



PM C12 S E R I E S

Specifications

**Pressure:** Vacuum to 120 psi, 8.3 bar

**Temperature:**  
32°F to 160°F (0°C to 71°C)

**Materials:**

Main components and valves: Polypropylene

Thumb latch: Stainless steel

Valve spring: 316 stainless steel

External spring and pin: Stainless steel

O-rings: EPDM

**Sterilization:**

Gamma: Up to 50 kGy irradiation

**Color:**

Almond

**Tubing Sizes:**

Microbore to 1/4" ID, Microbore to 6.4mm 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. Use the graph to the right as a guide.

Don't forget: you can always visit [www.colder.com](http://www.colder.com) for more product information.

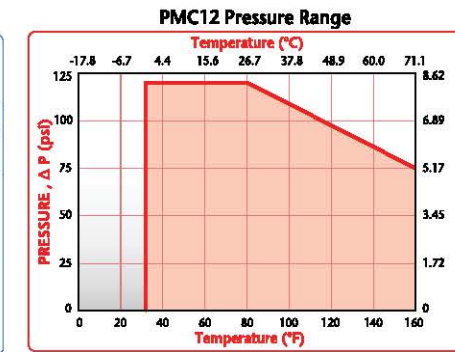
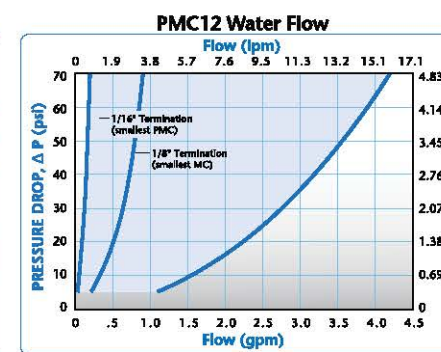
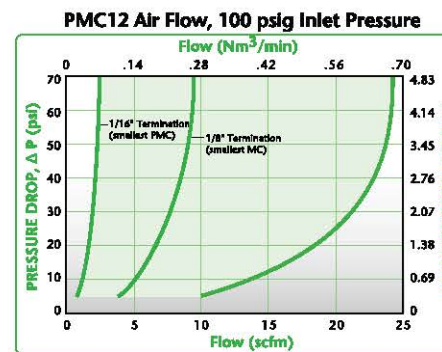
The 1/8" flow polypropylene PMC12 offers many of the same configuration options as the PMC. The polypropylene material adds greater chemical resistance and is gamma sterilizable. The PMC12 also mates to small diameter rigid tubing. Available with a 1/4-28 flat bottom port and 1/4-28 UNF threads, these couplings eliminate the need to thread and re-thread common compression nuts each time a tubing connection is made.

**Features**

- Polypropylene material
- EPDM o-ring
- Colder thumb latch
- Integral terminations

**Benefits**

- Chemically resistant and gamma-sterilizable
- Greater chemical resistance
- One-hand connection and disconnection
- Fewer leak points, shorter assemblies, faster installations



These graphs are intended to give you a general idea of the performance capabilities of each product line. The shaded area of each 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.

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.

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

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

C<sub>v</sub> Values for 1/8" Flow PMC12 Couplings

PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	PM C12	
BODIES20042004	2006	2006	2202	2202	2204	2204	2402	2402	2404	2404	2602	2304	2104	2304	2203	2203	2201	2201	
PM C100212	.40	.18	.50	.19	.25	.16	.50	.19	.50	.20	.51	.19	.50	.50	.38	.24	.30	.17	.03
PM C D100212	.27	.18	.31	.18	.24	.16	.28	.20	.26	.20	.29	.18	.26	.26	.27	.24	.25	.17	.03
PM C100412	.40	.21	.50	.24	.26	.18	.50	.24	.50	.20	.51	.24	.50	.50	.38	.26	.30	.19	.03
PM C D100412	.29	.19	.32	.23	.25	.17	.30	.23	.27	.21	.28	.23	.27	.28	.29	.24	.25	.18	.03
PM C120412	.40	.18	.50	.18	.25	.16	.40	.18	.40	.16	.36	.18	.40	.40	.38	.21	.30	.17	.03
PM C D120412	.21	.17	.22	.17	.20	.16	.22	.17	.21	.17	.20	.17	.21	.22	.21	.18	.21	.16	.03
PM C160212	.23	.15	.28	.18	.19	.14	.27	.15	.27	.15	.28	.18	.27	.27	.23	.16	.20	.14	.03
PM C D160212	.19	.15	.19	.15	.17	.14	.19	.15	.18	.15	.18	.15	.18	.19	.19	.15	.18	.14	.03



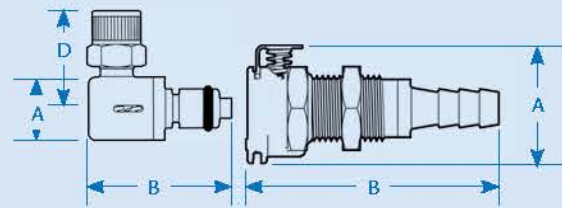
DID YOU KNOW ...

You can prevent misconnections and crossed lines to help protect people and equipment? One method of preventing tubing or line misconnection is by combining different sizes of standard couplings to make correct line connections obvious to users. The following guidelines can help:

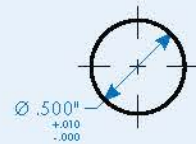
- Use one APC coupling and one PLC coupling.
- Use one MC/PMC size and one LC/PLC size.
- Use one panel mount body and one panel mount insert.
- Use Multi-Mount couplings (connect 3-5 lines simultaneously).



## Product Dimensions



A = Height/Diameter  
B = Total Length (including valve)  
D = Elbow Radial Length



	PANEL OPENING	MAX. PANEL THICKNESS	MIN. PANEL THICKNESS
COUPLING BODIES	see drawing	.50	.05
COUPLING INSERTS	see drawing	.30	.06



PANEL NUT HEX	PANEL NUT THREAD
5/8	1/2-24UNF

## Coupling Bodies

### POLYPROPYLENE

	<b>TERMINATION</b> IN-LINE PIPE THREAD	<b>THREAD SIZE</b> 1/8" NPT 1/8" BSPT 1/4" NPT 1/4" BSPT		<b>STRAIGHT THRU</b> PMC100212 PMC100212BSPT PMC100412 PMC100412BSPT	<b>SHUTOFF</b> PMCD100212 PMCD100212BSPT PMCD100412 PMCD100412BSPT	<b>A</b> .88 .88 .88 .88	<b>B</b> 1.00 1.00 1.10 1.10
	<b>TERMINATION</b> PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	<b>TUBING SIZE</b> 1/4" OD, .17" ID	<b>METRIC EQ.</b> 6.4mm OD, 4.3mm ID	<b>STRAIGHT THRU</b> PMC120412	<b>SHUTOFF</b> PMCD120412	<b>A</b> .79	<b>B</b> 1.72
	<b>TERMINATION</b> PANEL MOUNT HOSE BARB	<b>TUBING SIZE</b> 1/16" ID 1/8" ID 1/4" ID	<b>METRIC EQ.</b> 1.6mm ID 3.2mm ID 6.4mm ID	<b>STRAIGHT THRU</b> PMC160112 PMC160212 PMC160412	<b>SHUTOFF</b> PMCD160112 PMCD160212 PMCD160412	<b>A</b> .88 .88 .88	<b>B</b> 1.40 1.65 1.85
	<b>TERMINATION</b> IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	<b>TUBING SIZE</b> 1/4" OD, .17" ID	<b>METRIC EQ.</b> 6.4mm OD, 4.3mm ID	<b>STRAIGHT THRU</b> PMC130412	<b>SHUTOFF</b> PMCD130412	<b>A</b> .89	<b>B</b> 1.74
	<b>TERMINATION</b> IN-LINE HOSE BARB	<b>TUBING SIZE</b> 1/16" ID 1/8" ID 1/4" ID	<b>METRIC EQ.</b> 1.6mm ID 3.2mm ID 6.4mm ID	<b>STRAIGHT THRU</b> PMC170112 PMC170212 PMC170412	<b>SHUTOFF</b> PMCD170112 PMCD170212 PMCD170412	<b>A</b> .89 .89 .89	<b>B</b> 1.42 1.67 1.87

## PMC12 1/4-28 Coupling Bodies

### POLYPROPYLENE

	<b>TERMINATION</b> PANEL MOUNT WITH A 1/4-28 FLAT BOTTOM PORT			<b>SHUTOFF</b> PMCD18042812	<b>A</b> 0.88	<b>B</b> 1.57
	<b>TERMINATION</b> IN-LINE WITH A 1/4-28 FLAT BOTTOM PORT			<b>SHUTOFF</b> PMCD19042812	<b>A</b> 0.89	<b>B</b> 1.57

## Coupling Inserts

### POLYPROPYLENE

	<b>TERMINATION</b> IN-LINE PIPE THREAD	<b>THREAD SIZE</b> 1/8" NPT		<b>STRAIGHT THRU</b> PMC240212	<b>SHUTOFF</b> PMCD240212	<b>A</b> .58	<b>B</b> 1.03/1.45	
	<b>TERMINATION</b> IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	<b>TUBING SIZE</b> 1/4" OD, .17" ID	<b>METRIC EQ.</b> 6.4mm OD, 4.3mm ID	<b>STRAIGHT THRU</b> PMC200412	<b>SHUTOFF</b> PMCD200412	<b>A</b> .58	<b>B</b> 1.15/1.58	
	<b>TERMINATION</b> IN-LINE HOSE BARB	<b>TUBING SIZE</b> 1/16" ID 1/8" ID 1/4" ID	<b>METRIC EQ.</b> 1.6mm ID 3.2mm ID 6.4mm ID	<b>STRAIGHT THRU</b> PMC220112 PMC220212 PMC220412	<b>SHUTOFF</b> PMCD220112 PMCD220212 PMCD220412	<b>A</b> .50 .50 .50	<b>B</b> .80/1.47 1.05/1.67 1.20/1.71	
	<b>TERMINATION</b> ELBOW FERRULELESS POLYTUBE FITTING, PTF†	<b>TUBING SIZE</b> 5/32" OD, .10" ID 1/4" OD, .17" ID	<b>METRIC EQ.</b> 4.0mm OD, 2.5mm ID 6.4mm OD, 4.3mm ID	<b>STRAIGHT THRU</b> PMC2102512 PMC210412	<b>SHUTOFF</b> PMCD2102512 PMCD210412	<b>A</b> .50 .50	<b>B</b> 1.09/1.21 1.17/1.21	<b>D</b> .77 .77
	<b>TERMINATION</b> ELBOW HOSE BARB	<b>TUBING SIZE</b> 1/8" ID 1/4" ID	<b>METRIC EQ.</b> 3.2mm ID 6.4mm ID	<b>STRAIGHT THRU</b> PMC230212 PMC230412	<b>SHUTOFF</b> PMCD230212 PMCD230412	<b>A</b> .50 .50	<b>B</b> 1.09/1.21 1.09/1.21	<b>D</b> .69 .90

## PMC12 1/4-28 Coupling Inserts

### POLYPROPYLENE

	<b>TERMINATION</b> IN-LINE WITH 1/4-28 UNF THREADS	<b>STRAIGHT THRU</b> PMC24042812	<b>SHUTOFF</b> PMCD24042812	<b>A</b> .50	<b>B</b> 1.48
	<b>TERMINATION</b> PANEL MOUNT WITH A 1/4-28 FLAT BOTTOM PORT		<b>SHUTOFF</b> PMCD48042812	<b>A</b> .72	<b>B</b> 1.55

## Nuts

TUBING SIZE	DESCRIPTION	PART NUMBER
1/16" and 1.8mm	1/4-28 Polypropylene Nut (natural)	2418900
1/8" and 3mm	1/4-28 Polypropylene Nut (natural)	2419000
1/16" and 1.8mm	1/4-28 Acetal Nut (black)	2419199
1/8" and 3mm	1/4-28 Acetal Nut (black)	2419299

## Ferrules

TUBING SIZE	DESCRIPTION	PART NUMBER
1/16"	Ferrule, ETFE (blue)	2419300
1/8"	Ferrule, ETFE (yellow)	2419400
1.8mm	Ferrule, ETFE (green)	2419500
3.0mm	Ferrule, ETFE (orange)	2419600

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. †NOTE: Colder's Ferruleless PTF (polytube fitting) terminations do not require ferrules to achieve a secure connection and are therefore easier to use and reuse. PTF fittings are designed for semi-rigid tubing, i.e., polyethylene, nylon, polyurethane, etc.

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. Couplings are pictured with valves unless otherwise noted. †NOTE: Colder's Ferruleless PTF (polytube fitting) terminations do not require ferrules to achieve a secure connection and are therefore easier to use and reuse. PTF fittings are designed for semi-rigid tubing, i.e., polyethylene, nylon, polyurethane, etc.