

# **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.

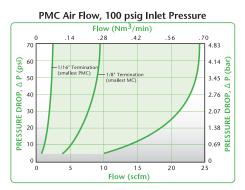
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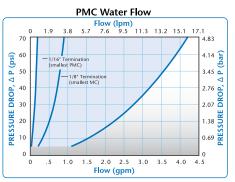
Don't forget: you can always visit <u>www.colder.com</u> for more product information.

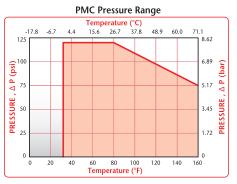
The 1/8" flow PMC coupling covers a wide variety of general-purpose applications. Featuring the Colder thumb latch, the PMC is easier to use than ball-and-sleeve designs. One-hand connection/disconnection and integral terminations make the PMC the choice for ease of use and manufacture.

This coupling is NuSeal compatible. See page 25 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 20 and 24)
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)  $\Delta$ P=Pressure drop across coupling (psi)

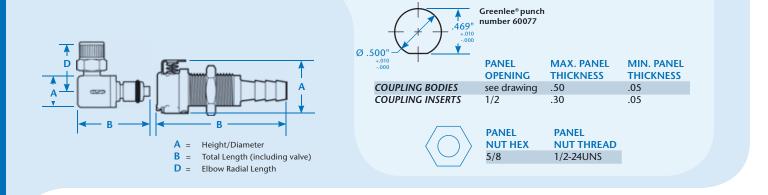
S=Specific gravity of liquid

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

	PMC	PMCD	PMC	PMC	PMC	PMCD	PMC	PMCD	PMC	PMCD										
BODIES	2004	2004	2006	2006	2202	2202	2204	2204	2402	2402	2404	2404	2602	2304	2104	2304	2203	2203	2201	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**

	<b>ACETAL</b>						
	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 .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	<b>A</b> .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
6	TERMINATION IN-LINE FEMALE THREAD	THREAD SIZE 10-32 UNF		STRAIGHT THRU PMC191032	SHUTOFF PMCD191032	<b>A</b> .81	<b>B</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†	<b>TUBING SIZE</b> 1/4" OD, .17" ID	METRIC EQ. 6.4mm OD, 4.3mm ID	STRAIGHT THRU PMC4004	SHUTOFF PMCD4004	<b>A</b> .72	B 1.70/1.82		non-valved trotal
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	A .72 .72 .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	A .58 .58 .58 .65	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	A .50 .50 .50	B .80/1.47 1.05/1.67 1.20/1.88 1.22/1.70		non-valued state
TERMINATION IN-LINE FEMALE THREAD	THREAD SIZE 10-32 UNF		STRAIGHT THRU PMC281032	SHUTOFF PMCD281032	A .58	B .63/1.31		
TERMINATION ELBOW FERRULELESS POLYTUBE FITTING, PTF†	<b>TUBING SIZE</b> 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	.50 .50	B .85/1.21 1.00/1.21	D .75/.69 .95/.90	
				_				Ton valved shown



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 semirigid tubing, i.e., polyethylene, nylon, polyurethane, etc.

