



Patent Pending

MPC Series couplings add ease of use and security to your most 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.

Features

- Ergonomic thumb latch
- USP Class VI materials
- Sterilizable by autoclave, EtO, e-beam, or gamma
- Parting line-free hose barb
- BSE/TSE free materials

Benefits

- Validated aseptic disconnect for pre-sterilized systems
- Meet biocompatibility requirements
- Reusable, yet economical enough to allow disposability
- Eliminates potential leak path
- Meet ADCF requirements

Note: MPC Series mates with SaniQuik™ Back-To-Back Body Adapters, and Sanitary Series. (pages 80-92)

Bag quantities of 25 are available for validation testing!

MPC SERIES

Specifications

Pressure:

Vacuum to 60 psi, 4.14 bar

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, ADCF
 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), USP Class V

Sterilization:

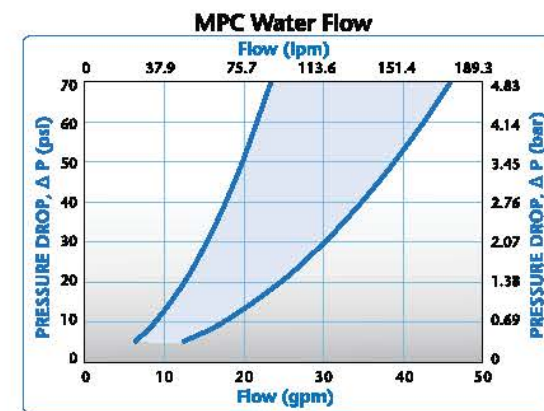
Gamma: Up to 50 kGy irradiation

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.

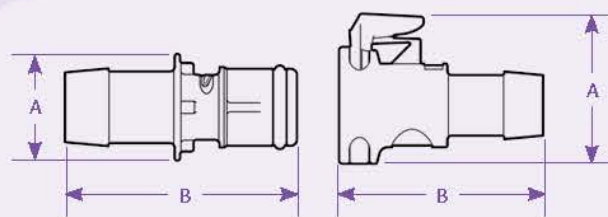
Tubing Sizes: 1/8" to 3/8" ID, 3.2mm to 9.5mm ID

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's products in their own application conditions.



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.

Product Dimensions



A = Height/Diameter
 B = Total Length

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 below.

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

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

C_v Values for MPC Couplings

BODIES	MPC 22002T03	MPC 22004T03	MPC 22006T03
MPC17002T03	0.11	-	0.21
MPC17004T03	-	2.8	2.8
MPC17006T03	0.14	2.8	5.5

Coupling Bodies

ABS

TERMINATION	TUBING	METRIC EQ.	FLOW	STRAIGHT THRU	A	B
IN-LINE HOSE BARB	1/4" ID	6.4mm ID	.210"	MPC17004T	.96 (24.4)	1.30 (33.0)
	3/8" ID	9.5mm ID	.290"	MPC17006T	.96 (24.4)	1.30 (33.0)



POLYCARBONATE

TERMINATION	TUBING	METRIC EQ.	FLOW	STRAIGHT THRU	A	B
IN-LINE HOSE BARB	1/8" ID	3.2mm ID	.09"	MPC17002T03	.96 (24.4)	1.10 (27.9)
	1/4" ID	6.4mm ID	.210"	MPC17004T03	.96 (24.4)	1.30 (33.0)
	3/8" ID	9.5mm ID	.290"	MPC17006T03	.96 (24.4)	1.30 (33.0)



POLYSULFONE

TERMINATION	TUBING	METRIC EQ.	FLOW	STRAIGHT THRU	A	B
IN-LINE HOSE BARB	1/8" ID	3.2mm ID	.09"	MPC17002T39	.96 (24.4)	1.10 (27.9)
	1/4" ID	6.4mm ID	.210"	MPC17004T39	.96 (24.4)	1.30 (33.0)
	3/8" ID	9.5mm ID	.290"	MPC17006T39	.96 (24.4)	1.30 (33.0)



TERMINATION	TUBING	METRIC EQ.	FLOW	STRAIGHT THRU	A	B
IN-LINE HOSE BARB WITH LOCK	1/8" ID	3.2mm ID	.09"	MPC17002T39	.99 (25.2)	1.10 (27.9)
	1/4" ID	6.4mm ID	.210"	MPC17004T39	.99 (25.2)	1.30 (33.0)
	3/8" ID	9.5mm ID	.290"	MPC17006T39	.99 (25.2)	1.30 (33.0)



Coupling Inserts

ABS

TERMINATION	TUBING	METRIC EQ.	FLOW	STRAIGHT THRU	O-RING	A	B
IN-LINE HOSE BARB	1/4" ID	6.4mm ID	.210"	MPC22004TM	Silicone Seal USP Class VI	.60 (15.2)	1.30 (33.0)
	3/8" ID	9.5mm ID	.290"	MPC22006TM	Silicone Seal USP Class VI	.60 (15.2)	1.30 (33.0)



TERMINATION	TUBING	METRIC EQ.	FLOW	STRAIGHT THRU	O-RING	A	B
IN-LINE HOSE BARB	1/4" ID	6.4mm ID	.210"	MPC22004T	Buna-N Seal USP Class V	.60 (15.2)	1.30 (33.0)
	3/8" ID	9.5mm ID	.290"	MPC22006T	Buna-N Seal USP Class V	.60 (15.2)	1.30 (33.0)



POLYCARBONATE

TERMINATION	TUBING	METRIC EQ.	FLOW	STRAIGHT THRU	O-RING	A	B
IN-LINE HOSE BARB	1/8" ID	3.2mm ID	.09"	MPC22002T03M	Silicone Seal USP Class VI	.60 (15.2)	1.10 (27.9)
	1/4" ID	6.4mm ID	.210"	MPC22004T03M	Silicone Seal USP Class VI	.60 (15.2)	1.30 (33.0)
	3/8" ID	9.5mm ID	.290"	MPC22006T03M	Silicone Seal USP Class VI	.60 (15.2)	1.30 (33.0)



TERMINATION	TUBING	METRIC EQ.	FLOW	STRAIGHT THRU	O-RING	A	B
IN-LINE HOSE BARB	1/8" ID	3.2mm ID	.09"	MPC22002T03	Buna-N Seal USP Class V	.60 (15.2)	1.10 (27.9)
	1/4" ID	6.4mm ID	.210"	MPC22004T03	Buna-N Seal USP Class V	.60 (15.2)	1.30 (33.0)
	3/8" ID	9.5mm ID	.290"	MPC22006T03	Buna-N Seal USP Class V	.60 (15.2)	1.30 (33.0)



POLYSULFONE

TERMINATION	TUBING	METRIC EQ.	FLOW	STRAIGHT THRU	O-RING	A	B
IN-LINE HOSE BARB	1/8" ID	3.2mm ID	.09"	MPC22002T39M	Silicone Seal USP Class VI	.60 (15.2)	1.10 (27.9)
	1/4" ID	6.4mm ID	.210"	MPC22004T39M	Silicone Seal USP Class VI	.60 (15.2)	1.30 (33.0)
	3/8" ID	9.5mm ID	.290"	MPC22006T39M	Silicone Seal USP Class VI	.60 (15.2)	1.30 (33.0)



Mating Parts

SEALING CAP	SEALING CAP W/LOCK	MATERIAL	A	B
MPC32003	MPCK32003	Polycarbonate	.93 (23.6)	1.30 (33.0)
MPC32039	MPCK32039	Polysulfone	.99 (25.2)	1.30 (33.0)

SEALING PLUG	O-RING	MATERIAL	A	B
MPC30003M	Silicone Seal USP Class VI	Polycarbonate	.75 (19.1)	1.24 (31.5)
MPC30039M	Silicone Seal USP Class VI	Polysulfone	.75 (19.1)	1.24 (31.5)

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

Accessories

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters.

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

Copyright © 2011 by Colder Products Company. All rights reserved. Colder Products Company, Colder Products and CPC are registered trademarks with the US Patent & Trademark Office.