

# Full Flow Quick-connects

QC2 Series

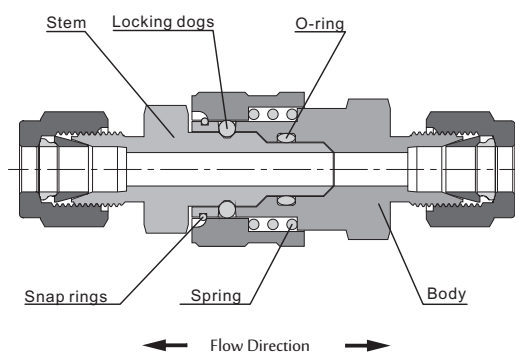


- ❖ Full flow without orifice restrictions
- ❖ Maximum working pressure up to 6000 psig (413 bar)
- ❖ Working temperature from -10°F to 400°F (-23°C to 204°C)
- ❖ O-ring is easily replaced without disassembling body
- ❖ Stainless steel and brass

## Features

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- ❖ Maximum working pressure up to 6000 psig (413 bar)
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## Materials of Construction

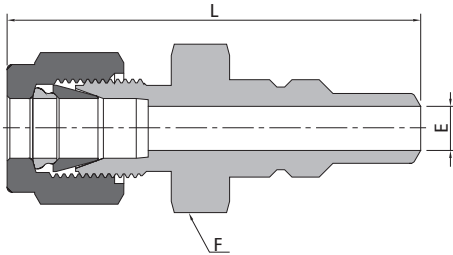


| Component    | Material         |              |
|--------------|------------------|--------------|
|              | 316 S.S.         | Brass        |
| Body, stem   | 316 S.S.         | Brass C36000 |
| O-rings      | Fluorocarbon FKM | Buna N       |
| Springs      | 316 S.S.         |              |
| Snap rings   |                  |              |
| Locking ball |                  |              |

## Pressure-Temperature Ratings

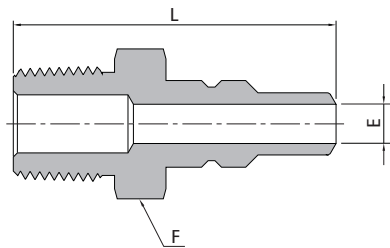
| Material               | 316 S.S.                      |            |            |            | Brass      |            |            |            |
|------------------------|-------------------------------|------------|------------|------------|------------|------------|------------|------------|
|                        | -4 Series                     | -8 Series  | -12 Series | -16 Series | -4 Series  | -8 Series  | -12 Series | -16 Series |
| Temperature<br>°F (°C) | Pressure Rating<br>psig (bar) |            |            |            |            |            |            |            |
| Coupled                |                               |            |            |            |            |            |            |            |
| -10 (23)               | 6000 (413)                    | 6000 (413) | 4000 (275) | 4000 (275) | 4000 (275) | 3000 (206) | 2000 (137) | 2000 (137) |
| 70 (20)                | 6000 (413)                    | 6000 (413) | 4000 (275) | 4000 (275) | 4000 (275) | 3000 (206) | 2000 (137) | 2000 (137) |
| 250 (121)              | 100 (6.8)                     | 100 (6.8)  | 100 (6.8)  | 100 (6.8)  | 100 (6.8)  | 100 (6.8)  | 100 (6.8)  | 100 (6.8)  |
| 400 (204)              | 100 (6.8)                     | 100 (6.8)  | 100 (6.8)  | 100 (6.8)  | 100 (6.8)  | 100 (6.8)  | 100 (6.8)  | 100 (6.8)  |

## Stems



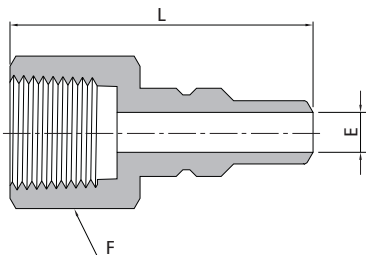
### Tube Fitting

| Tube Size<br>in. | Basic<br>Ordering<br>Number | Flow<br>Coefficient<br>(Cv) | E<br>in. (mm) | F<br>in. | L<br>in. (mm) |
|------------------|-----------------------------|-----------------------------|---------------|----------|---------------|
| 1/4              | QC2-4-F4-S-                 | 2.2                         | 0.19 (4.8)    | 9/16     | 1.77 (45.0)   |
| 3/8              | QC2-4-F6-S-                 | 2.8                         | 0.24 (6.1)    | 11/16    | 1.77 (45.0)   |
| 3/8              | QC2-8-F6-S-                 | 2.8                         | 0.28 (7.1)    | 7/8      | 1.88 (47.8)   |
| 1/2              | QC2-8-F8-S-                 | 13.0                        | 0.41 (10.4)   | 7/8      | 1.99 (50.5)   |
| 3/4              | QC2-12-F12-S-               | 26.0                        | 0.62 (15.7)   | 1 1/16   | 2.15 (54.6)   |
| 1                | QC2-16-F16-S-               | 45.0                        | 0.88 (22.4)   | 1 3/8    | 2.45 (62.2)   |
| mm               | Basic<br>Ordering<br>Number | Flow<br>Coefficient<br>(Cv) | (mm) in.      | mm       | (mm) in.      |
| 6                | QC2-4-M6-S-                 | 2.2                         | 4.8 (0.19)    | 15       | 45.0 (1.77)   |
| 10               | QC2-8-M10-S-                | 2.8                         | 7.1 (0.28)    | 22       | 48.5 (1.91)   |
| 12               | QC2-8-M12-S-                | 13.0                        | 9.5 (0.37)    | 22       | 51.3 (2.02)   |
| 20               | QC2-12-M20-S-               | 26.0                        | 15.7 (0.62)   | 30       | 54.6 (2.15)   |
| 25               | QC2-16-M25-S-               | 45.0                        | 22.4 (0.88)   | 36       | 63.5 (2.50)   |



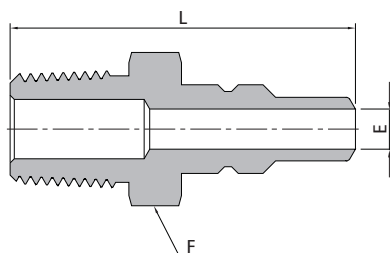
### Male NPT

| NPT Size | Basic<br>Ordering<br>Number | Flow<br>Coefficient<br>(Cv) | E<br>in. (mm) | F<br>in. | L<br>in. (mm) |
|----------|-----------------------------|-----------------------------|---------------|----------|---------------|
| 1/4      | QC2-4-NPT4-S-               | 1.7                         | 0.24 (6.1)    | 9/16     | 1.59 (40.4)   |
| 3/8      | QC2-4-NPT6-S-               | 1.7                         | 0.24 (6.1)    | 11/16    | 1.59 (40.4)   |
| 3/8      | QC2-8-NPT6-S-               | 7.1                         | 0.41 (10.4)   | 7/8      | 1.65 (41.9)   |
| 1/2      | QC2-8-NPT8-S-               | 11.5                        | 0.50 (12.7)   | 7/8      | 1.84 (46.7)   |
| 3/4      | QC2-12-NPT12-S-             | 23.6                        | 0.72 (18.3)   | 1 1/16   | 2.03 (51.6)   |
| 1        | QC2-16-NPT16-S-             | 39.0                        | 0.88 (22.4)   | 1 3/8    | 2.35 (59.7)   |



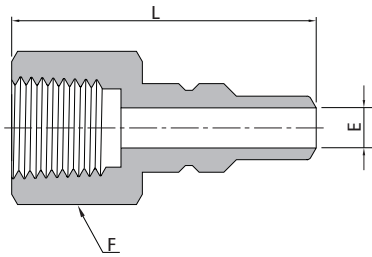
### Female NPT

| NPT Size | Basic<br>Ordering<br>Number | Flow<br>Coefficient<br>(Cv) | E<br>in. (mm) | F<br>in. | L<br>in. (mm) |
|----------|-----------------------------|-----------------------------|---------------|----------|---------------|
| 1/4      | QC2-4-FNPT4-S-              | 1.7                         | 0.24 (6.1)    | 3/4      | 1.60 (40.6)   |
| 3/8      | QC2-4-FNPT6-S-              | 1.7                         | 0.24 (6.1)    | 7/8      | 1.67 (42.4)   |
| 3/8      | QC2-8-FNPT6-S-              | 7.1                         | 0.41 (10.4)   | 1 1/16   | 1.59 (40.4)   |
| 1/2      | QC2-8-FNPT8-S-              | 11.5                        | 0.50 (12.7)   | 1 1/16   | 1.82 (46.2)   |
| 3/4      | QC2-12-FNPT12-S-            | 23.6                        | 0.72 (18.3)   | 1 5/16   | 2.08 (52.8)   |
| 1        | QC2-16-FNPT16-S-            | 39.0                        | 0.88 (22.4)   | 1 5/8    | 2.49 (63.2)   |



### Male BSPT

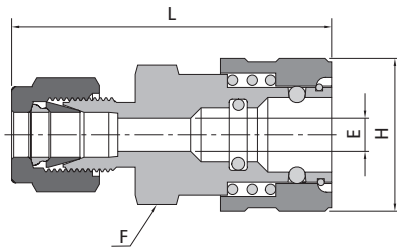
| BSPT Size | Basic<br>Ordering<br>Number | Flow<br>Coefficient<br>(Cv) | E<br>in. (mm) | F<br>in. | L<br>in. (mm) |
|-----------|-----------------------------|-----------------------------|---------------|----------|---------------|
| 1/4       | QC2-4-MBT4-S-               | 1.7                         | 0.24 (6.1)    | 9/16     | 1.59 (40.4)   |
| 3/8       | QC2-4-MBT6-S-               | 1.7                         | 0.24 (6.1)    | 11/16    | 1.59 (40.4)   |
| 3/8       | QC2-8-MBT6-S-               | 7.1                         | 0.41 (10.4)   | 7/8      | 1.65 (41.9)   |
| 1/2       | QC2-8-MBT8-S-               | 11.5                        | 0.50 (12.7)   | 7/8      | 1.84 (46.7)   |
| 3/4       | QC2-12-MBT12-S-             | 23.6                        | 0.72 (18.3)   | 1 1/16   | 2.03 (51.6)   |
| 1         | QC2-16-MBT16-S-             | 39.0                        | 0.88 (22.4)   | 1 3/8    | 2.35 (59.7)   |



### Female BSPT

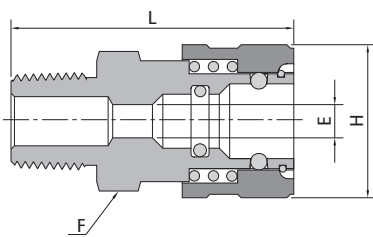
| BSPT Size | Basic Ordering Number | Flow Coefficient (Cv) | E           | F      | L           |
|-----------|-----------------------|-----------------------|-------------|--------|-------------|
|           |                       |                       | in. (mm)    | in.    | in. (mm)    |
| 1/4       | QC2-4-FBT4-S-         | 1.7                   | 0.24 (6.1)  | 3/4    | 1.60 (40.6) |
| 3/8       | QC2-4-FBT6-S-         | 1.7                   | 0.24 (6.1)  | 7/8    | 1.67 (42.4) |
| 3/8       | QC2-8-FBT6-S-         | 7.1                   | 0.41 (10.4) | 1 1/16 | 1.59 (40.4) |
| 1/2       | QC2-8-FBT8-S-         | 11.5                  | 0.50 (12.7) | 1 1/16 | 1.82 (46.2) |
| 3/4       | QC2-12-FBT12-S-       | 23.6                  | 0.72 (18.3) | 1 5/16 | 2.08 (52.8) |
| 1         | QC2-16-FBT16-S-       | 39.0                  | 0.88 (22.4) | 1 5/8  | 2.49 (63.2) |

### Bodies



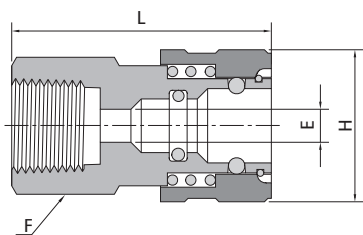
### Tube Fitting

| Tube Size | Basic Ordering Number | E           | F       | H           | L           |
|-----------|-----------------------|-------------|---------|-------------|-------------|
|           |                       | in. (mm)    | in.     | in. (mm)    | in. (mm)    |
| 1/4       | QC2-4-F4-B-           | 0.19 (4.8)  | 11/16   | 0.87 (22.1) | 1.80 (45.7) |
| 3/8       | QC2-4-F6-B-           | 0.28 (7.1)  | 11/16   | 0.87 (22.1) | 1.81 (46.0) |
| 3/8       | QC2-8-F6-B-           | 0.28 (7.1)  | 1 1/16  | 1.30 (33.0) | 2.17 (55.1) |
| 1/2       | QC2-8-F8-B-           | 0.47 (11.9) | 1 1/16  | 1.30 (33.0) | 2.23 (56.6) |
| 3/4       | QC2-12-F12-B-         | 0.62 (15.7) | 1 1/2   | 1.66 (42.2) | 2.45 (62.2) |
| 1         | QC2-16-F16-B-         | 0.88 (22.4) | 1 11/16 | 1.88 (47.8) | 2.75 (69.9) |
| mm        | Basic Ordering Number | (mm) in.    | mm      | (mm) in.    | (mm) in.    |
| 6         | QC2-4-M6-B-           | 4.8 (0.19)  | 18      | 22.1 (0.87) | 45.7 (1.80) |
| 10        | QC2-8-M10-B-          | 7.1 (0.28)  | 27      | 33.0 (1.30) | 55.9 (2.20) |
| 12        | QC2-8-M12-B-          | 10.4 (0.41) | 27      | 33.0 (1.30) | 57.4 (2.26) |
| 20        | QC2-12-M20-B-         | 15.9 (0.63) | 38      | 42.2 (1.66) | 63.5 (2.50) |
| 25        | QC2-16-M25-B-         | 21.8 (0.86) | 46      | 47.8 (1.88) | 70.0 (2.76) |



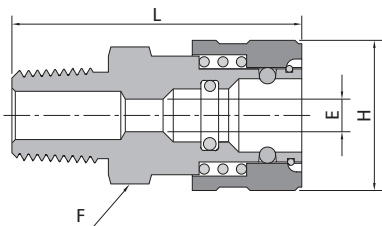
### Male NPT

| NPT Size | Basic Ordering Number | E           | F       | H           | L           |
|----------|-----------------------|-------------|---------|-------------|-------------|
|          |                       | in. (mm)    | in.     | in. (mm)    | in. (mm)    |
| 1/4      | QC2-4-NPT4-B-         | 0.25 (6.4)  | 11/16   | 0.87 (22.1) | 1.57 (39.9) |
| 3/8      | QC2-4-NPT6-B-         | 0.37 (9.4)  | 11/16   | 0.87 (22.1) | 1.57 (39.9) |
| 3/8      | QC2-8-NPT6-B-         | 0.41 (10.4) | 1 1/16  | 1.30 (33.0) | 1.83 (46.5) |
| 1/2      | QC2-8-NPT8-B-         | 0.50 (12.7) | 1 1/16  | 1.30 (33.0) | 2.08 (52.8) |
| 3/4      | QC2-12-NPT12-B-       | 0.72 (18.3) | 1 1/2   | 1.66 (42.2) | 2.33 (59.2) |
| 1        | QC2-16-NPT16-B-       | 0.88 (22.4) | 1 11/16 | 1.88 (47.8) | 2.65 (67.3) |



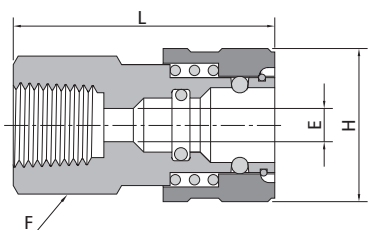
### Female NPT

| NPT Size | Basic Ordering Number | E           | F       | H           | L           |
|----------|-----------------------|-------------|---------|-------------|-------------|
|          |                       | in. (mm)    | in.     | in. (mm)    | in. (mm)    |
| 1/4      | QC2-4-FNPT4-B-        | 0.38 (9.7)  | 3/4     | 0.87 (22.1) | 1.50 (38.1) |
| 3/8      | QC2-4-FNPT6-B-        | 0.38 (9.7)  | 7/8     | 0.87 (22.1) | 1.63 (41.4) |
| 3/8      | QC2-8-FNPT6-B-        | 0.59 (15.0) | 1 1/16  | 1.30 (33.0) | 1.73 (43.9) |
| 1/2      | QC2-8-FNPT8-B-        | 0.63 (16.0) | 1 1/16  | 1.30 (33.0) | 1.73 (43.9) |
| 3/4      | QC2-12-FNPT12-B-      | 0.88 (22.4) | 1 1/2   | 1.66 (42.2) | 1.89 (48.0) |
| 1        | QC2-16-FNPT16-B-      | 1.06 (26.9) | 1 11/16 | 1.88 (47.8) | 2.12 (53.8) |



### Male BSPT

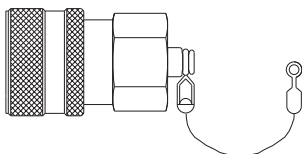
| BSPT Size | Basic Ordering Number | E           | F       | H           | L           |
|-----------|-----------------------|-------------|---------|-------------|-------------|
|           |                       | in. (mm)    | in.     | in. (mm)    | in. (mm)    |
| 1/4       | QC2-4-MBT4-B-         | 0.25 (6.4)  | 11/16   | 0.87 (22.1) | 1.57 (39.9) |
| 3/8       | QC2-4-MBT6-B-         | 0.37 (9.4)  | 11/16   | 0.87 (22.1) | 1.57 (39.9) |
| 3/8       | QC2-8-MBT6-B-         | 0.41 (10.4) | 1 1/16  | 1.30 (33.0) | 1.83 (46.5) |
| 1/2       | QC2-8-MBT8-B-         | 0.50 (12.7) | 1 1/16  | 1.30 (33.0) | 2.08 (52.8) |
| 3/4       | QC2-12-MBT12-B-       | 0.72 (18.3) | 1 1/2   | 1.66 (42.2) | 2.33 (59.2) |
| 1         | QC2-16-MBT16-B-       | 0.88 (22.4) | 1 11/16 | 1.88 (47.8) | 2.65 (67.3) |



### Female BSPT

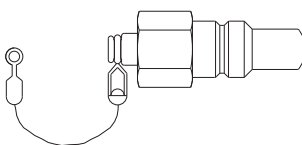
| BSPT Size | Basic Ordering Number | E           | F       | H           | L           |
|-----------|-----------------------|-------------|---------|-------------|-------------|
|           |                       | in. (mm)    | in.     | in. (mm)    | in. (mm)    |
| 1/4       | QC2-4-FBT4-B-         | 0.38 (9.7)  | 3/4     | 0.87 (22.1) | 1.50 (38.1) |
| 3/8       | QC2-4-FBT6-B-         | 0.38 (9.7)  | 7/8     | 0.87 (22.1) | 1.63 (41.4) |
| 3/8       | QC2-8-FBT6-B-         | 0.59 (15.0) | 1 1/16  | 1.30 (33.0) | 1.73 (43.9) |
| 1/2       | QC2-8-FBT8-B-         | 0.63 (16.0) | 1 1/16  | 1.30 (33.0) | 1.73 (43.9) |
| 3/4       | QC2-12-FBT12-B-       | 0.88 (22.4) | 1 1/2   | 1.66 (42.2) | 1.89 (48.0) |
| 1         | QC2-16-FBT16-B-       | 1.06 (26.9) | 1 11/16 | 1.88 (47.8) | 2.12 (53.8) |

### Body Protector



| Series | Basic Ordering Number |
|--------|-----------------------|
| -4     | QC2-4-BP-             |
| -8     | QC2-8-BP-             |
| -12    | QC2-12-BP-            |
| -16    | QC2-16-BP-            |

### Stem Protector



| Series | Basic Ordering Number |
|--------|-----------------------|
| -4     | QC2-4-SP-             |
| -8     | QC2-8-SP-             |
| -12    | QC2-12-SP-            |
| -16    | QC2-16-SP-            |

❖ To order a protector, add material designator (316 or Brass ) as a prefix to the basic ordering number.

Example: QC2-4-SP-316

## How to Order

**QC2 — 8 — F8 — BS — 316**

| Series | Size | End Connection Type               | End Connection Size        | Stem or Body          | Body Material        |
|--------|------|-----------------------------------|----------------------------|-----------------------|----------------------|
| QC2    | 4    | <b>FNPT</b> Female NPT            | <b>4</b> 1/4 in.           | <b>S</b> Stem         | <b>316</b> 316 S.S   |
|        | 8    | <b>NPT</b> Male NPT               | <b>6</b> 3/8 in. or 6 mm   | <b>B</b> Body         | <b>316L</b> 316L S.S |
|        | 12   | <b>FBT</b> Female BSPT            | <b>8</b> 1/2 in. or 8 mm   | <b>BS</b> Stem + Body | <b>304</b> 304 S.S   |
|        |      | <b>MBT</b> Male BSPT              | <b>10</b> 5/8 in. or 10 mm |                       |                      |
|        | 16   | <b>FMS</b> Female ISO 261         | <b>12</b> 3/4 in. or 12 mm |                       | <b>304L</b> 304L S.S |
|        |      | <b>MS</b> Male ISO 261 (for BG)   | <b>14</b> M14 x 1.5        |                       |                      |
|        |      | <b>F</b> Fractional Tube Fitting  | <b>16</b> 1 in. or 16 mm   |                       | <b>BR</b> Brass      |
|        |      | <b>M</b> Metric Tube Fitting      |                            |                       |                      |
|        |      | <b>MT</b> Metri Tube Adapter      |                            |                       |                      |
|        |      | <b>FT</b> Fractional Tube Adapter |                            |                       |                      |