
Quick Connectors

- SHQC Series
- SQC Series
- SFQC Series



Hydraulic Quick Connectors

SHQC Series

Features

- Large flow areas machined into the body of the socket and plug facilitate flow around the valve for a high flow capacity.
- Both socket and plug have automatic shut-off valve inside so that the fluid in the line will not flow out on disconnection.
- Various standard seal materials are available to suit a variety of fluids.
- In compliance with ISO 7241 series B standard.



Pressure Ratings

Brass with NBR O-ring

| Size (inch) | 1/8 | 1/4 | 3/8 | 1/2 | 3/4 | 1 | 1-1/4 | 1-1/2 | 2 |
|----------------------------|----------|-----|-----|----------|-----|---|----------|-------|----------|
| Working Pressure, psi(bar) | 725 (50) | | | 435 (30) | | | 290 (20) | | 218 (15) |

Stainless Steel 316 with Viton O-ring

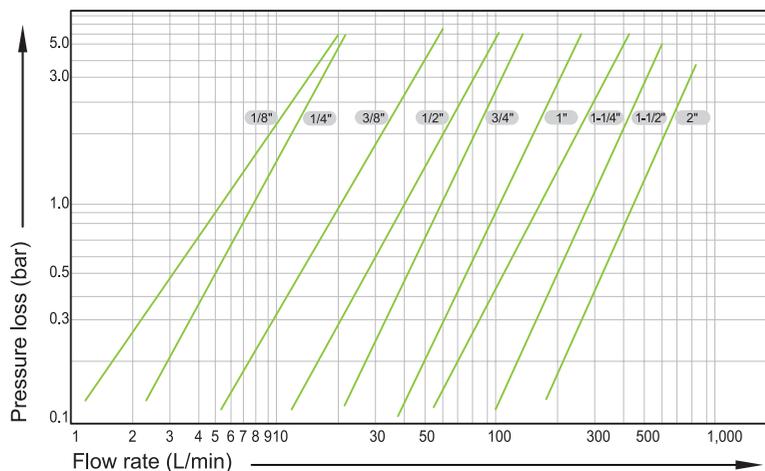
| Size (inch) | 1/8 | 1/4 | 3/8 | 1/2 | 3/4 | 1 | 1-1/4 | 1-1/2 | 2 |
|----------------------------|-----------|-----|-----|----------|-----|---|----------|-------|----------|
| Working Pressure, psi(bar) | 1000 (70) | | | 725 (50) | | | 560 (40) | | 435 (30) |

Temperature Range

| Seal Material | NBR | Viton | EPDM |
|-------------------|------------|-------------|-------------|
| Temperature Range | -20 ~ 80°C | -20 ~ 180°C | -40 ~ 150°C |

Flow Rate – Pressure Loss Characteristics

- Fluid : oil
- Temperature : 30±5 °C
- Fluid viscosity : 30 X 10⁻⁶ m²/s
- Density : 0.87 X 10³ kg/m³



- Components can limit the pressure and temperature ranges of the connector. Please consult BMT (SUPERLOK) sales representative for your specific application.

Instrumentation Quick Connectors

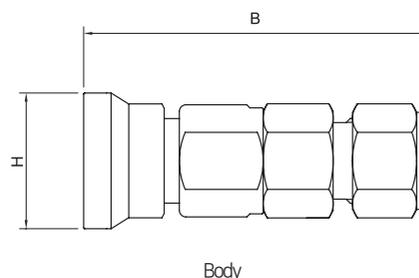
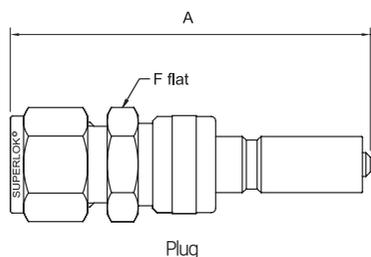
SQC Series

Features

- Simple push-pull action to connect and disconnect lines-no tools required.
- Plug and body are available valved or unvalved. Valves automatically open when connected and shut off when disconnected to minimize the loss of liquids or gases.



Table of Dimensions



Plug

| * Part No. | Cv | | End Connection | | A | | F | |
|--------------|--------------|--------|----------------|------|---------------------|----|------|------|
| | SO | DO | Type | | SO | DO | | |
| SQC1P -SO | SQC1P -DO | S2 | 0.08 | 0.08 | 1/8" Superlok | | 70.4 | 15.9 |
| | | S4 | | | 1/4" Superlok | | 61.5 | |
| | | S6M | | | 6mm Superlok | | | |
| | | M2N | 0.4 | 0.2 | 1/8" Male NPT | | 54.1 | |
| | | M4N(R) | | | 1/4" Male NPT(PT) | | 57.9 | |
| | | F2N | | | 1/8" Female NPT | | 52.6 | |
| | | F4N(R) | | | 1/4" Female NPT(PT) | | 58.9 | |
| SQC2P -SO | SQC2P -DO | S6 | 1.5 | 0.5 | 3/8" Superlok | | 67.1 | 19.1 |
| | | S10M | | | 10mm Superlok | | 70.4 | |
| | | M4N | | | 1/4" Male NPT | | 61.9 | |
| | | M6N(R) | 1.6 | 0.5 | 3/8" Male NPT(PT) | | | |
| | | F4N | 1.5 | 0.5 | 1/4" Female NPT | | 62.7 | |
| | | F6N(R) | 1.6 | 0.5 | 3/8" Female NPT(PT) | | | |
| SQC3P -SO | SQC3P -DO | S8 | 3.3 | 1.5 | 1/2" Superlok | | 80.3 | 23.8 |
| | | S12M | | | 12mm Superlok | | | |
| | | M8N(R) | 3.1 | 1.3 | 1/2" Male NPT(PT) | | 77.2 | |
| | | F8N(R) | | | 1/2" Female NPT(PT) | | 76.7 | |

Body

| Part No. | End Connection | | B | H |
|----------|----------------|---------------------|------|------|
| | Type | | | |
| SQC1B | S2 | 1/8" Superlok | 57.4 | 23.1 |
| | S4 | 1/4" Superlok | 58.4 | |
| | S6M | 6mm Superlok | | |
| | M2N | 1/8" Male NPT | 51.1 | |
| | M4N(R) | 1/4" Male NPT(PT) | 56.9 | |
| | F2N | 1/8" Female NPT | | |
| | F4N(R) | 1/4" Female NPT(PT) | 61.5 | |
| SQC2B | S6 | 3/8" Superlok | 65.5 | 26.2 |
| | S10M | 10mm Superlok | 68.1 | |
| | M4N | 1/4" Male NPT | 60.5 | |
| | M6N(R) | 3/8" Male NPT(PT) | | |
| | F4N | 1/4" Female NPT | 64.5 | |
| | F6N(R) | 3/8" Female NPT(PT) | 65.3 | |
| SQC3B | S8 | 1/2" Superlok | 78.5 | 30.7 |
| | S12M | 12mm Superlok | | |
| | M8N(R) | 1/2" Male NPT(PT) | 75.4 | |
| | F8N(R) | 1/2" Female NPT(PT) | 81.8 | |

* SO : Single shutoff type, DO : Double shutoff type

- Dimensions and Drawings are for reference only and are subject to change without prior notice.
- Unless otherwise specified, all dimensions are in millimeters.
- Sizes, pressure classes, and end connections not listed are available upon request.

Materials of Construction

| Component | Material |
|--------------------------------|------------|
| *Body | SS316/A276 |
| *Housing | |
| *Double shut off stem | |
| *Double shut off stem retainer | |
| *Body valve | |
| *Body insert | |
| *Single shut off stem retainer | |
| *O-ring | Viton |
| *Spring | SS304 |
| Body sleeve | SS316/A276 |
| Plug sleeve | |
| Locking Balls | |

* Wetted components

Pressure-Temperature Ratings

| Temperature °F (°C) | SQC 1 | SQC 2 | SQC 3 |
|------------------------|--------------------------------------|------------|------------|
| | Pressure Rating, coupled, psig (bar) | | |
| 70 (20) | 3000 (206) | 1500 (103) | 750 (51.6) |
| 400 (204) | 250 (17.2) | | |

• Rating based on 316 stainless steel material with Fluorocarbon FKM O-ring

Maximum Flow Rate Water at 70°F (20°C)

| Series | SQC 1 | SQC 2 | SQC 3 |
|-------------|-------|-------|-------|
| U.S gal/min | 4 | 6 | 10 |
| L/min | 15 | 22 | 37 |

Insertion Depth

| Series | Depth, in.(mm) | |
|--------|----------------|------------|
| | SO | DO |
| SQC 1 | 1.09(27.7) | 1.15(29.2) |
| SQC 2 | 1.18(30.0) | 1.30(33.0) |
| SQC 3 | 1.48(37.6) | 1.68(42.7) |

Overall Length

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

Spillage

Spillage is the amount of system fluid that escapes when a quick-connect is uncoupled (double shut off only)

| Series | Spillage |
|--------|---------------------|
| SQC 1 | 0.3 cm ³ |
| SQC 2 | 1.0 cm ³ |
| SQC 3 | 3.0 cm ³ |

Option

BODY & PLUG PROTECTOR

Body & Plug Protectors guard against damage and contaminants when body and plug are uncoupled.

| Series | Ordering Number | |
|--------|-----------------|----------------|
| | Body Protector | Plug Protector |
| SQC 1 | SQC1 - BP | SQC1 - PP |
| SQC 2 | SQC2 - BP | SQC2 - PP |
| SQC 3 | SQC3 - BP | SQC3 - PP |

Ordering Information

| | | | | | | | | |
|-----------|--------------|---|----------|----------|---|-----------|---|----------|
| Example : | SQC2P | - | S | 6 | - | DO | - | B |
| | <u>1</u> | | <u>2</u> | <u>3</u> | | <u>4</u> | | <u>5</u> |

1. Product Series

Body

- SQC1B
- SQC2B
- SQC3B

Plug

- SQC1P
- SQC2P
- SQC3P

2. End Connection

- S = SUPERLOK Tube Fitting
- F = Female Thread
- M = Male Thread

3. End Connection Size

Tube O.D Designator

| | | | |
|-----------------|-----|-----|-----|
| Tube O.D (inch) | 1/4 | 3/8 | 1/2 |
| Designator | 4 | 6 | 8 |
| Tube O.D (mm) | 6 | 10 | 12 |
| Designator | 6M | 10M | 12M |

Pipe Thread Designator

| | | | | |
|--------------|-----|-----|-----|-----|
| Size (inch) | 1/8 | 1/4 | 3/8 | 1/2 |
| Screwed BSPT | 2R | 4R | 6R | 8R |
| Screwed NPT | 2N | 4N | 6N | 8N |

4. Plug Type

- SO = Single Shutoff Type
- DO = Double Shutoff Type

5. Body Material

- (Blank) = 316 Stainless Steel
- B = Brass

Full Flow Quick Connectors

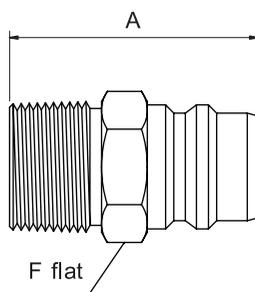
SFQC Series

Features

- Proven ball - lock mechanism provides positive connection.
- Simple push - pull action to connect and disconnect lines - no tools required.
- Compact coupling offers full flow without orifice restrictions.
- O-ring is easily replaced without disassembling body.



Table of Dimensions



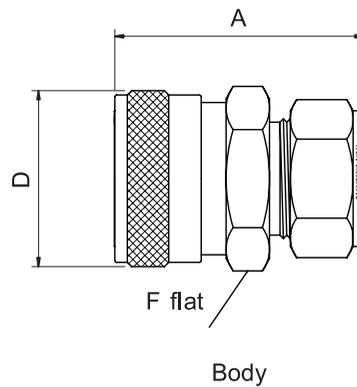
Plug

| Part No. | End Connection | | Cv | Min Orifice | A | F |
|----------|----------------|---------------------|------|-------------|------|------|
| | Type | | | | | |
| SFQC2P | S4 | 1/4" Superlok | 2.2 | 6.1 | 45.0 | 14.3 |
| | S6 | 3/8" Superlok | 2.8 | | | 17.5 |
| | M4N(R) | 1/4" Male NPT | 1.7 | | 40.4 | 14.3 |
| | M6N(R) | 3/8" Male NPT(PT) | | | | 17.5 |
| | M4G | 1/4" Male PF | | | 40.6 | 19.1 |
| | F4N(R) | 1/4" Female NPT(PT) | | | 42.4 | 22.2 |
| | F6N(R) | 3/8" Female NPT(PT) | | | 40.6 | 19.1 |
| | F4G | 1/4" Female PF | | | | |
| SFQC3P | S6 | 3/8" Superlok | 2.9 | 12.7 | 47.8 | 22.2 |
| | S8 | 1/2" Superlok | 13.0 | | 50.5 | |
| | M6N(R) | 3/8" Male NPT(PT) | 7.1 | | 41.9 | |
| | M8N(R) | 1/2" Male NPT(PT) | 11.5 | | 46.7 | |
| | M8G | 1/2" Male PF | 11.5 | | 46.2 | 27.0 |
| | F6N(R) | 3/8" Female NPT(PT) | 7.1 | | 40.4 | |
| | F8N(R) | 1/2" Female NPT(PT) | 11.5 | | 46.2 | |
| | F8G | 1/2" Female PF | 11.5 | | | |
| SFQC4P | S12 | 3/4" Superlok | 26.0 | 18.3 | 54.6 | 27.0 |
| | M12N(R) | 3/4" Male NPT(PT) | 23.6 | | 51.6 | |
| | F12N(R) | 3/4" Female NPT(PT) | | | 52.8 | 33.3 |
| SFQC5P | S16 | 1" Superlok | 45.0 | 22.4 | 62.2 | 34.9 |
| | M16N(R) | 1" Male NPT(PT) | 39.0 | | 59.7 | |
| | F16N(R) | 1" Female NPT(PT) | | | 63.2 | 41.3 |

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- Sizes, pressure classes, and end connections not listed are available upon request.



| Ordering Number | | End Connection | Cv | A | D | F |
|-----------------|---------|---------------------|------|------|------|------|
| Body Series | | Type | | | | |
| SFQC2B | S4 | 1/4" Superlok | 8 | 45.7 | 22.2 | 17.5 |
| | S6 | 3/8" Superlok | 7.1 | 46.0 | | |
| | M4N(R) | 1/4" Male NPT | 6.4 | 40.0 | | |
| | M6N(R) | 3/8" Male NPT(PT) | 9.4 | 40.0 | | |
| | M4G | 1/4" Male PF | 6.1 | 45.7 | 22.2 | 19.1 |
| | F4N(R) | 1/4" Female NPT(PT) | 9.7 | 38.1 | | |
| | F6N(R) | 3/8" Female NPT(PT) | | 41.4 | | |
| | F4G | 1/4" Female PF | | 38.1 | | |
| SFQC3B | S6 | 3/8" Superlok | | 7.1 | 55.1 | 33.0 |
| | S8 | 1/2" Superlok | 11.9 | 56.6 | | |
| | M6N(R) | 3/8" Male NPT(PT) | 10.4 | 46.5 | | |
| | M8N(R) | 1/2" Male NPT(PT) | 12.7 | 52.8 | | |
| | M8G | 1/2" Male PF | 11.9 | 52.8 | | |
| | F6N(R) | 3/8" Female NPT(PT) | 15.0 | 43.9 | | |
| | F8N(R) | 1/2" Female NPT(PT) | 16.0 | 43.9 | | |
| | F8G | 1/2" Female PF | | 43.9 | | |
| SFQC4B | S12 | 3/4" Superlok | 15.7 | 62.2 | 42.6 | 38.1 |
| | M12N(R) | 3/4" Male NPT(PT) | 18.3 | 59.2 | | |
| | F12N(R) | 3/4" Female NPT(PT) | 22.4 | 48.0 | | |
| SFQC5B | S16 | 1" Superlok | 22.4 | 70.0 | 49.0 | 44.5 |
| | M16N(R) | 1" Male NPT(PT) | | 67.3 | | |
| | F16N(R) | 1" Female NPT(PT) | | 53.8 | | |

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- Unless otherwise specified, all dimensions are in millimeters.

- Sizes, pressure classes, and end connections not listed are available upon request.

Materials of Construction

| Component | Material | |
|--------------|------------|-------------|
| | 316 SS | Brass |
| *Body | SS316/A276 | Brass / B16 |
| Sleeve | SS316/A276 | Brass / B16 |
| Locking ball | SS316/A276 | Brass / B16 |
| Spring | SS304 | SS304 |
| Sanp ring | SS304 | SS304 |
| *O - ring | Viton | NBR |
| *Plug | SS316/A276 | Brass / B16 |

* Wetted components

Pressure-Temperature Ratings

| Temperature °F (°C) | 316 SS with Viton O - ring | | | | Brass with NBR O - ring | | | |
|------------------------|--------------------------------------|--------|---------------|--------|-------------------------|--------|---------------|--------|
| | SFQC 2 | SFQC 3 | SFQC 4 | SFQC 5 | SFQC 2 | SFQC 3 | SFQC 4 | SFQC 5 |
| | Pressure Rating, coupled, psig (bar) | | | | | | | |
| 70 (20) | 6000 (413) | | 4000 (275) | | 4000 (275) | | 2000 (137) | |
| 250 (121) | | | | | 100 (6.8) | | | |
| 400 (204) | 100 (6.8) | | | | | | | |

Insertion Depth

| Series | Depth, in (mm) |
|--------|----------------|
| SFQC2 | 0.78 (19.8) |
| SFQC3 | 0.81 (20.6) |
| SFQC4 | 0.90 (23.0) |
| SFQC5 | 0.94 (23.9) |

Option

BODY & PLUG PROTECTOR

Body & Plug Protectors guard against damage and contaminants when bodies and plug are uncoupled.

| Series | Ordering Number | |
|--------|-----------------|----------------|
| | Body Protector | Plug Protector |
| SFQC 2 | SFQC2 - BP | SFQC2 - PP |
| SFQC 3 | SFQC3 - BP | SFQC3 - PP |
| SFQC 4 | SFQC4 - BP | SFQC4 - PP |
| SFQC 5 | SFQC5 - BP | SFQC5 - PP |

- Components can limit the pressure and temperature ranges of the connector. Please consult BMT (SUPERLOK) sales representative for your specific application.

Ordering Information

| | | | | | | |
|-----------|---------------|---|----------|------------|---|----------|
| Example : | SFQC4B | - | M | 12N | - | B |
| | 1 | | 2 | 3 | | 4 |

1. Product Series

Body

- SFQC2B
- SFQC3B
- SFQC4B
- SFQC5B

Plug

- SFQC2P
- SFQC3P
- SFQC4P
- SFQC5P

2. End Connection

- S = SUPERLOK Tube Fitting
- F = Female Thread
- M = Male Thread

3. End Connection Size

Tube O.D Designator

| Tube O.D (inch) | 1/4 | 3/8 | 1/2 | 3/4 | 1 |
|-----------------|-----|-----|-----|-----|-----|
| Designator | 4 | 6 | 8 | 12 | 4 |
| Tube O.D (mm) | 6 | 10 | 12 | 20 | 25 |
| Designator | 6M | 10M | 12M | 20M | 25M |

Pipe Thread Designator

| Size (inch) | 1/4 | 3/8 | 1/2 | 3/4 | 1 |
|--------------|-----|-----|-----|-----|-----|
| Screwed BSPT | 4R | 6R | 8R | 12R | 16R |
| Screwed NPT | 4N | 6N | 8N | 12N | 16N |
| Screwed BSPP | 4G | 6G | 8G | 12G | 16G |

4. Body Material

- (Blank) = 316 Stainless Steel
- B = Brass

※ For special sizes and configurations, please consult BMT (SUPERLOK) sales representative.



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