

MPC SERIES CONNECTOR

Specifications ● ● ●

PRESSURE:

Vacuum to 60 psi, 4.1 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

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.

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.

FEATURES

Ergonomic thumb latch

USP Class VI materials

Sterilizable by autoclave, EtO, e-beam, or gamma

Parting line-free hose barb

ADCF-free materials

BENEFITS

Easy to operate – even with gloved hands

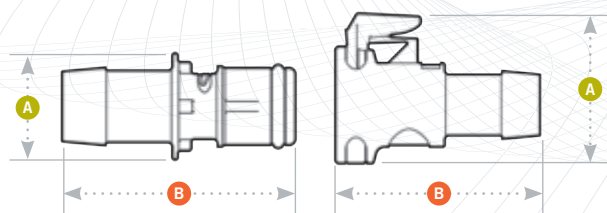
Meet biocompatibility requirements

Reusable, yet economical enough to allow disposability

Eliminates potential leak path

Meet BSE/TSE requirements

Product Dimensions



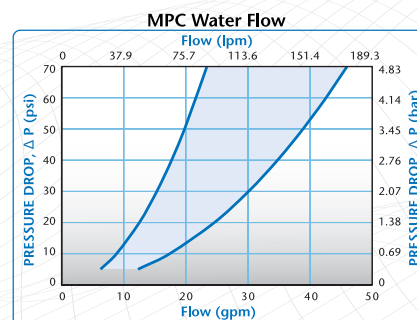
A = Height/Diameter
B = Total Length

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.

✓ 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.



MPC SERIES CONNECTOR DIMENSIONS

Coupling Bodies

A = Height/Diameter

B = Total Length

• ABS



TERMINATION
IN-LINE
HOSE BARB

TUBING
1/4" ID
3/8" ID

METRIC EQ.
6.4mm ID
9.5mm ID

FLOW
.21"
.29"

STRAIGHT THRU
MPC17004T
MPC17006T

A
.96 (24.4)
.96 (24.4)

B
1.30 (33.0)
1.30 (33.0)

• POLYCARBONATE



TERMINATION
IN-LINE
HOSE BARB

TUBING
1/8" ID
1/4" ID
3/8" ID

METRIC EQ.
3.2mm ID
6.4mm ID
9.5mm ID

FLOW
.09"
.21"
.29"

STRAIGHT THRU
MPC17002T03
MPC17004T03
MPC17006T03

A
.96 (24.4)
.96 (24.4)
.96 (24.4)

B
1.10 (27.9)
1.10 (27.9)
1.10 (27.9)



IN-LINE HOSE BARB
WITH LOCK

1/8" ID
1/4" ID
3/8" ID

3.2mm ID
6.4mm ID
9.5mm ID

.09"
.21"
.29"

MPCK17002T03
MPCK17004T03
MPCK17006T03

.99 (25.2)
.99 (25.2)
.99 (25.2)

1.10 (27.9)
1.30 (33.0)
1.30 (33.0)

• POLYSULFONE



TERMINATION
IN-LINE
HOSE BARB

TUBING
1/8" ID
1/4" ID
3/8" ID

METRIC EQ.
3.2mm ID
6.4mm ID
9.5mm ID

FLOW
.09"
.21"
.29"

STRAIGHT THRU
MPC17002T39
MPC17004T39
MPC17006T39

A
.96 (24.4)
.96 (24.4)
.96 (24.4)

B
1.10 (27.9)
1.10 (27.9)
1.10 (27.9)



IN-LINE HOSE BARB
WITH LOCK

1/8" ID
1/4" ID
3/8" ID

3.2mm ID
6.4mm ID
9.5mm ID

.09"
.21"
.29"

MPCK17002T39
MPCK17004T39
MPCK17006T39

.99 (25.2)
.99 (25.2)
.99 (25.2)

1.10 (27.9)
1.30 (33.0)
1.30 (33.0)

Coupling Inserts

• ABS



TERMINATION
IN-LINE
HOSE BARB

TUBING
1/4" ID
3/8" ID

METRIC EQ.
6.4mm ID
9.5mm ID

FLOW
.21"
.29"

STRAIGHT THRU
MPC22004TM
MPC22006TM

O-RING
Silicone Seal USP Class VI
Silicone Seal USP Class VI

A
.60 (15.2)
.60 (15.2)

B
1.30 (33.0)
1.30 (33.0)



IN-LINE
HOSE BARB

1/4" ID
3/8" ID

6.4mm ID
9.5mm ID

.21"
.29"

MPC22004T
MPC22006T

Buna-N Seal USP Class V
Buna-N Seal USP Class V

.60 (15.2)
.60 (15.2)

1.30 (33.0)
1.30 (33.0)

• POLYCARBONATE



TERMINATION
IN-LINE
HOSE BARB

TUBING
1/8" ID
1/4" ID
3/8" ID

METRIC EQ.
3.2mm ID
6.4mm ID
9.5mm ID

FLOW
.09"
.21"
.29"

STRAIGHT THRU
MPC22002T03M
MPC22004T03M
MPC22006T03M

O-RING
Silicone Seal USP Class VI
Silicone Seal USP Class VI
Silicone Seal USP Class VI

A
.60 (15.2)
.60 (15.2)
.60 (15.2)

B
1.10 (27.9)
1.30 (33.0)
1.30 (33.0)



IN-LINE
HOSE BARB

1/8" ID
1/4" ID
3/8" ID

3.2mm ID
6.4mm ID
9.5mm ID

.09"
.21"
.29"

MPC22002T03
MPC22004T03
MPC22006T03

Buna-N Seal USP Class V
Buna-N Seal USP Class V
Buna-N Seal USP Class V

.60 (15.2)
.60 (15.2)
.60 (15.2)

1.10 (27.9)
1.30 (33.0)
1.30 (33.0)

• POLYSULFONE



TERMINATION
IN-LINE
HOSE BARB

TUBING
1/8" ID
1/4" ID
3/8" ID

METRIC EQ.
3.2mm ID
6.4mm ID
9.5mm ID

FLOW
.09"
.21"
.29"

STRAIGHT THRU
MPC22002T39M
MPC22004T39M
MPC22006T39M

O-RING
Silicone Seal USP Class VI
Silicone Seal USP Class VI
Silicone Seal USP Class VI

A
.60 (15.2)
.60 (15.2)
.60 (15.2)

B
1.10 (27.9)
1.30 (33.0)
1.30 (33.0)

MPC SERIES CONNECTOR (cont.)

Mating Parts



SEALING CAP
MPC32003
MPC32039

SEALING CAP W/LOCK
MPCK32003
MPCK32039

MATERIAL
Polycarbonate
Polysulfone

A
.96 (24.4)
.99 (25.2)

B
1.30 (33.0)
1.30 (33.0)

SEALING PLUG
MPC30003M
MPC30039M

O-RING
Silicone Seal USP Class VI
Silicone Seal USP Class VI

MATERIAL
Polycarbonate
Polysulfone

A
.75 (19.1)
.75 (19.1)

B
1.24 (31.5)
1.24 (31.5)

PART NO.
MPC30L
MPC32L

DESCRIPTION
Leash plug for MPC body
Leash cap for MPC insert

MATERIALS
Soft, flexible, medical-grade PVC
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 at the right.

C_v VALUES FOR MPC SERIES COUPLINGS

BODIES	INSERTS	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

Note:
MPC Series mates with Back-to-Back Adapters (page 109), SaniQuik™ and Sanitary Series (pages 112-115).

