



# Quick-Connects



## QC, QF, QM, and QTM Series

- No twisting, turning, or wrenching necessary
- Single-end shutoff, double-end shutoff, and full-flow models

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### General Information

#### Spillage

Spillage is the amount of system fluid that escapes when a quick-connect is uncoupled (double-end shutoff [DESO] only).

#### Air Inclusion

Air inclusion is the amount of air trapped between the body and stem that enters the system when a quick-connect is coupled (DESO only).

#### Flow Coefficient ( $C_v$ )

$C_v$  is an average value and may vary  $\pm 10\%$ .  $C_v$  is based on like end connections on stem and body. For unlike end connections, average the two  $C_v$  values.

#### Coupling

Any quick-connect stem will fit any quick-connect body of the same series and size.

Examples: Any QC4 stem will fit any QC4 body.  
 Any QC8 stem will fit any QC8 body.

#### Overall Length

- To calculate overall length in the coupled position, subtract the insertion depth from any overall stem and body combination length.
- Dimensions are shown with Swagelok tube fitting nuts finger-tight.

#### End Connections

Additional end connections—such as ISO parallel and tapered thread, AN thread, pipe weld—are available. Where these end connections are not listed, a tube adapter can be used to create a two-piece assembly. For more information on tube adapters, see the *Gaugeable Tube Fittings and Adapter Fittings* catalog.



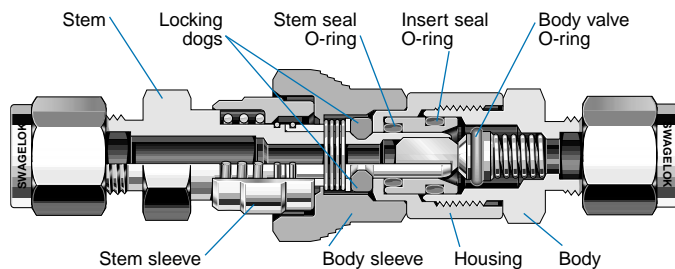
## Instrumentation Quick-Connects QC Series

### Features

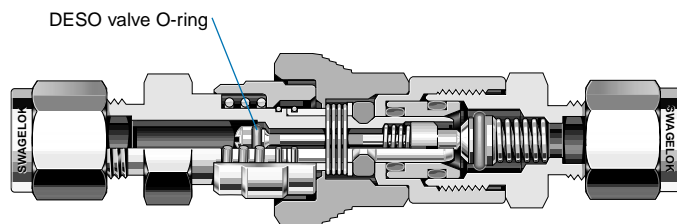
- Redesigned stem insert requires just one O-ring seal, yet improves O-ring containment.
- New-design stems and bodies interchange with old-design stems and bodies.
- Locking dog mechanism with large contact area retains stem.
- Push-to-connect coupling enables quick, easy operation.
- Wide variety of options, including keyed quick-connects, are available.
- Heavy-duty sleeve shields open end of body.



**Single-End Shutoff (SES)**



**Double-End Shutoff (DESO)—Red Stem Sleeve**



← Flow direction →

### Materials of Construction

| Component   | Material   |   |
|---|--|---|
|   | 316 SS   | Brass                                   |
| <i>Body, housing, stem</i>                                | 316 SS   | <i>Brass C36000</i>                     |
| <i>Body valve, body insert, DESO valve, DESO retainer</i> |  | <i>Brass C36000</i>                     |
| <i>SES stem insert</i>                                    |  | <i>Brass C26000</i>                     |
| <i>O-rings</i>  | <i>Fluorocarbon FKM</i>                          | <i>Buna N</i>                           |
| <i>Springs</i>  | 316 SS   |   |
| <i>Snap rings</i>   | 316 SS   |   |
| <i>Body sleeve</i>  | 316 SS powdered metal                            | Brass C36000                            |
| <i>DESO stem sleeve</i>                                   | Polyurethane enamel-coated 316 SS                | Polyurethane enamel-coated brass C36000 |
| <i>SES stem sleeve</i>                                    | 316 SS   | Brass C36000                            |
| <i>Locking dogs</i>                                       | Xylan <sup>®</sup> -coated 316 SS powdered metal |   |
| <i>Lubricants</i>   | <i>Silicone- and PTFE-based</i>                  |   |

Wetted components listed in *italics*.  
Other lubricants available.

### Pressure-Temperature Ratings

| Temperature<br>°F (°C)   | 316 SS<br>with Fluorocarbon<br>FKM O-rings |               |               | Brass<br>with Buna N<br>O-rings |                |               |
|--|--|---------------|---------------|---------------------------------|----------------|---------------|
|  | QC4  | QC6           | QC8           | QC4                             | QC6            | QC8           |
|  | Pressure Rating, coupled, psig (bar)       |               |               |                                 |                |               |
| 70 (20)  | 3000<br>(206)                              | 1500<br>(103) | 750<br>(51.6) | 2000<br>(137)                   | 1000<br>(68.9) | 500<br>(34.4) |
| 250 (121) <sup>①</sup><br>400 (204) <sup>②</sup>                 | 250<br>(17.2)                              |               |               |                                 |                |               |
| <b>Pressure Rating, uncoupled, psig (bar)</b>                    |  |               |               |                                 |                |               |
| 70 (20)  | 250<br>(17.2)                              |               |               |                                 |                |               |
| <b>Pressure Rating, when coupling and uncoupling, psig (bar)</b> |  |               |               |                                 |                |               |
| 70 (20)  | 250<br>(17.2)                              |               |               |                                 |                |               |

① For brass with Buna N O-rings.  
② For 316 SS with fluorocarbon FKM O-rings.

### Spillage and Air Inclusion

| Series | Spillage            | Air Inclusion       |
|--------|---------------------|---------------------|
| QC4    | 0.3 cm <sup>3</sup> | 0.3 cm <sup>3</sup> |
| QC6    | 1.0 cm <sup>3</sup> | 1.0 cm <sup>3</sup> |
| QC8    | 3.0 cm <sup>3</sup> | 3.0 cm <sup>3</sup> |

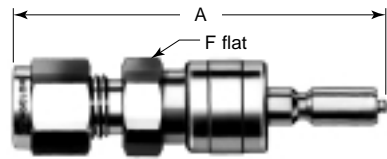
### Maximum Flow Rate






U.S. gal/min (L/min) water at 70°F (20°C)

| QC4    | QC6    | QC8     |
|--------|--------|---------|
| 4 (15) | 6 (22) | 10 (37) |

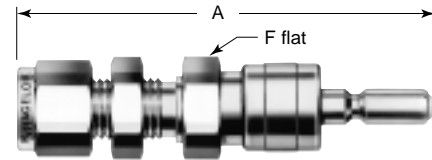
## Ordering Information and Dimensions, QC Series


### Stems



| End Connection   |          | Basic Ordering Number                                    |  | C <sub>v</sub> |      |           | A             |               |                  |
|--|----------|--|--|----------------|------|-----------|---------------|---------------|------------------|
| Type   | Size in. | SESO<br>(Stem has no valve; remains open when uncoupled) | DESO<br>(Stem has valve; shuts off when uncoupled) | SESO           | DESO | Full Flow | SESO in. (mm) | DESO in. (mm) | F in.            |
| Swagelok tube fitting<br> | 1/8      | -QC4-S-200   | -QC4-D-200 <sup>①</sup>                            | 0.08           | 0.08 | 0.08      | 2.32 (58.9)   | 2.77 (70.4)   | 5/8 <sup>①</sup> |
|  | 1/4      | -QC4-S-400   | -QC4-D-400   | 0.3            | 0.2  | 0.4       | 2.36 (59.9)   | 2.42 (61.5)   | 5/8              |
|  | 3/8      | -QC6-S-600   | -QC6-D-600   | 1.0            | 0.5  | 1.5       | 2.52 (64.0)   | 2.64 (67.1)   | 3/4              |
|  | 1/2      | -QC8-S-810   | -QC8-D-810   | 2.4            | 1.5  | 3.3       | 2.96 (75.2)   | 3.16 (80.3)   | 15/16            |
|  | 6 mm     | -QC4-S-6M0   | -QC4-D-6M0   | 0.3            | 0.2  | 0.4       | 2.36 (59.9)   | 2.42 (61.5)   | 5/8              |
|  | 10 mm    | -QC6-S-10M0  | -QC6-D-10M0  | 1.0            | 0.5  | 1.5       | 2.65 (67.3)   | 2.77 (70.4)   | 3/4              |
|  | 12 mm    | -QC8-S-12M0  | -QC8-D-12M0  | 2.4            | 1.5  | 3.3       | 2.96 (75.2)   | 3.16 (80.3)   | 15/16            |
| Male NPT<br>              | 1/8      | -QC4-S-2PM   | -QC4-D-2PM   | 0.3            | 0.2  | 0.4       | 2.07 (52.6)   | 2.13 (54.1)   | 5/8              |
|  | 1/4      | -QC4-S-4PM   | -QC4-D-4PM   | 0.3            | 0.2  | 0.4       | 2.22 (56.4)   | 2.28 (57.9)   | 5/8              |
|  | 1/4      | -QC6-S-4PM   | -QC6-D-4PM   | 0.9            | 0.5  | 1.5       | 2.32 (58.9)   | 2.44 (61.9)   | 3/4              |
|  | 3/8      | -QC6-S-6PM   | -QC6-D-6PM   | 0.8            | 0.5  | 1.6       | 2.35 (59.7)   | 2.47 (62.7)   | 3/4              |
|  | 1/2      | -QC8-S-8PM   | -QC8-D-8PM   | 2.0            | 1.3  | 3.1       | 2.84 (72.1)   | 3.04 (77.2)   | 15/16            |
| Male ISO tapered<br>      | 1/4      | -QC4-S-4MT   | -QC4-D-4MT   | 0.3            | 0.2  | 0.4       | 2.22 (56.4)   | 2.28 (57.9)   | 5/8              |
|  | 3/8      | -QC6-S-6MT   | -QC6-D-6MT   | 0.8            | 0.5  | 1.6       | 2.35 (59.7)   | 2.47 (62.7)   | 3/4              |
|  | 1/2      | -QC8-S-8MT   | -QC8-D-8MT   | 2.0            | 1.3  | 3.1       | 2.84 (72.1)   | 3.04 (77.2)   | 15/16            |
| Female NPT<br>            | 1/8      | -QC4-S-2PF   | -QC4-D-2PF   | 0.3            | 0.2  | 0.4       | 2.01 (51.1)   | 2.07 (52.6)   | 5/8              |
|  | 1/4      | -QC4-S-4PF   | -QC4-D-4PF   | 0.3            | 0.2  | 0.4       | 2.26 (57.4)   | 2.32 (58.9)   | 3/4              |
|  | 1/4      | -QC6-S-4PF   | -QC6-D-4PF   | 0.9            | 0.5  | 1.5       | 2.35 (59.7)   | 2.47 (62.7)   | 3/4              |
|  | 3/8      | -QC6-S-6PF   | -QC6-D-6PF   | 0.8            | 0.5  | 1.6       | 2.35 (59.7)   | 2.47 (62.7)   | 7/8              |
|  | 1/2      | -QC8-S-8PF   | -QC8-D-8PF   | 2.0            | 1.3  | 3.1       | 2.82 (71.6)   | 3.02 (76.7)   | 1 1/16           |
| Female ISO tapered<br>  | 1/4      | -QC4-S-4FT   | -QC4-D-4FT   | 0.3            | 0.2  | 0.4       | 2.26 (57.4)   | 2.32 (58.9)   | 3/4              |
|  | 3/8      | -QC6-S-6FT   | -QC6-D-6FT   | 0.8            | 0.5  | 1.6       | 2.35 (59.7)   | 2.47 (62.7)   | 7/8              |
|  | 1/2      | -QC8-S-8FT   | -QC8-D-8FT   | 2.0            | 1.3  | 3.1       | 2.82 (71.6)   | 3.02 (76.7)   | 1 1/16           |

① The -QC4-D-200 is a two-piece assembly.



| End Connection  |          | Basic Ordering Number                                    |  | A             |               |       | Max Panel Thickness in. (mm) | Min Panel Hole Dia in. (mm) |
|---|----------|--|--|---------------|---------------|-------|------------------------------|-----------------------------|
| Type  | Size in. | SESO<br>(Stem has no valve; remains open when uncoupled) | DESO<br>(Stem has valve; shuts off when uncoupled) | SESO in. (mm) | DESO in. (mm) | F in. |                              |                             |
| Swagelok bulkhead tube fitting<br> | 1/4      | -QC4-S1-400  | -QC4-D1-400  | 2.74 (69.6)   | 2.80 (71.1)   | 5/8   | 0.25 (6.4)                   | 15/32 (11.9)                |
|   | 3/8      | -QC6-S1-600  | -QC6-D1-600  | 2.92 (74.2)   | 3.07 (78.0)   | 3/4   | 0.27 (6.9)                   | 19/32 (15.1)                |
|   | 1/2      | -QC8-S1-810  | -QC8-D1-810  | 3.43 (87.1)   | 3.63 (92.2)   | 15/16 | 0.26 (6.6)                   | 25/32 (19.8)                |
|   | 6 mm     | -QC4-S1-6M0  | -QC4-D1-6M0  | 2.74 (69.6)   | 2.80 (71.1)   | 16 mm | 0.25 (6.4)                   | 29/64 (11.5)                |
|   | 10 mm    | -QC6-S1-10M0   | -QC6-D1-10M0                                       | 3.06 (77.7)   | 3.10 (78.7)   | 22 mm | 0.27 (6.9)                   | 21/32 (16.7)                |
|   | 12 mm    | -QC8-S1-12M0   | -QC8-D1-12M0                                       | 3.43 (87.1)   | 3.63 (92.2)   | 24 mm | 0.26 (6.6)                   | 49/64 (19.4)                |

### How to Order

Select a basic ordering number and add a material designator.

| Material | Designator |
|----------|------------|
| 316 SS   | SS         |
| Brass    | B          |

Example: **SS-QC4-S-200**

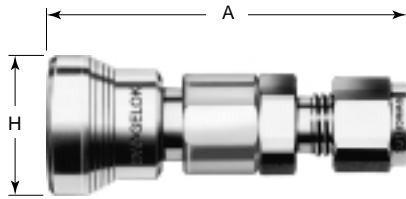
Other end connections may be available from the factory as two-piece components. Contact your independent Swagelok sales and service representative for information.






### Insertion Depth

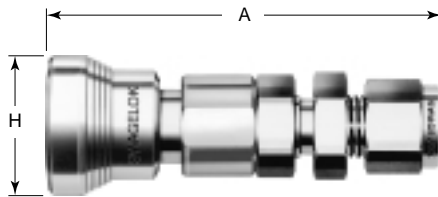
| Series | Depth, in. (mm) |             |
|--------|-----------------|-------------|
|        | SESO            | DESO        |
| QC4    | 1.09 (27.7)     | 1.15 (29.2) |
| QC6    | 1.18 (30.0)     | 1.30 (33.0) |
| QC8    | 1.48 (37.6)     | 1.68 (42.7) |


Dimensions are for reference only and are subject to change.

**Bodies**



| End Connection   |             | Basic Ordering Number | A<br>in. (mm) | H<br>in. (mm) |
|--|-------------|-----------------------|---------------|---------------|
| Type   | Size<br>in. |                       |               |               |
| Swagelok tube fitting<br> | 1/8         | -QC4-B-200            | 2.26 (57.4)   | 0.91 (23.1)   |
|  | 1/4         | -QC4-B-400            | 2.30 (58.4)   | 0.91 (23.1)   |
|  | 3/8         | -QC6-B-600            | 2.58 (65.5)   | 1.03 (26.2)   |
|  | 1/2         | -QC8-B-810            | 3.09 (78.5)   | 1.21 (30.7)   |
|  | 6 mm        | -QC4-B-6M0            | 2.30 (58.4)   | 0.91 (23.1)   |
|  | 10 mm       | -QC6-B-10M0           | 2.68 (68.1)   | 1.03 (26.2)   |
| 12 mm  | -QC8-B-12M0 | 3.09 (78.5)           | 1.21 (30.7)   |               |
| Male NPT<br>              | 1/8         | -QC4-B-2PM            | 2.01 (51.1)   | 0.91 (23.1)   |
|  | 1/4         | -QC4-B-4PM            | 2.16 (54.9)   | 0.91 (23.1)   |
|  | 1/4         | -QC6-B-4PM            | 2.38 (60.5)   | 1.03 (26.2)   |
|  | 3/8         | -QC6-B-6PM            | 2.38 (60.5)   | 1.03 (26.2)   |
|  | 1/2         | -QC8-B-8PM            | 2.97 (75.4)   | 1.21 (30.7)   |
| Male ISO tapered<br>      | 1/4         | -QC4-B-4MT            | 2.16 (54.9)   | 0.91 (23.1)   |
|  | 3/8         | -QC6-B-6MT            | 2.38 (60.5)   | 1.03 (26.2)   |
|  | 1/2         | -QC8-B-8MT            | 2.97 (75.4)   | 1.21 (30.7)   |
| Female NPT<br>            | 1/8         | -QC4-B-2PF            | 2.16 (54.9)   | 0.91 (23.1)   |
|  | 1/4         | -QC4-B-4PF            | 2.42 (61.5)   | 0.91 (23.1)   |
|  | 1/4         | -QC6-B-4PF            | 2.54 (64.5)   | 1.03 (26.2)   |
|  | 3/8         | -QC6-B-6PF            | 2.57 (65.3)   | 1.03 (26.2)   |
|  | 1/2         | -QC8-B-8PF            | 3.22 (81.8)   | 1.21 (30.7)   |
| Female ISO tapered<br>  | 1/4         | -QC4-B-4FT            | 2.42 (61.5)   | 0.91 (23.1)   |
|  | 3/8         | -QC6-B-6FT            | 2.57 (65.3)   | 1.03 (26.2)   |
|  | 1/2         | -QC8-B-8FT            | 3.22 (81.8)   | 1.21 (30.7)   |



| End Connection  |             | Basic Ordering Number | A<br>in. (mm) | H<br>in. (mm) | Max Panel Thickness<br>in. (mm) | Min Panel Hole Dia<br>in. (mm) |
|---|-------------|-----------------------|---------------|---------------|---------------------------------|--------------------------------|
| Type  | Size<br>in. |                       |               |               |                                 |                                |
| Swagelok bulkhead tube fitting<br> | 1/4         | -QC4-B1-400           | 2.67 (67.8)   | 0.91 (23.1)   | 0.25 (6.4)                      | 15/32 (11.9)                   |
|   | 3/8         | -QC6-B1-600           | 2.98 (75.7)   | 1.03 (26.2)   | 0.27 (6.9)                      | 19/32 (15.1)                   |
|   | 1/2         | -QC8-B1-810           | 3.56 (90.4)   | 1.21 (30.7)   | 0.26 (6.6)                      | 25/32 (19.8)                   |
|   | 6 mm        | -QC4-B1-6M0           | 2.67 (67.8)   | 0.91 (23.1)   | 0.25 (6.4)                      | 15/32 (11.9)                   |
|   | 10 mm       | -QC6-B1-10M0          | 2.99 (75.9)   | 1.03 (26.2)   | 0.27 (6.9)                      | 21/32 (16.7)                   |
|   | 12 mm       | -QC8-B1-12M0          | 3.56 (90.4)   | 1.21 (30.7)   | 0.26 (6.6)                      | 49/64 (19.4)                   |

**How to Order a Full-Flow Quick-Connect**

A full-flow QC series quick-connect consists of a SESO stem and a full-flow body.

To order a SESO stem, select a basic ordering number and add a material designator.

Example: **SS-QC4-S-200**

To order a full-flow body, select a basic ordering number and add a material designator and **MB**.

Example: **SS-QC4-B-200MB**

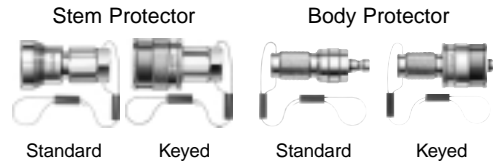
Dimensions are for reference only and are subject to change.

**Options**

For keyed combinations see page 12.

**Stem and Body Protectors**

Stem and body protectors guard against damage and contaminants when bodies and stems are uncoupled. Protectors are not pressure-containing devices; for pressure-retaining protectors, contact your independent Swagelok representative.



**Materials**

| Component      | Material                      |
|----------------|-------------------------------|
| Protector      | 316 SS or plated brass C36000 |
| Lanyard        | 302 SS                        |
| Lanyard clamps | 303 SS                        |

| Series | Basic Ordering Number |                |
|--------|-----------------------|----------------|
|        | Stem Protector        | Body Protector |
| QC4    | -QC4-SP               | -QC4-BP        |
| QC6    | -QC6-SP               | -QC6-BP        |
| QC8    | -QC8-SP               | -QC8-BP        |

To order, select a basic ordering number and add **SS** for stainless steel or **B** for brass.

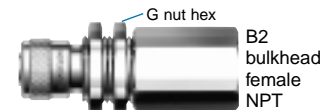
Example: **SS-QC4-SP**

**Keyed Protectors**

To order a keyed protector, add a key designator from the table on page 12 to the ordering number.

Example: **SS-QC4-SPK1**

**Bulkhead Bodies with Two Panel Nuts**



**Dimensions**

| Series | G<br>in. | Max Panel Thickness<br>in. (mm) | Min Panel Hole Dia<br>in. (mm) |
|--------|----------|---------------------------------|--------------------------------|
| QC4    | 7/8      | 0.20 (5.1)                      | 23/32 (18.3)                   |
| QC6    | 15/16    | 0.25 (6.4)                      | 27/32 (21.4)                   |
| QC8    | 1 1/8    | 0.31 (7.9)                      | 1 1/32 (26.2)                  |

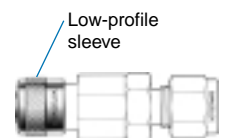
To order, insert **B2** in place of **B** in the ordering number. Example: **SS-QC4-B2-400**

B2 style bulkhead body is available only with low-profile IS sleeve.

**Low-Profile Sleeve**

This option is available for use in areas where space is limited. To order, add **IS** to the ordering number.

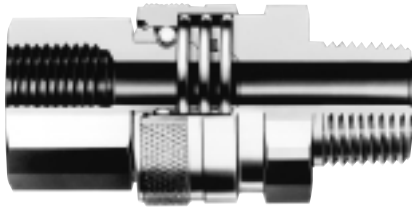
Example: **SS-QC4-B-400IS**



## Full Flow Quick-Connects QF Series

### Features

- Compact coupling offers full flow without orifice restrictions.
- O-ring is easily replaced without disassembling body.



← Bidirectional flow →

### Materials of Construction

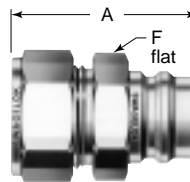
| Component                        | Material                 |              |
|----------------------------------|--------------------------|--------------|
|                                  | 316 SS                   | Brass        |
| Body, stem                       | 316 SS                   | Brass C36000 |
| Spring, snap ring, locking balls | 316 SS                   |              |
| Sleeve                           | 316 SS                   | Brass C36000 |
| O-ring                           | Fluorocarbon FKM         | Buna N       |
| Lubricants                       | Silicone- and PTFE-based |              |

Wetted components listed in *italics*.

Other O-ring materials and lubricants available.

### Ordering Information and Dimensions

#### Stems










#### How to Order

Select a basic ordering number and add a material designator.

| Material | Designator |
|----------|------------|
| 316 SS   | SS         |
| Brass    | B          |

Example: **SS-QF4-S-400**

| End Connection                 | Type  | Size, in. | Basic Ordering Number | C <sub>v</sub> | A<br>in. (mm) | F<br>in. | Min Orifice<br>in. (mm) |
|--------------------------------|---|-----------|-----------------------|----------------|---------------|----------|-------------------------|
|                                |   |           |                       |                |               |          |                         |
| Swagelok tube fitting          |  | 1/4       | -QF4-S-400            | 2.2            | 1.77 (45.0)   | 9/16     | 0.19 (4.8)              |
|                                |   | 3/8       | -QF4-S-600            | 2.8            | 1.77 (45.0)   | 11/16    | 0.24 (6.1)              |
|                                |   | 3/8       | -QF8-S-600            | 2.9            | 1.88 (47.8)   | 7/8      | 0.28 (7.1)              |
|                                |   | 1/2       | -QF8-S-810            | 13.0           | 1.99 (50.5)   | 7/8      | 0.41 (10.4)             |
|                                |   | 3/4       | -QF12-S-1210          | 26.0           | 2.15 (54.6)   | 1 1/16   | 0.62 (15.7)             |
|                                |   | 1         | -QF16-S-1610          | 45.0           | 2.45 (62.2)   | 1 3/8    | 0.88 (22.4)             |
|                                |   | 6 mm      | -QF4-S-6M0            | 2.2            | 1.77 (45.0)   | 9/16     | 0.19 (4.8)              |
| Male NPT                       |  | 1/4       | -QF4-S-4PM            | 1.7            | 1.59 (40.4)   | 9/16     | 0.24 (6.1)              |
|                                |   | 3/8       | -QF4-S-6PM            | 1.7            | 1.59 (40.4)   | 11/16    | 0.24 (6.1)              |
|                                |   | 3/8       | -QF8-S-6PM            | 7.1            | 1.59 (40.4)   | 7/8      | 0.41 (10.4)             |
|                                |   | 1/2       | -QF8-S-8PM            | 11.5           | 1.84 (46.7)   | 7/8      | 0.50 (12.7)             |
|                                |   | 3/4       | -QF12-S-12PM          | 23.6           | 2.03 (51.6)   | 1 1/16   | 0.72 (18.3)             |
|                                |   | 1         | -QF16-S-16PM          | 39.0           | 2.35 (59.7)   | 1 3/8    | 0.88 (22.4)             |
| Male ISO tapered               |  | 1/4       | -QF4-S-4MT            | 1.7            | 1.59 (40.4)   | 9/16     | 0.24 (6.1)              |
|                                |   | 1/2       | -QF8-S-8MT            | 11.5           | 1.84 (46.7)   | 7/8      | 0.50 (12.7)             |
|                                |   | 1         | -QF16-S-16MT          | 39.0           | 2.35 (59.7)   | 1 3/8    | 0.88 (22.4)             |
| Male ISO parallel <sup>①</sup> |  | 1/4       | -QF4-S-4MS            | 1.7            | 1.60 (40.6)   | 3/4      | 0.24 (6.1)              |
|                                |   | 1/2       | -QF8-S-8MS            | 11.5           | 1.82 (46.2)   | 1 1/16   | 0.50 (12.7)             |
| Female NPT                     |  | 1/4       | -QF4-S-4PF            | 1.7            | 1.60 (40.6)   | 3/4      | 0.24 (6.1)              |
|                                |   | 3/8       | -QF4-S-6PF            | 1.7            | 1.67 (42.4)   | 7/8      | 0.24 (6.1)              |
|                                |   | 3/8       | -QF8-S-6PF            | 7.1            | 1.59 (40.4)   | 1 1/16   | 0.47 (11.9)             |
|                                |   | 1/2       | -QF8-S-8PF            | 11.5           | 1.82 (46.2)   | 1 1/16   | 0.50 (12.7)             |
|                                |   | 3/4       | -QF12-S-12PF          | 23.6           | 2.08 (52.8)   | 1 5/16   | 0.72 (18.3)             |
| 1                              | -QF16-S-16PF  | 39.0      | 2.49 (63.2)           | 1 5/8          | 0.88 (22.4)   |          |                         |
| Female ISO parallel            |  | 1/4       | -QF4-S-4FS            | 1.7            | 1.60 (40.6)   | 3/4      | 0.24 (6.1)              |
|                                |   | 1/2       | -QF8-S-8FS            | 11.5           | 1.82 (46.2)   | 1 1/16   | 0.50 (12.7)             |
| Female ISO tapered             |  | 1/4       | -QF4-S-4FT            | 1.7            | 1.60 (40.6)   | 3/4      | 0.24 (6.1)              |
|                                |   | 1/2       | -QF8-S-8FT            | 11.5           | 1.82 (46.2)   | 1 1/16   | 0.50 (12.7)             |

Dimensions are for reference only and are subject to change.

① Include a female 60° cone profile. They accept a 60° male cone with female swivel nut.



## Pressure-Temperature Ratings

| Temperature<br>°F (°C)                           | 316 SS<br>with Fluorocarbon FKM<br>O-rings |               |               |               | Brass<br>with Buna N<br>O-rings |     |      |      |
|--|--|---------------|---------------|---------------|---------------------------------|-----|------|------|
|  | QF4  | QF8           | QF12          | QF16          | QF4                             | QF8 | QF12 | QF16 |
|  | Pressure Rating, coupled, psig (bar)       |               |               |               |                                 |     |      |      |
| 70 (20)  | 6000<br>(413)                              | 4000<br>(275) | 4000<br>(275) | 3000<br>(206) | 2000<br>(137)                   |     |      |      |
| 250 (121) <sup>①</sup><br>400 (204) <sup>②</sup> | 100<br>(6.8)                               |               |               |               |                                 |     |      |      |

① For brass with Buna A O-rings.

② For 316 SS with fluorocarbon FKM O-rings.

## Insertion Depth

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

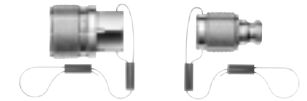
**⚠ Warning: Do not uncouple under pressure.**

## Options

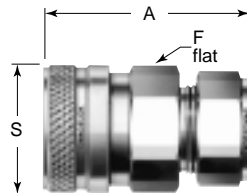
### Stem and Body Protectors








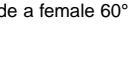
Stem and body protectors guard against damage and contaminants when bodies and stems are uncoupled. Protectors are not pressure-containing devices; for pressure-retaining protectors, contact your independent Swagelok representative.

Stem Protector Body Protector



## Bodies



| End Connection   |   | Basic Ordering Number | A<br>in. (mm) | F<br>in.    | S<br>in. (mm) | Min Orifice<br>in. (mm) |
|--|---|-----------------------|---------------|-------------|---------------|-------------------------|
| Type   | Size, in.   |                       |               |             |               |                         |
| Swagelok tube fitting<br> | 1/4   | -QF4-B-400            | 1.80 (45.7)   | 11/16       | 0.87 (22.1)   | 0.19 (4.8)              |
|  | 3/8   | -QF4-B-600            | 1.81 (46.0)   | 11/16       | 0.87 (22.1)   | 0.28 (7.1)              |
|  | 3/8   | -QF8-B-600            | 2.17 (55.1)   | 1 1/16      | 1.30 (33.0)   | 0.28 (7.1)              |
|  | 1/2   | -QF8-B-810            | 2.23 (56.6)   | 1 1/16      | 1.30 (33.0)   | 0.47 (11.9)             |
|  | 3/4   | -QF12-B-1210          | 2.45 (62.2)   | 1 1/2       | 1.66 (42.2)   | 0.62 (15.7)             |
|  | 1   | -QF16-B-1610          | 2.75 (69.9)   | 1 11/16     | 1.88 (47.8)   | 0.88 (22.4)             |
|  | 6 mm  | -QF4-B-6M0            | 1.80 (45.7)   | 11/16       | 0.87 (22.1)   | 0.19 (4.8)              |
| Male NPT<br>              | 1/4   | -QF4-B-4PM            | 1.57 (39.9)   | 11/16       | 0.87 (22.1)   | 0.25 (6.4)              |
|  | 3/8   | -QF4-B-6PM            | 1.57 (39.9)   | 11/16       | 0.87 (22.1)   | 0.37 (9.4)              |
|  | 3/8   | -QF8-B-6PM            | 1.83 (46.5)   | 1 1/16      | 1.30 (33.0)   | 0.41 (10.4)             |
|  | 1/2   | -QF8-B-8PM            | 2.08 (52.8)   | 1 1/16      | 1.30 (33.0)   | 0.50 (12.7)             |
|  | 3/4   | -QF12-B-12PM          | 2.33 (59.2)   | 1 1/2       | 1.66 (42.2)   | 0.72 (18.3)             |
| Male ISO tapered<br>      | 1   | -QF16-B-16PM          | 2.65 (67.3)   | 1 11/16     | 1.88 (47.8)   | 0.88 (22.4)             |
|  | Male ISO parallel <sup>①</sup><br> | 1/4                   | -QF4-B-4MS    | 1.80 (45.7) | 3/4           | 0.87 (22.1)             |
| 1/2  |   | -QF8-B-8MS            | 2.08 (52.8)   | 1 11/16     | 1.30 (33.0)   | 0.50 (12.7)             |
| Female NPT<br>            |   | 1/4                   | -QF4-B-4PF    | 1.50 (38.1) | 3/4           | 0.87 (22.1)             |
|  | 3/8   | -QF4-B-6PF            | 1.63 (41.4)   | 7/8         | 0.87 (22.1)   | 0.38 (9.7)              |
|  | 3/8   | -QF8-B-6PF            | 1.73 (43.9)   | 1 1/16      | 1.30 (33.0)   | 0.59 (15.0)             |
|  | 1/2   | -QF8-B-8PF            | 1.73 (43.9)   | 1 1/16      | 1.30 (33.0)   | 0.63 (16.0)             |
|  | 3/4   | -QF12-B-12PF          | 1.89 (48.0)   | 1 1/2       | 1.66 (42.2)   | 0.88 (22.4)             |
| Female ISO parallel<br>   | 1   | -QF16-B-16PF          | 2.12 (53.8)   | 1 11/16     | 1.88 (47.8)   | 1.06 (26.9)             |
|  | Female ISO tapered<br>             | 1/4                   | -QF4-B-4FS    | 1.50 (38.1) | 3/4           | 0.87 (22.1)             |
| 1/2  |   | -QF8-B-8FS            | 1.73 (43.9)   | 1 11/16     | 1.30 (33.0)   | 0.63 (16.0)             |
| Female ISO tapered<br>    | 1/4   | -QF4-B-4FT            | 1.50 (38.1)   | 3/4         | 0.87 (22.1)   | 0.38 (9.7)              |
|  | 1/2   | -QF8-B-8FT            | 1.73 (43.9)   | 1 11/16     | 1.30 (33.0)   | 0.63 (16.0)             |

① Include a female 60° cone profile. They accept a 60° male cone with female swivel nut.

## Materials

| Component      | Material                      |
|----------------|-------------------------------|
| Protector      | 316 SS or plated brass C36000 |
| Lanyard        | 302 SS                        |
| Lanyard clamps | 303 SS                        |

| Series | Basic Ordering Number |                |
|--------|-----------------------|----------------|
|        | Stem Protector        | Body Protector |
| QF4    | -QF4-SP               | -QF4-BP        |
| QF8    | -QF8-SP               | -QF8-BP        |
| QF12   | -QF12-SP              | -QF12-BP       |
| QF16   | -QF16-SP              | -QF16-BP       |

To order, select a basic ordering number and add **SS** for 316 stainless steel or **B** for brass.

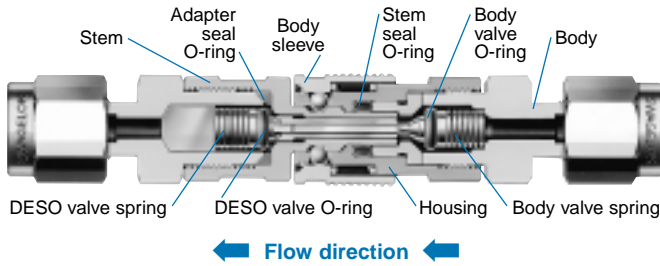
Example: **SS-QF4-SP**

Dimensions are for reference only and are subject to change.

## Miniature Quick-Connects QM Series

### Features

- Lightweight, compact design offers fingertip operation.
- Low dead volume reduces spillage and air inclusion.



### Spillage and Air Inclusion

0.1 cm<sup>3</sup>

### Maximum Flow Rate

1 U.S. gal/min  
(3.8 L/min) water  
at 70°F (20°C)

### Insertion Depth

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

### Materials of Construction

| Component   | Material                 |              |
|---|--------------------------|--------------|
|   | 316 SS                   | Brass        |
| <i>Body, body insert, DESO adapter, stem, body valve, DESO valve, housing</i> | 316 SS                   | Brass C36000 |
| <i>SESO stem insert, valve stop</i>   |                          | Brass C26000 |
| <i>DESO stem fin, springs</i>   | 316 SS                   |              |
| <i>O-rings</i>  | Fluorocarbon FKM         | Buna N       |
| <i>Sleeve</i>   | 316 SS                   | Brass C36000 |
| <i>Locking balls, snap rings</i>  | 316 SS                   |              |
| <i>Lubricants</i>   | Silicone- and PTFE-based |              |

Wetted components listed in *italics*.  
Other O-ring materials and lubricants available.

### Ordering Information and Dimensions

#### Stems



#### How to Order

Select a basic ordering number and a material designator.  
Example: **SS-QM2-S-100**

| Material | Designator |
|----------|------------|
| 316 SS   | SS         |
| Brass    | B          |

| End Connection               |           | Basic Ordering Number   |   | C <sub>v</sub> |      |           | A                |                  |          |
|------------------------------|-----------|---|---|----------------|------|-----------|------------------|------------------|----------|
| Type                         | Size, in. | SESO<br><small>(Stem has no valve; remains open when uncoupled)</small> | DESO<br><small>(Stem has valve; shuts off when uncoupled)</small> | SESO           | DESO | Full Flow | SESO<br>in. (mm) | DESO<br>in. (mm) | F<br>in. |
| Swagelok tube fitting (SESO) | 1/16      | -QM2-S-100  | -QM2-D-100  | 0.06           | 0.05 | 0.06      | 1.18 (30.0)      | 1.76 (44.7)      | 7/16     |
|                              | 1/8       | -QM2-S-200  | -QM2-D-200  | 0.06           | 0.05 | 0.06      | 1.29 (32.8)      | 1.87 (47.5)      | 7/16     |
| Male NPT (SESO)              | 1/16      | -QM2-S-1PM  | -QM2-D-1PM  | 0.06           | 0.05 | 0.06      | 1.03 (26.2)      | 1.61 (40.9)      | 7/16     |
|                              | 1/8       | -QM2-S-2PM  | -QM2-D-2PM  | 0.06           | 0.05 | 0.06      | 1.03 (26.2)      | 1.61 (40.9)      | 7/16     |
| Female NPT (SESO)            | 1/16      | -QM2-S-1PF  | -QM2-D-1PF  | 0.06           | 0.05 | 0.06      | 1.03 (26.2)      | 1.61 (40.9)      | 7/16     |
|                              | 1/8       | -QM2-S-2PF  | -QM2-D-2PF  | 0.06           | 0.05 | 0.06      | 1.03 (26.2)      | 1.81 (46.0)      | 9/16     |

#### How to Order a Full-Flow Quick-Connect

A full-flow QM series quick-connect consists of a SESO stem and a full-flow body.

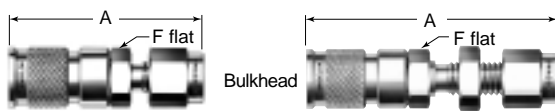
To order a SESO stem, select a basic ordering number and add a material designator.

Example: **SS-QM2-S-200**

To order a full-flow body, select a basic ordering number and add a material designator and **MB**.

Example:  
**SS-QM2-B-200MB**

#### Bodies



Dimensions are for reference only and are subject to change.

| End Connection                              |           | Basic Ordering Number | A<br>in. (mm) | F<br>in. |
|---|-----------|-----------------------|---------------|----------|
| Type  | Size, in. |                       |               |          |
| Swagelok tube fitting                       | 1/16      | -QM2-B-100            | 1.50 (38.1)   | 7/16     |
|   | 1/8       | -QM2-B-200            | 1.70 (43.2)   | 7/16     |
| Male NPT                                    | 1/16      | -QM2-B-1PM            | 1.42 (36.1)   | 7/16     |
|   | 1/8       | -QM2-B-2PM            | 1.44 (36.6)   | 7/16     |
| Female NPT                                  | 1/16      | -QM2-B-1PF            | 1.43 (36.3)   | 7/16     |
|   | 1/8       | -QM2-B-2PF            | 1.62 (41.1)   | 9/16     |
| Swagelok bulkhead <sup>①</sup> tube fitting | 1/8       | -QM2-B1-200           | 2.09 (53.1)   | 7/16     |

### Pressure-Temperature Ratings

| Temperature<br>°F (°C)                                    | 316 SS with Fluorocarbon FKM O-rings | Brass with Buna N O-rings |
|---|--------------------------------------|---------------------------|
|   | Pressure Rating, coupled, psig (bar) |                           |
| 70 (20)   | 4000 (275)                           | 2000 (137)                |
| 250 (121) <sup>①</sup><br>400 (204) <sup>②</sup>          | 100 (6.8)                            |                           |
| Pressure Rating, uncoupled, psig (bar)                    |                                      |                           |
| 70 (20)   | 100 (6.8)                            |                           |
| Pressure Rating, when coupling and uncoupling, psig (bar) |                                      |                           |
| 70 (20)   | 100 (6.8)                            |                           |

① For brass with Buna N O-rings.

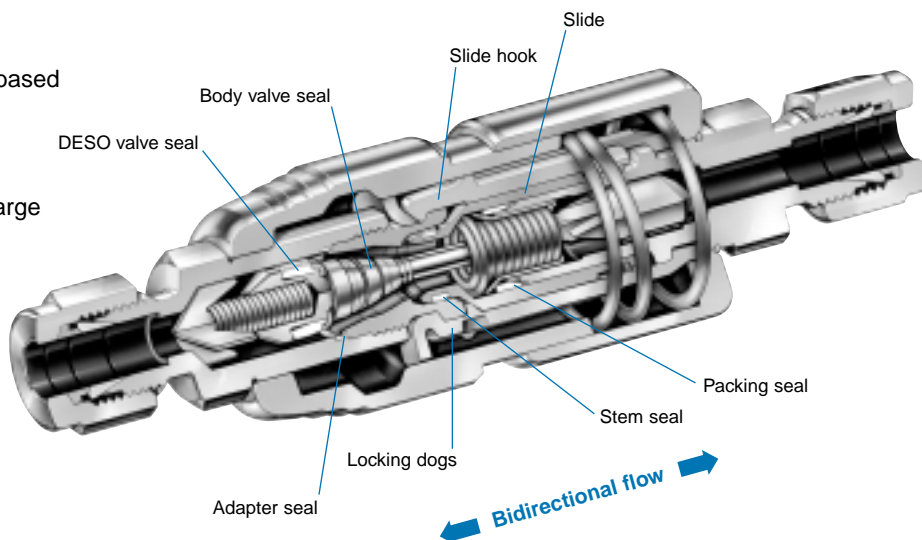
② For 316 SS with fluorocarbon FKM O-rings.



## PTFE-Sealed Quick-Connects QTM Series

### Features

- Product qualification tests are based on ANSI B93.51M.
- Flush valve design reduces air inclusion and spillage.
- Locking dog mechanism with large contact area retains stem.
- Seals are recessed for protection.
- Keyed option is available.
- Push-to-connect design enables quick, simple operation.



### Materials of Construction

| Component  | Material   |   |
|--|--|---|
|  | 316 SS   | Alloy 400                                 |
| Body   | <i>Xylan-coated</i><br>316 SS                      | <i>Xylan-coated</i><br><i>alloy R-405</i> |
| Slide, stem, stem adapter, body valve, DESO valve                        | 316 SS   | <i>Alloy R-405</i>                        |
| Packing gland, body bolt, body valve cap, DESO valve cap, DESO stem fins |  | <i>Alloy 400/R-405</i>                    |
| Eyelet, body insert, DESO valve post                                     |  | —   |
| Snap rings   |  | <i>Alloy X-740</i>                        |
| Body fin (QTM4 only)   | <i>PTFE-coated 316 SS</i><br><i>powdered metal</i> | —   |
| Springs  | <i>316 SS and</i><br><i>Elgiloy®</i>               | <i>Alloy X-740 and</i><br><i>Elgiloy</i>  |
| Packing seal, stem seal, adapter seal                                    | <i>Dyneon™ TFM 1600</i>                            |   |
| Body valve seal, DESO valve seal   | <i>Virgin PTFE</i>                                 |   |
| Packing backup ring  | Filled PTFE  |   |
| Locking dogs   | 316 SS or CF8M                                     | M-35-1                                    |
| Rear sleeve, front sleeve  | 316 SS   | Alloy R-405                               |
| Slide hooks  |  | Alloy 400/R-405                           |
| Lubricants   | <i>PTFE-based</i>                                  |   |

Wetted components listed in *italics*.

### Pressure-Temperature Ratings

| Temperature<br>°F (°C)                                    | 316 SS                               |               |             | Alloy 400      |
|---|--------------------------------------|---------------|-------------|----------------|
|   | QTM2                                 | QTM4          | QTM8        | QTM2           |
|   | Pressure Rating, coupled, psig (bar) |               |             |                |
| 0 to 120<br>(-17 to 48)                                   | 4500<br>(310)                        | 3200<br>(220) |             | 3200<br>(220)  |
| Pressure Rating, uncoupled, psig (bar)                    |                                      |               |             |                |
| 0 to 120<br>(-17 to 48)                                   | 1000<br>(68.9)                       |               |             | 1000<br>(68.9) |
| Pressure Rating, when coupling and uncoupling, psig (bar) |                                      |               |             |                |
| 70 (20)   | 250<br>(17.2)                        | 100<br>(6.8)  | 50<br>(3.4) | 250<br>(17.2)  |

### Spillage and Air Inclusion

| Series | Spillage            | Air Inclusion       |
|--------|---------------------|---------------------|
| QTM2   | 0.1 cm <sup>3</sup> | 0.1 cm <sup>3</sup> |
| QTM4   | 0.2 cm <sup>3</sup> | 0.4 cm <sup>3</sup> |
| QTM8   | 1.0 cm <sup>3</sup> | 2.0 cm <sup>3</sup> |

### Maximum Flow Rate

U.S. gal/min (L/min) water at 70°F (20°C)

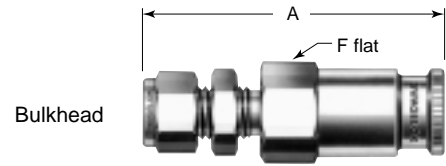
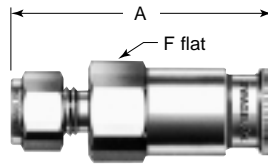
| QTM2    | QTM4     | QTM8     |
|---------|----------|----------|
| 15 (56) | 35 (130) | 50 (180) |

### Insertion Depth

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









## Ordering Information and Dimensions, QTM Series

### Stems




### How to Order

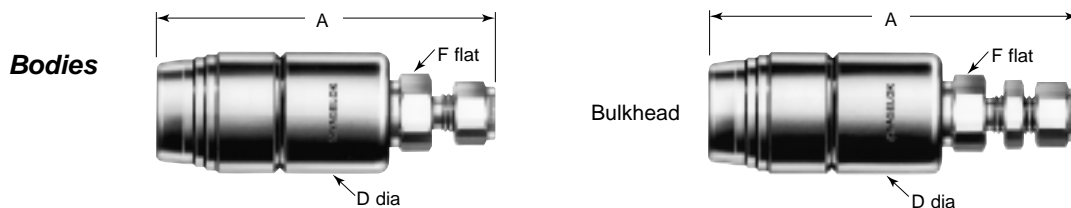
Select an ordering number.







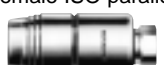

| End Connection  |             | Ordering Number  |  | C <sub>v</sub> |      | A<br>in. (mm) | F<br>in. |
|---|-------------|--|--|----------------|------|---------------|----------|
| Type  | Size<br>in. | SESO<br>(Stem has no valve; remains open when uncoupled) | DESO<br>(Stem has valve; shuts off when uncoupled) | SESO           | DESO |               |          |
| Swagelok tube fitting<br>            | 1/4         | SS-QTM2-S-400 <sup>①</sup>                               | SS-QTM2-D-400 <sup>①</sup>                         | 0.7            | 0.6  | 2.02 (51.3)   | 5/8      |
|   | 1/4         | SS-QTM4-S-400  | SS-QTM4-D-400                                      | 0.9            | 0.8  | 2.61 (66.3)   | 15/16    |
|   | 3/8         | SS-QTM2-S-600  | SS-QTM2-D-600                                      | 0.9            | 0.8  | 2.08 (52.8)   | 11/16    |
|   | 3/8         | SS-QTM4-S-600  | SS-QTM4-D-600                                      | 1.7            | 1.6  | 2.67 (67.8)   | 15/16    |
|   | 1/2         | SS-QTM8-S-810  | SS-QTM8-D-810                                      | 4.2            | 3.1  | 3.06 (77.7)   | 1 5/16   |
|   | 3/4         | SS-QTM8-S-1210   | SS-QTM8-D-1210                                     | 6.7            | 6.5  | 3.06 (77.7)   | 1 5/16   |
|   | 1           | SS-QTM8-S-1610   | SS-QTM8-D-1610                                     | 9.0            | 7.8  | 3.27 (83.1)   | 1 3/8    |
|   | 6 mm        | SS-QTM2-S-6M0 <sup>①</sup>                               | SS-QTM2-D-6M0 <sup>①</sup>                         | 0.7            | 0.6  | 2.02 (51.3)   | 16 mm    |
|   | 6 mm        | SS-QTM4-S-6M0  | SS-QTM4-D-6M0                                      | 0.9            | 0.8  | 2.61 (66.3)   | 24 mm    |
|   | 8 mm        | SS-QTM2-S-8M0  | SS-QTM2-D-8M0                                      | 0.9            | 0.8  | 2.09 (53.1)   | 11/16    |
|   | 10 mm       | SS-QTM4-S-10M0   | SS-QTM4-D-10M0                                     | 1.7            | 1.6  | 2.68 (68.1)   | 24 mm    |
|   | 12 mm       | SS-QTM8-S-12M0   | SS-QTM8-D-12M0                                     | 4.2            | 3.1  | 3.06 (77.7)   | 35 mm    |
| Male NPT<br>                         | 1/4         | SS-QTM2-S-4PM <sup>①</sup>                               | SS-QTM2-D-4PM <sup>①</sup>                         | 0.2            | 0.2  | 1.91 (48.5)   | 5/8      |
|   | 1/4         | SS-QTM4-S-4PM  | SS-QTM4-D-4PM                                      | 1.4            | 1.4  | 2.46 (62.5)   | 15/16    |
|   | 3/8         | SS-QTM2-S-6PM  | SS-QTM2-D-6PM                                      | 0.7            | 0.6  | 2.04 (51.8)   | 3/4      |
|   | 3/8         | SS-QTM4-S-6PM  | SS-QTM4-D-6PM                                      | 1.8            | 1.7  | 2.46 (62.5)   | 15/16    |
|   | 1/2         | SS-QTM8-S-8PM  | SS-QTM8-D-8PM                                      | 5.1            | 4.4  | 2.78 (70.6)   | 1 5/16   |
|   | 3/4         | SS-QTM8-S-12PM   | SS-QTM8-D-12PM                                     | 8.5            | 7.8  | 2.78 (70.6)   | 1 5/16   |
| Male ISO tapered<br>                 | 1/4         | SS-QTM2-S-4MT  | SS-QTM2-D-4MT                                      | 0.2            | 0.2  | 1.91 (48.5)   | 5/8      |
|   | 1/4         | SS-QTM4-S-4MT  | SS-QTM4-D-4MT                                      | 1.4            | 1.4  | 2.46 (62.5)   | 15/16    |
|   | 1/2         | SS-QTM8-S-8MT  | SS-QTM8-D-8MT                                      | 5.1            | 4.4  | 2.78 (70.6)   | 1 5/16   |
| Male ISO parallel <sup>③</sup><br> | 1/8         | SS-QTM2-S-2MS  | SS-QTM2-D-2MS                                      | 0.5            | 0.4  | 1.73 (43.9)   | 5/8      |
|   | 1/4         | SS-QTM2-S-4MS  | SS-QTM2-D-4MS                                      | 0.6            | 0.6  | 2.04 (51.8)   | 3/4      |
|   | 1/4         | SS-QTM4-S-4MS  | SS-QTM4-D-4MS                                      | 1.2            | 1.2  | 2.48 (63.0)   | 15/16    |
|   | 1/2         | SS-QTM8-S-8MS  | SS-QTM8-D-8MS                                      | 4.8            | 3.9  | 2.78 (70.6)   | 1 5/16   |
| Male JIC 37° flare<br>             | 1/4         | SS-QTM4-S-4AN  | SS-QTM4-D-4AN                                      | ②              | ②    | 2.48 (63.0)   | 15/16    |
|   | 1/2         | SS-QTM8-S-8AN  | SS-QTM8-D-8AN                                      | 4.2            | 2.7  | 2.78 (70.6)   | 1 5/16   |
| Female NPT<br>                     | 1/8         | SS-QTM2-S-2PF  | SS-QTM2-D-2PF                                      | 0.7            | 0.7  | 1.73 (43.9)   | 5/8      |
|   | 1/4         | SS-QTM2-S-4PF <sup>①</sup>                               | SS-QTM2-D-4PF <sup>①</sup>                         | 0.2            | 0.2  | 2.04 (51.8)   | 3/4      |
|   | 1/4         | SS-QTM4-S-4PF  | SS-QTM4-D-4PF                                      | 1.4            | 1.4  | 2.36 (59.9)   | 15/16    |
|   | 3/8         | SS-QTM2-S-6PF  | SS-QTM2-D-6PF                                      | 0.7            | 0.6  | 2.14 (54.4)   | 7/8      |
|   | 3/8         | SS-QTM4-S-6PF  | SS-QTM4-D-6PF                                      | 1.8            | 1.7  | 2.48 (63.0)   | 15/16    |
|   | 1/2         | SS-QTM8-S-8PF  | SS-QTM8-D-8PF                                      | 5.1            | 4.4  | 2.66 (67.6)   | 1 5/16   |
|   | 3/4         | SS-QTM8-S-12PF   | SS-QTM8-D-12PF                                     | 8.5            | 7.8  | 2.66 (67.6)   | 1 5/16   |
| Female ISO parallel<br>            | 1/8         | SS-QTM2-S-2FS  | SS-QTM2-D-2FS                                      | 0.5            | 0.4  | 1.73 (43.9)   | 5/8      |
|   | 1/4         | SS-QTM2-S-4FS  | SS-QTM2-D-4FS                                      | 0.6            | 0.6  | 2.04 (51.8)   | 3/4      |
|   | 1/4         | SS-QTM4-S-4FS  | SS-QTM4-D-4FS                                      | 1.2            | 1.2  | 2.62 (66.5)   | 5/16     |
|   | 1/2         | SS-QTM8-S-8FS  | SS-QTM8-D-8FS                                      | 4.8            | 3.9  | 2.66 (67.6)   | 1 5/16   |
| Female ISO tapered<br>             | 1/4         | SS-QTM2-S-4FT  | SS-QTM2-D-4FT                                      | 0.2            | 0.2  | 2.04 (51.8)   | 3/4      |
|   | 1/4         | SS-QTM4-S-4FT  | SS-QTM4-D-4FT                                      | 1.4            | 1.4  | 2.36 (59.9)   | 5/16     |
|   | 1/2         | SS-QTM8-S-8FT  | SS-QTM8-D-8FT                                      | 5.1            | 4.4  | 2.66 (67.6)   | 1 5/16   |

- ① To order alloy 400 with PTFE seals, replace **SS** in the ordering number with **M**.  
Example: **M-QTM2-S-400**
- ② For C<sub>v</sub>, contact your independent Swagelok representative.
- ③ Include a female 60° cone profile. They accept a 60° male cone with female swivel nut.

| End Connection  |             | Ordering Number  |  | C <sub>v</sub> |      | A<br>in. (mm) | F<br>in. | Max Panel Thickness<br>in. (mm) | Min Panel Hole Dia<br>in. (mm) |
|---|-------------|--|--|----------------|------|---------------|----------|---------------------------------|--------------------------------|
| Type  | Size<br>in. | SESO<br>(Stem has no valve; remains open when uncoupled) | DESO<br>(Stem has valve; shuts off when uncoupled) | SESO           | DESO |               |          |                                 |                                |
| Swagelok bulkhead tube fitting<br> | 1/4         | SS-QTM4-S1-400   | SS-QTM4-D1-400                                     | 0.9            | 0.8  | 3.05 (77.5)   | 15/16    | 0.15 (3.8)                      | 29/64 (11.5)                   |
|   | 3/8         | SS-QTM4-S1-600   | SS-QTM4-D1-600                                     | 1.7            | 1.6  | 3.05 (77.5)   | 15/16    | 0.15 (3.8)                      | 37/64 (14.7)                   |
|   | 1/2         | SS-QTM8-S1-810   | SS-QTM8-D1-810                                     | 4.2            | 3.1  | 3.54 (89.9)   | 1 5/16   | 0.19 (4.8)                      | 49/64 (19.4)                   |
|   | 6 mm        | SS-QTM4-S1-6M0   | SS-QTM4-D1-6M0                                     | 0.9            | 0.8  | 3.05 (77.5)   | 24 mm    | 0.15 (3.8)                      | 29/64 (11.5)                   |
|   | 10 mm       | SS-QTM4-S1-10M0  | SS-QTM4-D1-10M0                                    | 1.7            | 1.6  | 3.06 (77.7)   | 24 mm    | 0.15 (3.8)                      | 21/32 (16.7)                   |
|   | 12 mm       | SS-QTM8-S1-12M0  | SS-QTM8-D1-12M0                                    | 4.2            | 3.1  | 3.54 (89.9)   | 35 mm    | 0.19 (4.8)                      | 49/64 (19.4)                   |

Dimensions are for reference only and are subject to change.



| End Connection   |                 | Ordering Number             | A<br>in. (mm) | D<br>in. (mm) | F<br>in. |
|--|-----------------|-----------------------------|---------------|---------------|----------|
| Type   | Size, in.       |                             |               |               |          |
| Swagelok tube fitting<br>           | 1/4             | SS-QTM2A-B-400 <sup>①</sup> | 3.16 (80.3)   | 1.12 (28.4)   | 9/16     |
|  | 1/4             | SS-QTM4A-B-400              | 4.08 (104)    | 1.68 (42.7)   | 7/8      |
|  | 3/8             | SS-QTM2A-B-600              | 3.25 (82.6)   | 1.12 (28.4)   | 3/4      |
|  | 3/8             | SS-QTM4A-B-600              | 4.08 (104)    | 1.68 (42.7)   | 7/8      |
|  | 1/2             | SS-QTM8A-B-810              | 4.30 (109)    | 2.00 (50.8)   | 1 1/8    |
|  | 3/4             | SS-QTM8A-B-1210             | 4.30 (109)    | 2.00 (50.8)   | 1 1/8    |
|  | 1               | SS-QTM8A-B-1610             | 4.58 (116)    | 2.00 (50.8)   | 1 3/8    |
|  | 6 mm            | SS-QTM2A-B-6M0 <sup>①</sup> | 3.16 (80.3)   | 28.4 mm       | 15 mm    |
|  | 6 mm            | SS-QTM4A-B-6M0              | 4.08 (104)    | 42.7 mm       | 24 mm    |
|  | 8 mm            | SS-QTM2A-B-8M0              | 3.16 (80.3)   | 28.4 mm       | 15 mm    |
|  | 10 mm           | SS-QTM4A-B-10M0             | 4.09 (104)    | 42.7 mm       | 24 mm    |
| 12 mm  | SS-QTM8A-B-12M0 | 4.31 (109)                  | 50.8 mm       | 30 mm         |          |
| Male NPT<br>                        | 1/4             | SS-QTM2A-B-4PM <sup>①</sup> | 3.02 (76.7)   | 1.12 (28.4)   | 9/16     |
|  | 1/4             | SS-QTM4A-B-4PM              | 3.89 (98.8)   | 1.68 (42.7)   | 7/8      |
|  | 3/8             | SS-QTM2A-B-6PM              | 3.07 (78.0)   | 1.12 (28.4)   | 3/4      |
|  | 3/8             | SS-QTM4A-B-6PM              | 3.89 (98.8)   | 1.68 (42.7)   | 7/8      |
|  | 1/2             | SS-QTM8A-B-8PM              | 4.20 (107)    | 2.00 (50.8)   | 1 1/8    |
|  | 3/4             | SS-QTM8A-B-12PM             | 4.19 (106)    | 2.00 (50.8)   | 1 1/8    |
| Male ISO tapered<br>                | 1/4             | SS-QTM2A-B-4MT              | 3.02 (76.7)   | 28.4 mm       | 9/16     |
|  | 1/4             | SS-QTM4A-B-4MT              | 3.89 (98.8)   | 42.7 mm       | 7/8      |
|  | 1/2             | SS-QTM8A-B-8MT              | 4.20 (107)    | 50.8 mm       | 1 1/8    |
| Male ISO parallel <sup>②</sup><br> | 1/4             | SS-QTM2A-B-4MS              | 2.96 (75.2)   | 28.4 mm       | 3/4      |
|  | 1/4             | SS-QTM4A-B-4MS              | 3.89 (98.8)   | 42.7 mm       | 7/8      |
|  | 1/2             | SS-QTM8A-B-8MS              | 4.20 (107)    | 50.8 mm       | 1 1/8    |
| Male JIC 37° flare (AN)<br>       | 1/4             | SS-QTM4A-B-4AN              | 3.89 (98.8)   | 1.68 (42.7)   | 7/8      |
|  | 1/2             | SS-QTM8A-B-8AN              | 4.20 (107)    | 2.00 (50.8)   | 1 1/8    |
| Female NPT<br>                    | 1/8             | SS-QTM2A-B-2PF              | 2.60 (66.0)   | 1.12 (28.4)   | 9/16     |
|  | 1/4             | SS-QTM2A-B-4PF <sup>①</sup> | 2.99 (75.9)   | 1.12 (28.4)   | 3/4      |
|  | 1/4             | SS-QTM4A-B-4PF              | 3.35 (85.1)   | 1.68 (42.7)   | 7/8      |
|  | 3/8             | SS-QTM2A-B-6PF              | 3.04 (77.2)   | 1.12 (28.4)   | 7/8      |
|  | 3/8             | SS-QTM4A-B-6PF              | 3.35 (85.1)   | 1.68 (42.7)   | 7/8      |
|  | 1/2             | SS-QTM8A-B-8PF              | 3.53 (89.7)   | 2.00 (50.8)   | 1 1/8    |
|  | 3/4             | SS-QTM8A-B-12PF             | 4.02 (102)    | 2.00 (50.8)   | 1 5/16   |
| Female ISO parallel<br>           | 1/8             | SS-QTM2A-B-2FS              | 2.60 (66.0)   | 1.12 (28.4)   | 9/16     |
|  | 1/4             | SS-QTM2A-B-4FS              | 2.99 (75.9)   | 1.12 (28.4)   | 3/4      |
|  | 1/4             | SS-QTM4A-B-4FS              | 3.35 (85.1)   | 1.68 (42.7)   | 7/8      |
|  | 1/2             | SS-QTM8A-B-8FS              | 3.53 (89.7)   | 2.00 (50.8)   | 1 1/8    |
| Female ISO tapered<br>            | 1/4             | SS-QTM2A-B-4FT              | 2.99 (75.9)   | 1.12 (28.4)   | 3/4      |
|  | 1/4             | SS-QTM4A-B-4FT              | 3.35 (85.1)   | 1.68 (42.7)   | 7/8      |
|  | 1/4             | SS-QTM8A-B-8FT              | 3.92 (99.6)   | 2.00 (50.8)   | 1 1/8    |

**Options**

For keyed combinations, see page 12.

**Bodies with Release Button**


QTM series bodies are available with an optional release button to prevent accidental uncoupling.

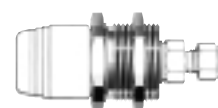
For more information, contact your independent Swagelok representative.

① To order alloy 400 with PTFE seals, replace **SS** in the ordering number with **M**.  
Example: **M-QTM2A-B-400**

② Include a female 60° cone profile. They accept a 60° male cone with female swivel nut.

Dimensions are for reference only and are subject to change.

| End Connection  |                  | Ordering Number              | A<br>in. (mm) | D<br>in. (mm) | F<br>in.   | Max Panel<br>Thickness<br>in. (mm) | Min Panel<br>Hole Dia<br>in. (mm) |
|---|------------------|------------------------------|---------------|---------------|------------|------------------------------------|-----------------------------------|
| Type  | Size, in.        |                              |               |               |            |                                    |                                   |
| Swagelok bulkhead tube fitting<br> | 1/4              | SS-QTM2A-B1-400 <sup>①</sup> | 3.16 (80.3)   | 1.12 (28.4)   | 9/16       | 0.65 (16.5)                        | 1 13/64 (30.6)                    |
|   | 1/4              | SS-QTM4A-B1-400              | 4.42 (112)    | 1.68 (42.7)   | 7/8        | 0.15 (3.8)                         | 29/64 (11.5)                      |
|   | 3/8              | SS-QTM4A-B1-600              | 4.51 (115)    | 1.68 (42.7)   | 7/8        | 0.15 (3.8)                         | 37/64 (14.7)                      |
|   | 1/2              | SS-QTM8A-B1-810              | 4.78 (121)    | 2.00 (50.8)   | 1 1/8      | 0.19 (4.8)                         | 49/64 (19.4)                      |
|   | 6 mm             | SS-QTM2A-B1-6M0 <sup>①</sup> | 3.16 (80.3)   | 28.4 mm       | 15 mm      | 0.65 (16.5)                        | 1 13/64 (30.6)                    |
|   | 6 mm             | SS-QTM4A-B1-6M0              | 4.42 (112)    | 42.7 mm       | 24 mm      | 0.15 (3.8)                         | 29/64 (11.5)                      |
|   | 10 mm            | SS-QTM4A-B1-10M0             | 4.52 (115)    | 42.7 mm       | 24 mm      | 0.15 (3.8)                         | 21/32 (16.7)                      |
| 12 mm   | SS-QTM8A-B1-12M0 | 4.77 (121)                   | 50.8 mm       | 30 mm         | 0.19 (4.8) | 49/64 (19.4)                       |                                   |
| Bulkhead male NPT   | 1/4              | SS-QTM2A-B1-4PM <sup>①</sup> | 3.02 (76.7)   | 1.12 (28.4)   | 9/16       | 0.65 (16.5)                        | 1 13/64 (30.6)                    |
| Bulkhead female NPT   | 1/4              | SS-QTM2A-B1-2PF              | 2.60 (66.0)   | 1.12 (28.4)   | 9/16       | 0.65 (16.5)                        | 1 13/64 (30.6)                    |
|   | 1/8              | SS-QTM2A-B1-4PF <sup>①</sup> | 2.96 (75.2)   | 1.12 (28.4)   | 3/4        | 0.65 (16.5)                        | 1 13/64 (30.6)                    |



QTM2 bulkhead bodies have an integral bulkhead.

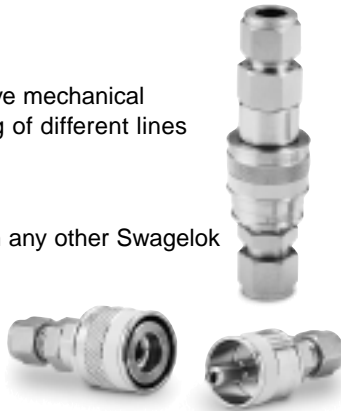
## Options

### Keyed QC and QTM Series

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

#### Features

- Keyed quick-connects will not interchange with any other Swagelok 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.



### QC Series Key Numbers and Sleeve Outside Diameters

for use in calculating alignment positions when panel mounting

| Key Number and Color | QC4                  |                      | QC6                  |                      | QC8                  |                      |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                      | Body Sleeve in. (mm) | Stem Sleeve in. (mm) | Body Sleeve in. (mm) | Stem Sleeve in. (mm) | Body Sleeve in. (mm) | Stem Sleeve 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)          |

For other dimensions, see page 4 and 5.

### QTM Series Key Numbers

QTM2 series quick-connects are available in keys K1 through K8.

QTM4 and QTM8 series quick-connects are available in keys K1 through K4 only (black, orange, green, or yellow).

Keyed QTM series sleeve dimensions are the same as standard QTM sleeve dimensions. (See the tables on page 10 and 11.)

#### How to Order

Add a key designator to the QC or QTM series ordering number.

Example: SS-QC4-B-200K1

### Body and Stem Protectors

Body and stem protectors are available. Contact your independent Swagelok representative.

Dimensions are for reference only and are subject to change.

## Good Practices for Operation of Swagelok Quick-Connects

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

### Warning:

Pressure rating restrictions apply when coupling and uncoupling. Do not uncouple single-end shutoff quick-connects under pressure.

### Caution:

- Do not rotate quick-connects while coupled.
- Do not insert foreign objects into uncoupled bodies or stems.

## ISO Reference Specification

ISO 7/1 (tapered)

ISO 228/1 (straight)

Specifications can be obtained from:

ANSI (American National Standards Institute)  
25 W. 43rd Street  
New York, NY U.S.A. 10036

or

[www.ansi.org](http://www.ansi.org)

#### Safe Product Selection

**When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.**

**Caution: Do not mix or interchange parts with those of other manufacturers.**