

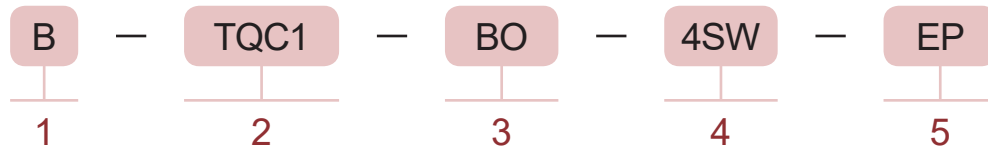
Quick Connectors



TQC SERIES

- Maximum Working Pressure : 3,000 psig(206 bar)
- Working Temperature Range : -10 °F(-20 °C) to 400 °F(204 °C) with FKM O-Ring.
- End Connection Size from 1/4" to 1/2" is available.
- There are Single-end shut-off, Double-end shut-off models.
- Simple to operate.

ORDERING INFORMATION



1. BODY MATERIALS

Material	Designator
316SS	Blank
BRASS	B

2. SERIES DESIGNATOR

Size	Designator
1/4"	TQC1
3/8"	TQC2
1/2"	TQC3

3. COMPONENT DESIGNATOR

Part	Designator
Body	BO
SECO Plug	SP
DECO Plug	DP

* SECO: Single-End Shut-Off
 DECO: Double-End Shut-Off

4. CONNECTION SIZE & TYPE

Connection Size	Designator
1/8"	2
1/4"	4
3/8"	6
1/2"	8
6mm	6M
10mm	10M
12mm	12M

Connection Type	Designator
T-Lok	SW
T-Lok Bulkhead	BH*SW
Male NPT	NM
Female NPT	NF
Male ISO Tapered	PTM
Female ISO Tapered	PTF

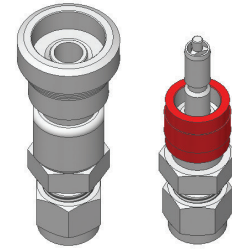
* Designator of Connection Size

5. O-RING MATERIALS

Packing Materials	Designator
KFM (316SS Standard)	Blank
Buna N (BRASS Standard)	Blank
Ethylene Propylene	EP
Neoprene	NE

FEATURES

- No twisting, turning or wrenching necessary.
- Single-end shutoff (SESO) stems have no valves and remain open when uncoupled.
Double-end shutoff (DESO) stems have valves and shut off when uncoupled.
- Push-to-connect coupling enables quick, easy operation.
- Do not couple or uncouple at pressures exceeding 250 psig (17.2 bar).
- Applications : Gauge Calibration, Gas Distribution, Biopharmaceutical, Portable Test Equipment.



TECHNICAL DATA

TEMPERATURE-WORKING PRESSURE RATING

Materials	316SS ①			BRASS ②		
	Series	TQC1	TQC2	TQC3	TQC1	TQC2
Temperature °F (°C)	Pressure Rating Psig (bar)					
Coupled						
-10 (-23) to 100 (37)	3,000 (206)	1,500 (103)	750 (52)	2,000 (137)	1,000 (68.9)	500 (34.4)
to 150 (65)	2,750 (189)	1,350 (93)	680 (46.8)	1300 (89.5)	700 (48)	400 (27.5)
to 200 (93)	2,300 (158)	1,150 (79.2)	600 (41.3)	700 (48)	450 (31)	350 (24.1)
to 250 (121)	1,850 (127)	970 (66.8)	520 (35.8)	300 (20.6)	300 (20.6)	300 (20.6)
to 300 (148)	1,400 (96.4)	750 (51.6)	440 (30.3)	-	-	-
to 350 (176)	950 (65.4)	580 (27.5)	360 (24.8)	-	-	-
to 400 (204)	500 (34.4)	400 (27.5)	300 (20.6)	-	-	-
Uncoupled and When Coupling and Uncoupling						
100 (37)	250 (17.5)			250 (17.5)		

① Standard O-Ring: KFM, ②Standard O-Ring: Buna N

O-RING MATERIALS-TEMPERATURE RATING

Material	Temperature Rating
FKM	-10 °F to 400 °F (-23 °C to 204 °C)
Buna N	-10 °F to 250 °F (-23 °C to 121 °C)
Ethylene Propylene	-50 °F to 300 °F (-46 °C to 149 °C)
Neoprene	-40 °F to 250 °F (-40 °C to 121 °C)

SPILLAGE AND AIR INCLUSION

- Spillage - Spillage is the volume of system fluid that escapes while a quick connector is uncoupled. (DESO Plug and Body)
- Air inclusion - Air inclusion is the volume of air trapped that comes in while a quick connector is coupled. (DESO Plug and Body)

Series	Spillage cm ³	Air inclusion cm ³
TQC1	0.3	0.3
TQC2	1.0	1.0
TQC3	3.0	3.0

MAXIMUM FLOW RATE at 70°F (20°C)

DESO Plug and Full Flow Body

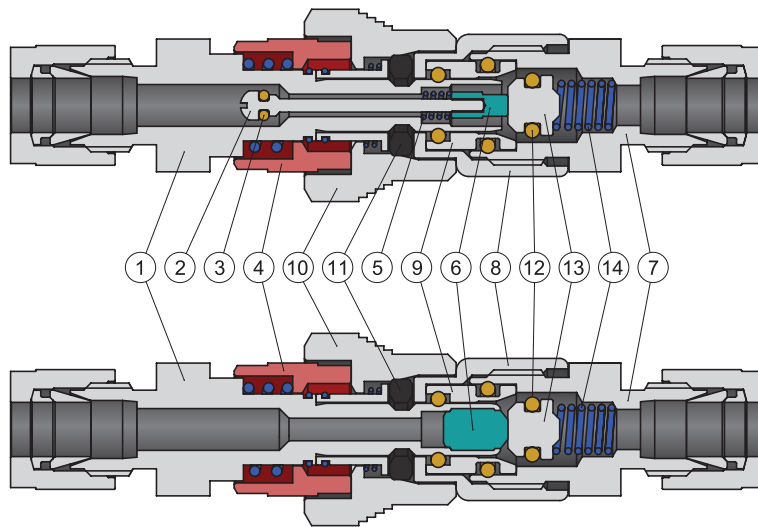
Series	Water Flow U.S. gal/min (L/min)
TQC1	4 (15)
TQC2	6 (22)
TQC3	10 (37)

FEATURES

- Use filters ahead of quick-connectors.
- Couple and uncouple quick-connects at room temperature.
- Re-lubricate stem seal O-rings periodically. (Silicone based)
- Align bodies and plugs when coupling or uncoupling.
- Protect uncoupled body and plug with body and plug protectors or dust caps.
- Support hanging hoses or other equipment to prevent side load.
- Couple and uncouple quick-connectors during system cleaning operations.

MATERIALS OF CONSTRUCTION

Double-end shut-off (DESO)

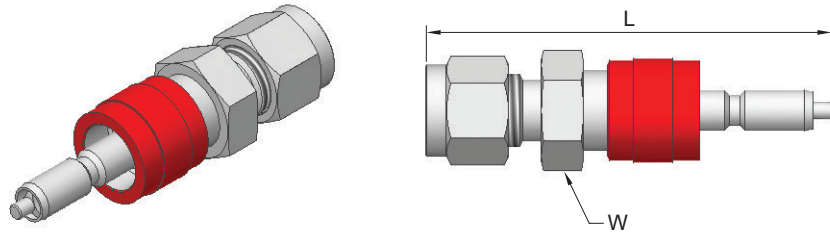


Single-end shut-off (SESO)

No.	Description	Materials	
		316SS	BRASS
1	Body	316SS	Brass
2	Stem	316SS	Brass
3	O-Ring	FKM	Buna N
4	Sleeve	SESO	Brass
		DESO	Brass (Polyurethane enamel coated Brass)
5	Spring	Stainless Steel	
6	Poppet	316SS	Brass
7	Body	316SS	Brass
8	Housing	316SS	Brass
9	Insert	316SS	Brass
10	Sleeve	316SS	Brass
11	Locking Dog	316SS Powdered Metal (PTFE-coated)	
12	O-Ring	FKM	Buna N
13	Poppet	316SS	Brass
14	Spring	Stainless Steel	

DIMENSIONS

PLUG



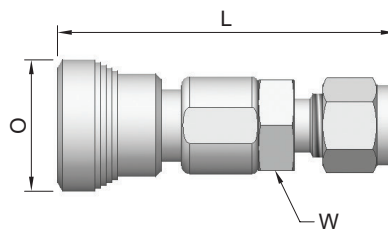
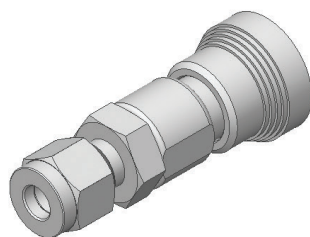
Series	Order Number		End Connections	Cv		Dimensions (mm)				
	Part No.			SES0	DES0	L		W	Panel Hole drill Size	Max. Panel thickness
	SES0	DES0				SES0	DES0			
TQC1	SP-2SW	DP-2SW	1/8" T-Lok	0.08	0.08	58.9	60.4	15.8	-	-
	SP-4SW	DP-4SW	1/4" T-Lok	0.3	0.2	59.9	61.5	15.8	-	-
	SP-6MSW	DP-6MSW	6mm T-Lok	0.3	0.2	59.9	61.5	15.8	-	-
	SP-BH4SW	DP-BH4SW	1/4" T-Lok Bulkhead	-	-	69.6	71.1	15.8	11.9	6.4
	SP-BH6MSW	DP-BH6MSW	6mm T-Lok Bulkhead	-	-	69.6	71.1	15.8	11.9	6.4
	SP-2NM	DP-2NM	1/8" Male NPT	0.3	0.2	52.6	54.1	15.8	-	-
	SP-4NM	DP-4NM	1/4" Male NPT	0.3	0.2	56.4	57.9	15.8	-	-
	SP-2NF	DP-2NF	1/8" Female NPT	0.3	0.2	51.1	52.6	15.8	-	-
	SP-4NF	DP-4NF	1/4" Female NPT	0.3	0.2	57.4	58.9	19.1	-	-
TQC2	SP-6SW	DP-6SW	3/8" T-Lok	1.0	0.5	64	67.1	19.1	-	-
	SP-10MSW	DP-10MSW	10mm T-Lok	1.0	0.5	67.3	70.4	19.1	-	-
	SP-BH6SW	DP-BH6SW	3/8" T-Lok Bulkhead	-	-	74.2	78	19.1	15.1	6.9
	SP-BH10MSW	DP-BH10MSW	10mm T-Lok Bulkhead	-	-	77.7	78.7	22	16.7	6.9
	SP-4NM	DP-4NM	1/4" Male NPT	0.9	0.5	58.9	61.9	19.1	-	-
	SP-6NM	DP-6NM	3/8" Male NPT	0.8	0.5	59.7	62.7	19.1	-	-
	SP-4NF	DP-4NF	1/4" Female NPT	0.8	0.5	59.7	62.7	19.1	-	-
TQC3	SP-6NF	DP-6NF	3/8" Female NPT	0.8	0.5	59.7	62.7	22.2	-	-
	SP-8SW	DP-8SW	1/2" T-Lok	2.4	1.5	75.2	80.3	23.8	-	-
	SP-12MSW	DP-12MSW	12mm T-Lok	2.4	1.5	75.2	80.3	23.8	-	-
	SP-BH8SW	DP-BH8SW	1/2" T-Lok Bulkhead	-	-	87.1	92.2	23.8	19.8	6.6
	SP-BH12MSW	DP-BH12MSW	12mm T-Lok Bulkhead	-	-	87.1	92.2	23.8	19.6	6.6
	SP-8NM	DP-8NM	1/2" Male NPT	2.0	1.3	72.1	77.2	23.8	-	-
	SP-8NF	DP-8NF	1/2" Female NPT	2.0	1.3	71.6	76.7	26.9	-	-

INSERTION DEPTH

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

Series	Depth (mm)	
	SES0	DES0
TQC1	27.7	29.2
TQC2	30.0	33.0
TQC3	37.6	42.7

BODY



Order Number		End Connections	Dimensions (mm)				
Series	Part No.		L	O	W Hex. Flat	Panel Hole drill Size	Max. Panel thickness
TQC1	BO-2SW	1/8" T-Lok	57.3	23.1	15.8	-	-
	BO-4SW	1/4" T-Lok	58.4	23.1	15.8	-	-
	BO-6MSW	6mm T-Lok	58.4	23.1	15.8	-	-
	BO-BH4SW	1/4" T-Lok Bulkhead	67.8	23.1	15.8	11.9	6.4
	BO-BH6MSW	6mm T-Lok Bulkhead	67.8	23.1	15.8	11.9	6.4
	BO-2NM	1/8" Male NPT	51.1	23.1	15.8	-	-
	BO-4NM	1/4" Male NPT	54.9	23.1	15.8	-	-
	BO-2NF	1/8" Female NPT	54.9	23.1	15.8	-	-
TQC2	BO-4NF	1/4" Female NPT	61.5	23.1	19.1	-	-
	BO-6SW	3/8" T-Lok	65.5	26.2	19.1	-	-
	BO-10MSW	10mm T-Lok	68.1	26.2	19.1	-	-
	BO-BH6SW	3/8" T-Lok Bulkhead	75.7	26.2	19.1	15.1	6.9
	BO-BH10MSW	10mm T-Lok Bulkhead	75.9	26.2	22	15.1	6.9
	BO-4NM	1/4" Male NPT	60.5	26.2	19.1	-	-
	BO-6NM	3/8" Male NPT	60.5	26.2	19.1	-	-
TQC3	BO-4NF	1/4" Female NPT	64.5	26.2	19.1	-	-
	BO-6NF	3/8" Female NPT	65.3	26.2	22.2	-	-
	BO-8SW	1/2" T-Lok	78.5	30.7	23.8	-	-
	BO-12MSW	12mm T-Lok	78.5	30.7	23.8	-	-
	BO-BH8SW	1/2" T-Lok Bulkhead	90.4	30.7	23.8	19.8	6.6
	BO-BH12MSW	12mm T-Lok Bulkhead	90.4	30.7	23.8	19.6	6.6
	BO-8NM	1/2" Male NPT	75.4	30.7	23.8	-	-
	BO-8NF	1/2" Female NPT	81.8	30.7	26.9	-	-