DES0 while Coupling and Uncoupling						
Temp. F° (C°)						
70 (21)			250 (17.2)			

Air Inclusion and Spillage

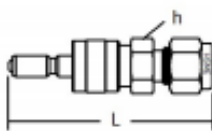
Air inclusion is the amount of air entering the system while DES0 is coupled.

Spillage is the system fluid amount escaping while DES0 is uncoupled.

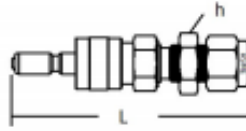
UNIT: cm³

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

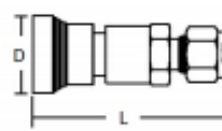
Stem
QS Series
QSV Series



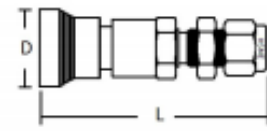
Bulkhead Stem
QS-BH Series
QSV-BH Series



Body
QB Series



Bulkhead Body
QB-BH Series



Ordering Information and Dimensions

Complete Ordering Number				End Connections	Cv			Dimensions, mm (in.)				
QS	QSV	QB	Ends		QS	QSV	Full Flow	L			D	h
							QS	QSV	QB			
QS A-	QSV A-	QB A-	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)	23.1 (0.91)	5/8
			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)		
			A6M-BH-SS	6mm M Tube Fitting	0.3	0.2	0.4	69.6 (2.74)	71.1 (2.8)	67.8 (2.67)		
			A8M-SS	8mm M Tube Fitting	0.3	0.2	0.4	63.8 (2.51)	65.4 (2.57)	62.3 (2.45)		
			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)	54.9 (2.16)		
			F2N-SS	1/8 in. Female NPT	0.3	0.2	0.4	51.0 (2.01)	52.6 (2.07)			
QS B-	QSV B-	QB B-	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)	26.2 (1.03)	3/4
			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)		
			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)		
			M4N-SS	1/4 in. Male NPT	0.9	0.5	1.5	58.9 (2.32)	62.1 (2.44)	60.5 (2.38)		
			M6N-SS	3/8 in. Male NPT	0.8	0.5	1.6					
			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)		
			F6N-SS	3/8 in. Female NPT	0.8	0.5	1.6			65.3 (2.57)		
QS C-	QSV C-	QB C-	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)	30.7 (1.21)	1 5/16
			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)		
			A12M-SS	12mm M Tube Fitting	2.2	1.5	3.3	75.2 (2.96)	80.2 (3.16)	78.5 (3.09)		
			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)		
			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) 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 Number			Max. Thickness	Min. Hole Dia.
Body	Stem	End		
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	6.4 (.25)	11.9 (15/32)
-	QSA-	A6M-BH		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)

Quick Connector

Q & QF Series

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)
QSA	29.2 (1.15)
QSVB	33.0 (1.30)
QSV C	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.

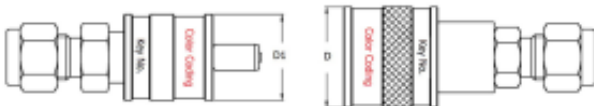
To order full flow body, add "FW" in the ordering number.
Example: QBA-A4T-FW-SS

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.)

Key Ordering Number	Key Color	Body	Stem	Body	Stem	Body	Stem
		QB A	QS A, QSV A	QB B	QS B, QSV B	QB C	QS C, QSV C
		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

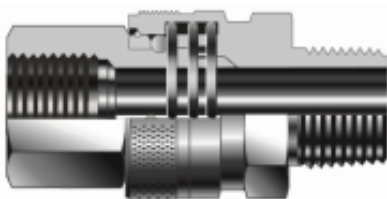
To order brass protector, replace "SS" in the ordering number with "B". QBA-P-B

Protectors do not retain pressure. To order pressure retaining protector, insert "P" in the ordering number. QBA-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	
	SS316	Brass
Body, Body Sleeve, Stem	SS316 /ASTM A276	Brass C3604 /JIS H3250
Locking Ball, Snap ring	SS316	SS316
Spring	SS302/ASTM A313	
O-ring	FKM	NBR
Lubricant	Silicon and PTFE-based	

Quick Connector

Q & QF Series

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



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

• 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.)

Stem Series	Insertion Depth
QFSA	19.8 (0.78)
QFSB	20.6 (0.81)
QFSC	22.9 (0.90)
QFSD	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.

Options



Body Protector

Stem Protector

QF Series Protectors

Body and Stem Protector are available to protect body and stem from damage and contamination while they are uncoupled.

To order protector, select an applicable stem and body series and insert "P" designator and suffix material designator.

Example: QFSA-P-SS, "Stem Protector"

QFBA-P-SS, "Body Protector"

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.