



The SMC is a twist-to-connect coupling that provides a reliable and more secure alternative to luer-type connections. It also allows for the tubing to rotate freely when connected. This important feature prevents both kinked tubing and accidental disconnection during use.

Features

- Twist to connect
- Free coupling rotation
- Safer; prevents misconnections

Benefits

- Prevents accidental disconnects
- Eliminates kinked tubing
- Does not mate to luers

SMC SERIES

Specifications

- Pressure:** Vacuum to 100 psi, 6.9 bar
- Temperature:** -40°F to 250°F (-40°C to 121°C)
- Materials:**
 - Main components: Polycarbonate, USP Class VI, ADCF
 - Locking sleeves: Polycarbonate, USP Class VI, ADCF
 - O-rings: Buna-N, USP Class V, ADCF
- Color:**
 - Main components: Purple tint
- Sterilization:**
 - Gamma: Up to 50 kGy irradiation

Tubing Sizes: 1/16" to 1/8" ID, 1.6mm to 3.2mm ID

WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of Colder products in their own application conditions.

Liquid Flow Rates

Liquid Flow Rate Information for Couplings

The chart below shows the flow rate for Colder couplings. Each coupling was tested with water at 70°F (21°C). To determine flow rates for specific coupling configurations use the formula to the right.

C_v Values for Subminiature Couplings

| BODIES | SMM01 | SMM02 |
|--------|-------|-------|
| SMF01 | .03 | .03 |
| SMF02 | .03 | .19 |

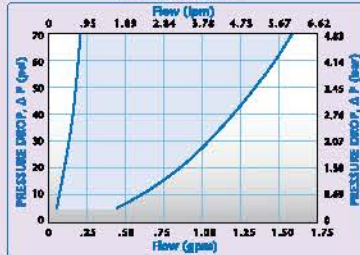
$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

Q=Flow rate in gallons per minute
 C_v=Average coefficient across various flow rates (see chart)
 ΔP=Pressure drop across coupling (psi)
 S=Specific gravity of liquid

SMC Air Flow, 100 psig Inlet Pressure



SMC Water Flow



These graphs are intended to give you a general idea of the performance capabilities of each product line. The shaded area of the graph represents the operating range of the product family, i.e. upper and lower values are shown. Therefore, depending on the exact coupling configurations selected, you can reasonably expect values to fall within the shaded area.

Coupling Body

| TERMINATION | TUBING SIZE | METRIC EQ. | STRAIGHT THRU | Product Dimensions (See drawing on page 14) | |
|---------------------------------|-------------|------------|---------------|---|---------|
| | | | | A | B |
| POLYCARBONATE IN-LINE | 1/16" ID | 1.6mm ID | SMF0191 | .48 | .75/.90 |
| HOSE BARB | 1/8" ID | 3.2mm ID | SMF0291 | .48 | .90 |

Coupling Insert

| TERMINATION | TUBING SIZE | METRIC EQ. | STRAIGHT THRU | Product Dimensions (See drawing on page 14) | |
|---------------------------------|-------------|------------|---------------|---|-----|
| | | | | A | B |
| POLYCARBONATE IN-LINE | 1/16" ID | 1.6mm ID | SMM0191 | .48 | .75 |
| HOSE BARB | 1/8" ID | 3.2mm ID | SMM0291 | .48 | .90 |

Coupling Set

| TERMINATION | TUBING SIZE | METRIC EQ. | STRAIGHT THRU | Product Dimensions (See drawing on page 14) | |
|-----------------------------------|-------------|------------|---------------|---|------|
| | | | | A | B |
| POLYCARBONATE HOSE BARB | 1/16" ID | 1.6mm ID | SMC0191 | .48 | 1.32 |
| | 1/8" ID | 3.2mm ID | SMC0291 | .48 | 1.61 |



The new SRC connector is a small bore connector that eliminates the potential for misconnections with luer fittings. The intuitive design is simple for end users to operate and provides an audible "click" for added assurance and a secure, leak-free connection. This new connector features a unique elastomeric seal with a smooth, gap-free flow path that provides better flow characteristics and eliminates stagnant flow areas.

Features

- Prevents misconnections
- Reliable elastomeric seals
- Audible "click" and positive feel
- Allows tubing rotation

Benefits

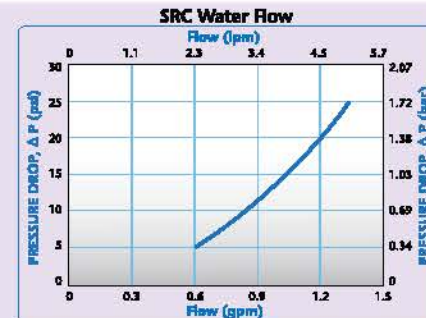
- Won't connect to IV lines and other non-compatible applications
- Leak-free connections
- Operators know when a secure, reliable connection is made
- Prevents accidental disconnect or kinked tubing

SRC SERIES

Specifications

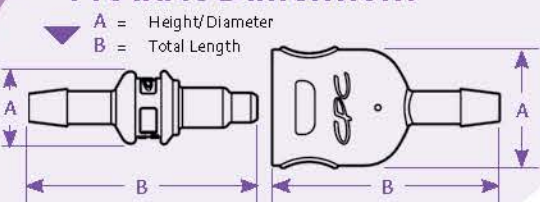
- Pressure:** Vacuum to 25 psi, 1.7 bar
- Temperature:** 32° to 110° F (0° to 43° C) (rated for shipment uncoupled up to 160° F)
- Materials:**
 - Main components: Polypropylene with overmolded TPE* pads, USP Class VI, ADCF
 - Integral seals: Overmolded TPE*, USP Class VI, ADCF
- Color:** White with blue pads
- Sterilization:** EtO, e-beam or gamma
- Tubing Sizes:** 1/8" to 3/16" ID, 3.2mm to 4.8mm ID

Add "CL" to the end of the plastic SRC part numbers below for cleanroom manufactured versions.



This graph is intended to give you a general idea of the performance capabilities of the product.

Product Dimensions



| | PANEL OPENING | MAX. PANEL THICKNESS | MIN. PANEL THICKNESS |
|------------------------------------|---------------|----------------------|----------------------|
| COUPLING BODIES AND INSERTS | 7/16 | .21 | .03 |
| | PANEL NUT HEX | PANEL NUT THREAD | |
| | 1/2 | 7/16-24UNS | |

Coupling Bodies POLYPROPYLENE

| TERMINATION | TUBING SIZE | METRIC EQ. | STRAIGHT THRU | A | B |
|---------------------------------|-------------|------------|---------------|-----|------|
| POLYPROPYLENE IN-LINE | 1/8" ID | 3.2mm ID | SRC1702 | .62 | 1.18 |
| HOSE BARB | 3/16" ID | 4.8mm ID | SRC1703 | .62 | 1.18 |

Coupling Inserts POLYPROPYLENE

| TERMINATION | TUBING SIZE | METRIC EQ. | STRAIGHT THRU | A | B |
|---------------------------------|-------------|------------|---------------|-----|------|
| POLYPROPYLENE IN-LINE | 1/8" ID | 3.2mm ID | SRC2202 | .38 | 1.19 |
| HOSE BARB | 3/16" ID | 4.8mm ID | SRC2203 | .38 | 1.19 |

CHROME-PLATED BRASS

| TERMINATION | TUBING SIZE | METRIC EQ. | STRAIGHT THRU | A | B |
|---|-------------|------------|---------------|-----|------|
| CHROME-PLATED BRASS PANEL MOUNT | 1/8" ID | 3.2mm ID | SRC4202CB | .57 | 1.66 |
| HOSE BARB | 3/16" ID | 4.8mm ID | SRC4203CB | .57 | 1.66 |

Accessories

| PART NO. | DESCRIPTION | MATERIALS |
|----------|---|-------------------------|
| SRC3L | Tethered cap and plug for SRC body and insert | White medical-grade TPE |

Call toll free 1-800-444-2474 or visit us at www.colder.com

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