

Specifications

Pressure: Vacuum to 120 psi, 8.3 bar

Temperature:

-40°F to 180°F (-40°C to 82°C)

Materials:

Main components and valves: Acetal

Thumb latch: Stainless steel Valve spring: 316 stainless steel

External springs and pin: Stainless steel

O-rings: Buna-N

Color:

Natural white, others available

Tubing Sizes:

1/16" to 1/4" ID, 1.6mm to 6.4mm ID

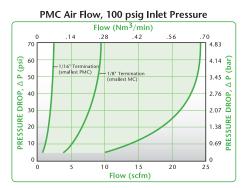
WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of Colder products in their own application conditions.

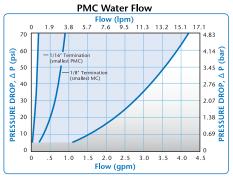
Don't forget: you can always visit www.colder.com for more product information.

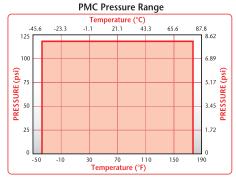
The 1/8" flow PMC coupling covers a wide variety of general-purpose applications. Featuring the Colder thumb latch, the PMC is easier to use than ball-and-sleeve designs. One-hand connection/disconnection and integral terminations make the PMC the choice for ease of use and manufacture.

This coupling is NuSeal [®] compatible. See page 33 for details.

Features	Benefits
Hose barb shroud	Extra protection for the 1/16" hose barb
Integral terminations	Fewer leak points, shorter assemblies, faster installations
Compatible	Mates with PMC12 and MC Series couplings (see pages 28 and 32)
Clicks when connected	Assurance of a reliable connection







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.

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

=Average coefficient across various flow rates (see chart) Δ P=Pressure drop across coupling (psi)

S=Specific gravity of liquid

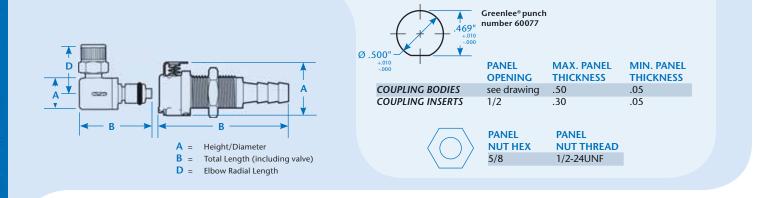
C_v Values for 1/8" Flow PMC Couplings

BODIES	PMC 2004	PMCD 2004	PMC 2006	PMCD 2006	PMC 2202	PMCD 2202	PMC 2204	PMCD 2204	PMC 2402	PMCD 2402	PMC 2404	PMCD 2404	PMC 2602	PMC 2304	PMC 2104	PMCD 2304	PMC 2203	PMCD 2203	PMC 2201	PMCD 2201
PMC1002	.40	.18	.50	.19	.25	.16	.50	.19	.50	.20	.51	.19	.50	.50	.38	.24	.30	.17	.03	.03
PMCD1002	.27	.18	.31	.18	.24	.16	.28	.20	.26	.20	.29	.18	.26	.26	.27	.24	.25	.17	.03	.03
PMC1004	.40	.21	.50	.24	.26	.18	.50	.24	.50	.20	.51	.24	.50	.50	.38	.26	.30	.19	.03	.03
PMCD1004	.29	.19	.32	.23	.25	.17	.30	.23	.27	.21	.28	.23	.27	.28	.29	.24	.25	.18	.03	.03
PMC1204	.40	.18	.50	.18	.25	.16	.40	.18	.40	.16	.36	.18	.40	.40	.38	.21	.30	.17	.03	.03
PMCD1204	.21	.17	.22	.17	.20	.16	.22	.17	.21	.17	.20	.17	.21	.22	.21	.18	.21	.16	.03	.03
PMC1602	.23	.15	.28	.18	.19	.14	.27	.15	.27	.15	.28	.18	.27	.27	.23	.16	.20	.14	.03	.03
PMCD1602	.19	.15	.19	.15	.17	.14	.19	.15	.18	.15	.18	.15	.18	.19	.19	.15	.18	.14	.03	.03
PMC1604	.33	.23	.44	.24	.24	.18	.44	.23	.44	.20	.38	.24	.38	.44	.33	.26	.26	.19	.03	.03
PMCD1604	.23	.17	.26	.21	.22	.16	.26	.21	.26	.19	.25	.21	.21	.26	.23	.24	.22	.16	.03	.03
PMC1703	.25	.20	.30	.20	.20	.17	.30	.20	.30	.19	.28	.20	.28	.30	.25	.18	.21	.17	.03	.03
PMCD1703	.20	.17	.20	.17	.19	.15	.21	.17	.19	.17	.20	.17	.19	.20	.20	.16	.19	.16	.03	.03
PMC1701	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02
PMCD1701	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02



DID YOU KNOW ...

CAD models are available for all Colder couplings. These files are available in many formats including STEP, IGES and native file formats. You can see them online at www.colder.com.



Coupling Bodies

ACETAL						
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/8" NPT 1/8" BSPT 1/4" NPT 1/4" BSPT		STRAIGHT THRU PMC1002 PMC1002BSPT PMC1004 PMC1004BSPT	SHUTOFF PMCD1002 PMCD1002BSPT PMCD1004 PMCD1004BSPT	A .79 .79 .79 .79	B 1.00 1.00 1.10 1.10
TERMINATION PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 5/32" OD, .10" ID 1/4" OD, .17" ID	METRIC EQ. 4.0mm OD, 2.0mm ID 4.0mm OD, 2.5mm ID 6.4mm OD, 4.3mm ID	STRAIGHT THRU PMC12M42 PMC12025 PMC1204	SHUTOFF PMCD12M42 PMCD12025 PMCD1204	A .77 .77 .77	B 1.65 1.70 1.72
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/16" ID 1/8" ID 3/16" ID 1/4" ID	METRIC EQ. 1.6mm ID 3.2mm ID 4.8mm ID 6.4mm ID	STRAIGHT THRU PMC1601 PMC1602 PMC1603 PMC1604	SHUTOFF PMCD1601 PMCD1602 PMCD1603 PMCD1604	A .77 .77 .77	B 1.40 1.65 1.85 1.85
TERMINATION PANEL MOUNT FEMALE THREAD	THREAD SIZE 10-32 UNF		STRAIGHT THRU PMC181032	SHUTOFF PMCD181032	A .77	B 1.25
TERMINATION IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 5/32" OD, .10" ID 1/4" OD, .17" ID	METRIC EQ. 4.0mm OD, 2.0mm ID 4.0mm OD, 2.5mm ID 5.0mm OD, 3.0mm ID 6.4mm OD, 4.3mm ID	STRAIGHT THRU PMC13M42 PMC13025 PMC13M5 PMC1304	SHUTOFF PMCD13M42 PMCD13025 PMCD13M5 PMCD1304	A .81 .81 .81	B 1.65 1.65 1.72 1.75
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/16" ID 1/8" ID 3/16" ID 1/4" ID	METRIC EQ. 1.6mm ID 3.2mm ID 4.8mm ID 6.4mm ID	STRAIGHT THRU PMC1701 PMC1702 PMC1703 PMC1704	SHUTOFF PMCD1701 PMCD1702 PMCD1703 PMCD1704	A .81 .81 .81	B 1.41 1.45/1.65 1.65/1.85 1.65/1.85
TERMINATION IN-LINE FEMALE THREAD	THREAD SIZE 10-32 UNF		STRAIGHT THRU PMC191032	SHUTOFF PMCD191032	A .81	B 1.25

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.

Coupling Inserts

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TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/8" NPT 1/8" BSPT 1/4" NPT 1/4" BSPT		STRAIGHT THRU PMC2402 PMC2402BSPT PMC2404 PMC2404BSPT	SHUTOFF PMCD2402 PMCD2402BSPT PMCD2404 PMCD2404BSPT	A .58 .58 .65 .65	B 1.03/1.45 1.03/1.44 1.13/1.42 1.13/1.42		
TERMINATION PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17" ID	METRIC EQ. 6.4mm OD, 4.3mm ID	STRAIGHT THRU PMC4004	SHUTOFF PMCD4004	A .72	B 1.70/1.82		non-valved strongs
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/16" ID 1/8" ID 3/16" ID 1/4" ID	METRIC EQ. 1.6mm ID 3.2mm ID 4.8mm ID 6.4mm ID	STRAIGHT THRU PMC4201 PMC4202 PMC4203 PMC4204	SHUTOFF PMCD4201 PMCD4202 PMCD4203 PMCD4204	.72 .72	B 1.38/1.50 1.63/1.75 1.83/1.95 1.83/1.95		
TERMINATION IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 5/32" OD, .10" ID 1/4" OD, .17" ID 3/8" OD, .25" ID	METRIC EQ. 4.0mm OD, 2.0mm ID 4.0mm OD, 2.5mm ID 6.4mm OD, 4.3mm ID 9.5mm OD, 6.4mm ID	STRAIGHT THRU PMC20M42 PMC20025 PMC2004 PMC2006	SHUTOFF PMCD20M42 PMCD20025 PMCD2004 PMCD2006	.58 .58	B 1.08/1.60 1.13/1.65 1.15/1.57 1.40/1.52		
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/16" ID 1/8" ID 3/16" ID 1/4" ID	METRIC EQ. 1.6mm ID 3.2mm ID 4.8mm ID 6.4mm ID	STRAIGHT THRU PMC2201 PMC2202 PMC2203 PMC2204	SHUTOFF PMCD2201 PMCD2202 PMCD2203 PMCD2204		B .80/1.47 1.00/1.67 1.20/1.88 1.22/1.70		non-valued and
TERMINATION IN-LINE FEMALE THREAD	THREAD SIZE 10-32 UNF		STRAIGHT THRU PMC281032	SHUTOFF PMCD281032	A .58	B .63/1.31		5
TERMINATION ELBOW FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 5/32" OD, .10" ID 1/4" OD, .17" ID	METRIC EQ. 4.0mm OD, 2.5mm ID 6.4mm OD, 4.3mm ID	STRAIGHT THRU PMC21025 PMC2104	SHUTOFF PMCD2104	A .50 .50	B 1.17 1.17/1.21	D .75 .77	
TERMINATION ELBOW HOSE BARB	TUBING SIZE 1/8" ID 1/4" ID	METRIC EQ. 3.2mm ID 6.4mm ID	STRAIGHT THRU PMC2302 PMC2304	SHUTOFF PMCD2302 PMCD2304	A .50 .50	B .85/1.21 1.00/1.21	D .75/.69 .95/.90	
				_				30 No Valved shown



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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.



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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

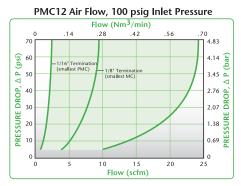
Benefits

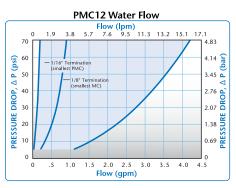
Chemically resistant and gammasterilizable

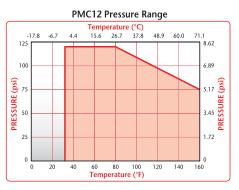
Greater chemical resistance

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.

$$Q = C_{V} \sqrt{\frac{\Delta F}{S}}$$

=Average coefficient across various flow rates (see chart) ΔP =Pressure drop across coupling (psi)

S=Specific gravity of liquid

C_v Values for 1/8" Flow PMC12 Couplings

	PMC12	PMCD12	PMC12	PMCD12	PMC12 I	PMCD12	PMC12	PMCD12	PMC12	PMCD12	PMC12	PMCD12	PMC12	PMC12	PMC12	PMCD12	PMC12	PMCD12	PMC12 I	PMCD12
BODIES	2004	2004	2006	2006	2202	2202	2204	2204	2402	2402	2404	2404	2602	2304	2104	2304	2203	2203	2201	2201
PMC100212	.40	.18	.50	.19	.25	.16	.50	.19	.50	.20	.51	.19	.50	.50	.38	.24	.30	.17	.03	.03
PMCD10021	2 .27	.18	.31	.18	.24	.16	.28	.20	.26	.20	.29	.18	.26	.26	.27	.24	.25	.17	.03	.03
PMC100412	.40	.21	.50	.24	.26	.18	.50	.24	.50	.20	.51	.24	.50	.50	.38	.26	.30	.19	.03	.03
PMCD10041	2 .29	.19	.32	.23	.25	.17	.30	.23	.27	.21	.28	.23	.27	.28	.29	.24	.25	.18	.03	.03
PMC120412	.40	.18	.50	.18	.25	.16	.40	.18	.40	.16	.36	.18	.40	.40	.38	.21	.30	.17	.03	.03
PMCD12041	2 .21	.17	.22	.17	.20	.16	.22	.17	.21	.17	.20	.17	.21	.22	.21	.18	.21	.16	.03	.03
PMC160212	.23	.15	.28	.18	.19	.14	.27	.15	.27	.15	.28	.18	.27	.27	.23	.16	.20	.14	.03	.03
PMCD16021	2 .19	.15	.19	.15	.17	.14	.19	.15	.18	.15	.18	.15	.18	.19	.19	.15	.18	.14	.03	.03
PMC160412	.33	.23	.44	.24	.24	.18	.44	.23	.44	.20	.38	.24	.38	.44	.33	.26	.26	.19	.03	.03
PMCD16041	2 .23	.17	.26	.21	.22	.16	.26	.21	.26	.19	.25	.21	.21	.26	.23	.24	.22	.16	.03	.03
PMC170312	.25	.20	.30	.20	.20	.17	.30	.20	.30	.19	.28	.20	.28	.30	.25	.18	.21	.17	.03	.03
PMCD17031	2 .20	.17	.20	.17	.19	.15	.21	.17	.19	.17	.20	.17	.19	.20	.20	.16	.19	.16	.03	.03
PMC170112	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02
PMCD17011	2 .03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02



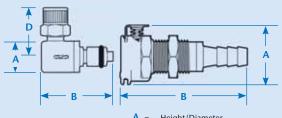
DID YOU KNOW ...

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)
- **Elbow Radial Length**



COUPLING BODIES COUPLING INSERTS

MAX. PANEL MIN. PANEL **PANEL OPENING THICKNESS THICKNESS** see drawing .05 .30 .06 see drawing



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

Coupling Bodies

POLYPROPYLENE



TERMINATION IN-LINE PIPE THREAD

THREAD SIZE 1/8" NPT 1/8" BSPT

1/4" NPT 1/4" BSPT

METRIC EQ.

STRAIGHT THRU PMC100212 PMC100212BSPT PMC100412 PMC100412BSPT

PMCD100412 PMCD100412BSPT

SHUTOFF

PMCD100212

PMCD100212BSPT

.88 1.10 .88 1.10 В 1.72

1.00

1.00

1.40

1.65

1.74

1.42

1.67

1.87

.88

.88



TERMINATION PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†

TUBING SIZE 1/4" OD, .17" ID

6.4mm OD, 4.3mm ID

STRAIGHT THRU PMC120412

SHUTOFF PMCD120412 .79



TERMINATION PANEL MOUNT HOSE BARB

1/16" ID 1/8" ID 1/4" ID

TUBING SIZE

TUBING SIZE 1/4" OD, .17" ID

3.2mm ID 6.4mm ID METRIC EQ.

6.4mm OD, 4.3mm ID

METRIC EQ.

1.6mm ID

STRAIGHT THRU PMC130412

STRAIGHT THRU

PMC160112

PMC160212

PMC160412

PMCD160112 PMCD160212 PMCD160412 **SHUTOFF**

PMCD130412

SHUTOFF

.88 1.85 В

.88

.88

.89



TERMINATION IN-LINE **FERRULELESS POLYTUBE** FITTING, PTF†

TERMINATION

IN-LINE

HOSE BARB

TUBING SIZE

1/16" ID

1/8" ID

1/4" ID

METRIC EQ. 1.6mm ID 3.2mm ID

6.4mm ID

STRAIGHT THRU PMC170112 PMC170212 PMC170412

SHUTOFF PMCD170112 PMCD170212 PMCD170412

.89 .89

PMC12 1/4-28 Coupling Bodies

POLYPROPYLENE



TERMINATION PANEL MOUNT WITH A 1/4-28 FLAT **BOTTOM PORT**

TERMINATION IN-LINE WITH A 1/4-28 FLAT **BOTTOM PORT**

SHUTOFF 1.57 PMCD18042812 0.88

SHUTOFF В PMCD19042812 0.89 1.57

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Coupling Inserts

POLYPROPYLENE

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



POLYPRODYLENE

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

Nuts

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



Ferrules

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



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