

MPC™ SERIES CONNECTOR

The MPC™ series couplings add ease of use and security to critical fluid handling applications. Choose from a full line of connectors and configurations, including pressure sealing caps and plugs, in sizes to fit 1/8" to 3/8" tubing. MPC couplings offer optional locking sleeves to further guard against accidental disconnects. In addition, coupling halves can be rotated when connected to reduce tube kinks.

SPECIFICATIONS

OPERATING PRESSURE:

Vacuum to 60 psi, 4.1 bar

OPERATING TEMPERATURE:

ABS:

-40°F to 160°F (-40°C to 71°C)

Polycarbonate:

-40°F to 250°F (-40°C to 121°C)

Polysulfone:

-40°F to 300°F (-40°C to 149°C)

MATERIALS:

Main components:

ABS (white), USP Class VI, Polycarbonate (purple tint), USP Class VI, ADCF Polysulfone (amber tint), USP Class VI, ADCF

Locking sleeves:

Polysulfone (white), USP Class VI, ADCF

Thumb Latches:

Polycarbonate (white), USP Class VI, ADCF Polysulfone (amber tint), USP Class VI, ADCF

O-rings: Silicone (clear), platinum-cured, USP Class VI, ADCF and Buna-N (black)

STERILIZATION:

Gamma: Up to 50 kGy irradiation

Autoclave:

Polycarbonate: Up to 250°F (121°C), 30 minutes, up to 10 repetitions. Sterilize uncoupled only.

Polysulfone: Up to 270°F (132°C) for 60 minutes, up to 25 repetitions. Sterilize uncoupled only.

TUBING SIZES:

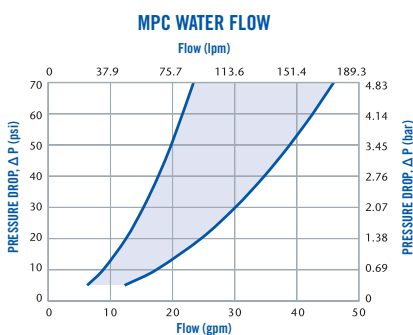
1/8" to 3/8" ID (3.2mm to 9.5mm)

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

FEATURES

- Ergonomic thumb latch → Easy to operate – even with gloved hands
- USP Class VI materials → Meet biocompatibility requirements
- Sterilizable by autoclave, EtO, e-beam, or gamma → Reusable, yet economical enough to allow disposability
- Parting line-free hose barb → Eliminates potential leak path
- ADCF-free materials → Meet BSE/TSE requirements

BENEFITS



This graph is 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.



cpcworldwide.com/MPC

NOTE

MPC Series mates with Back-to-Back Adapters, SaniQuik™ and Sanitary Series.








COLDER PRODUCTS COMPANY
U.S.A.
PHONE: +1 (651) 645-0091
FAX: +1 (651) 645-5404
TOLL FREE: +1 (800) 444-2474
E-MAIL: info@cpcworldwide.com

COLDER PRODUCTS COMPANY GMBH
Germany
E-MAIL: cpcgmbh@cpcworldwide.com






DOVER (SHANGHAI) INDUSTRIAL CO., LTD
ShangHai, China
PHONE: +86 21 2411 2666
TOLL FREE: +86 400 990 1978
E-MAIL: asiapacific@cpcworldwide.com

MPC™ SERIES DIMENSIONS

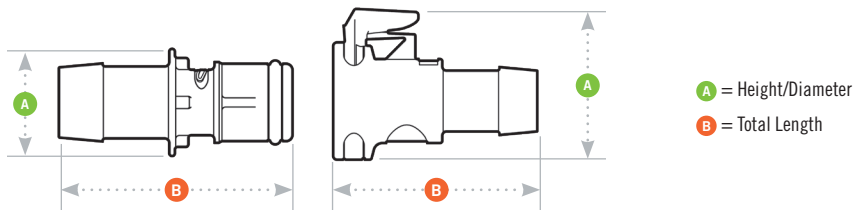
COUPLING BODIES - ABS / Polycarbonate / Polysulfone

| TERMINATION | TUBING SIZE | METRIC EQ | FLOW | STRAIGHT THRU | O-RINGS | A | B |
|---|-------------|-----------|-------|---------------|---------|-------------|------------|
|  ABS IN-LINE HOSE BARB | 1/4" ID | 6.4mm ID | 0.21" | MPC17004T | | 0.96 (24.4) | 1.3 (33.0) |
| | 3/8" ID | 9.5mm ID | 0.29" | MPC17006T | | 0.96 (24.4) | 1.3 (33.0) |
|  POLYCARBONATE IN-LINE HOSE BARB | 1/8" ID | 3.2mm ID | 0.09" | MPC17002T03 | | 0.96 (24.4) | 1.1 (27.9) |
| | 1/4" ID | 6.4mm ID | 0.21" | MPC17004T03 | | 0.96 (24.4) | 1.1 (27.9) |
| | 3/8" ID | 9.5mm ID | 0.29" | MPC17006T03 | | 0.96 (24.4) | 1.1 (27.9) |
|  POLYCARBONATE IN-LINE HOSE BARB WITH LOCK | 1/8" ID | 3.2mm ID | 0.09" | MPCK17002T03 | | 0.99 (25.1) | 1.1 (27.9) |
| | 1/4" ID | 6.4mm ID | 0.21" | MPCK17004T03 | | 0.99 (25.1) | 1.3 (33.0) |
| | 3/8" ID | 9.5mm ID | 0.29" | MPCK17006T03 | | 0.99 (25.1) | 1.3 (33.0) |
|  POLYSULFONE IN-LINE HOSE BARB | 1/8" ID | 3.2mm ID | 0.09" | MPC17002T39 | | 0.96 (24.4) | 1.1 (27.9) |
| | 1/4" ID | 6.4mm ID | 0.21" | MPC17004T39 | | 0.96 (24.4) | 1.1 (27.9) |
| | 3/8" ID | 9.5mm ID | 0.29" | MPC17006T39 | | 0.96 (24.4) | 1.1 (27.9) |
|  POLYSULFONE IN-LINE HOSE BARB WITH LOCK | 1/8" ID | 3.2mm ID | 0.09" | MPCK17002T39 | | 0.99 (25.1) | 1.1 (27.9) |
| | 1/4" ID | 6.4mm ID | 0.21" | MPCK17004T39 | | 0.99 (25.1) | 1.3 (33.0) |
| | 3/8" ID | 9.5mm ID | 0.29" | MPCK17006T39 | | 0.99 (25.1) | 1.3 (33.0) |

COUPLING INSERTS - ABS / Polycarbonate / Polysulfone

| TERMINATION | TUBING SIZE | METRIC EQ | FLOW | STRAIGHT THRU | O-RINGS | A | B |
|---|-------------|-----------|-------|---------------|----------------------------|------------|------------|
|  ABS IN-LINE HOSE BARB | 1/4" ID | 6.4mm ID | 0.21" | MPC22004TM | Silicone Seal USP Class VI | 0.6 (15.2) | 1.3 (33.0) |
| | 3/8" ID | 9.5mm ID | 0.29" | MPC22006TM | Silicone Seal USP Class VI | 0.6 (15.2) | 1.3 (33.0) |
|  ABS IN-LINE HOSE BARB | 1/4" ID | 6.4mm ID | 0.21" | MPC22004T | Buna-N Seal USP Class V | 0.6 (15.2) | 1.3 (33.0) |
| | 3/8" ID | 9.5mm ID | 0.29" | MPC22006T | Buna-N Seal USP Class V | 0.6 (15.2) | 1.3 (33.0) |
|  POLYCARBONATE IN-LINE HOSE BARB | 1/8" ID | 3.2mm ID | 0.09" | MPC22002T03M | Silicone Seal USP Class VI | 0.6 (15.2) | 1.1 (27.9) |
| | 1/4" ID | 6.4mm ID | 0.21" | MPC22004T03M | Silicone Seal USP Class VI | 0.6 (15.2) | 1.3 (33.0) |
| | 3/8" ID | 9.5mm ID | 0.29" | MPC22006T03M | Silicone Seal USP Class VI | 0.6 (15.2) | 1.3 (33.0) |
|  POLYSULFONE IN-LINE HOSE BARB | 1/8" ID | 3.2mm ID | 0.09" | MPC22002T03 | Buna-N Seal USP Class V | 0.6 (15.2) | 1.1 (27.9) |
| | 1/4" ID | 6.4mm ID | 0.21" | MPC22004T03 | Buna-N Seal USP Class V | 0.6 (15.2) | 1.3 (33.0) |
| | 3/8" ID | 9.5mm ID | 0.29" | MPC22006T03 | Buna-N Seal USP Class V | 0.6 (15.2) | 1.3 (33.0) |
|  POLYSULFONE IN-LINE HOSE BARB | 1/8" ID | 3.2mm ID | 0.09" | MPC22002T39M | Silicone Seal USP Class VI | 0.6 (15.2) | 1.1 (27.9) |
| | 1/4" ID | 6.4mm ID | 0.21" | MPC22004T39M | Silicone Seal USP Class VI | 0.6 (15.2) | 1.3 (33.0) |
| | 3/8" ID | 9.5mm ID | 0.29" | MPC22006T39M | Silicone Seal USP Class VI | 0.6 (15.2) | 1.3 (33.0) |

PRODUCT DIMENSIONS



MPC™ SERIES CONNECTOR (CONT.)

ADAPTORS



| SEALING CAP | W/LOCK | MATERIAL | A | B |
|-------------|-----------|---------------|----------------|---------------|
| MPC32003 | MPCK32003 | Polycarbonate | 0.96 (24.4 mm) | 1.3 (33.0 mm) |
| MPC32039 | MPCK32039 | Polysulfone | 0.99 (25.1 mm) | 1.3 (33.0 mm) |

| SEALING PLUG | O-RING | MATERIAL | A | B |
|--------------|----------------------------|---------------|----------------|----------------|
| MPC30003M | Silicone Seal USP Class VI | Polycarbonate | 0.75 (19.1 mm) | 1.24 (31.5 mm) |
| MPC30039M | Silicone Seal USP Class VI | Polysulfone | 0.75 (19.1 mm) | 1.24 (31.5 mm) |

| PART NO. | DESCRIPTION | MATERIAL |
|----------|---------------------------|-----------------------------------|
| MPC30L | Leash plug for MPC body | Soft, flexible, medical-grade PVC |
| MPC32L | Leash plug for MPC insert | Soft, flexible, medical-grade PVC |

LIQUID FLOW RATE INFORMATION FOR COUPLINGS

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

C_v VALUES

INSERTS

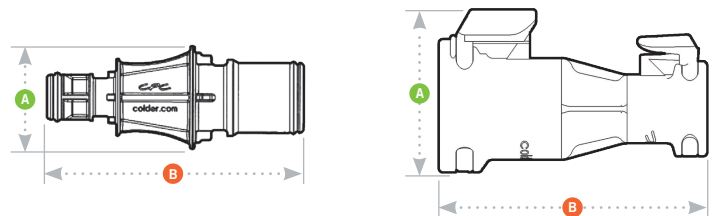
BODIES

| | MPC22002T03 | MPC22004T03 | MPC22006T03 |
|-------------|-------------|-------------|-------------|
| MPC17002T03 | 0.11 | - | 0.21 |
| MPC17004T03 | - | 2.8 | 2.8 |
| MPC17006T03 | 0.14 | 2.8 | 5.5 |

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

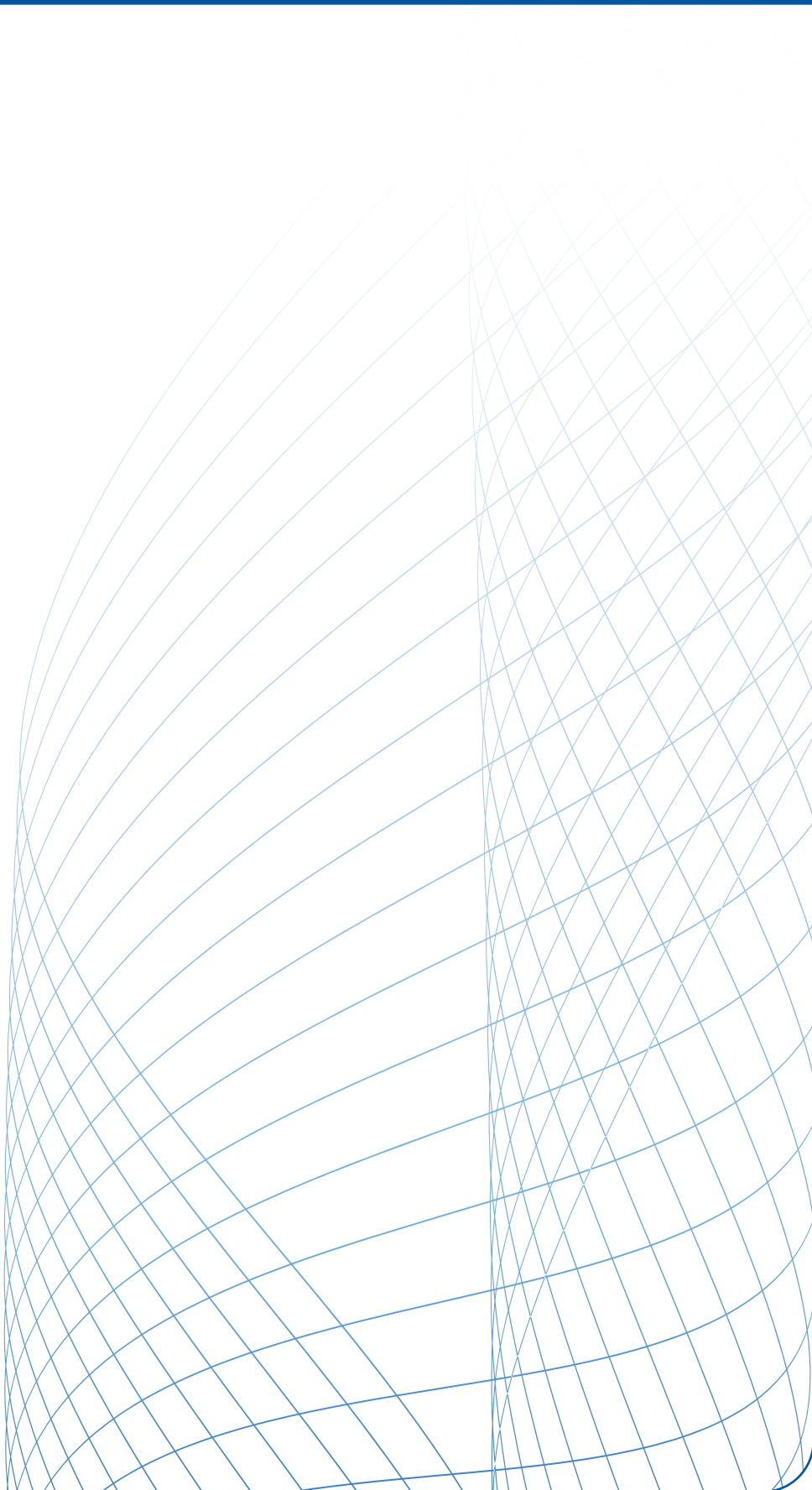
Q = Flow rate in gallons per minute
 C_v = Average coefficient across various flow rates (see chart)
 ΔP = Pressure drop across coupling (psi)
 S = Specific gravity of liquid

BACK-TO-BACK PRODUCT DIMENSIONS



A = Height/Diameter

B = Total Length



WARRANTY: All sales are subject to Colder Products Company's limited express warranty set forth in the CPC catalog. Contact your local distributor or CPC Customer Service for warranty provisions.

Warning: Due to the wide variety of possible fluid media and operating conditions, unintended consequences may result from the use of this product, all of which are beyond the control of CPC. It is the user's responsibility to carefully determine and test for compatibility for use with their application. All such risks shall be assumed by the buyer.

COPYRIGHT © 2021 BY COLDER PRODUCTS COMPANY. COLDER PRODUCTS COMPANY, COLDER PRODUCTS AND CPC ARE REGISTERED

TRADEMARKS WITH THE US PATENT & TRADEMARK OFFICE

CAT2021-MPC-124126 Rev. 06/22