

# PMC SERIES CONNECTOR



**The 1/8" flow PMC** coupling covers a wide variety of general-purpose applications. Featuring the CPC 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 27 for details).

## 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 CPC products in their own application conditions.

Also available in NSF listed versions. Please visit our website for part number information.



## FEATURES

Hose barb shroud

Integral terminations

Compatible

Clicks when connected

## BENEFITS

Extra protection for the 1/16" hose barb

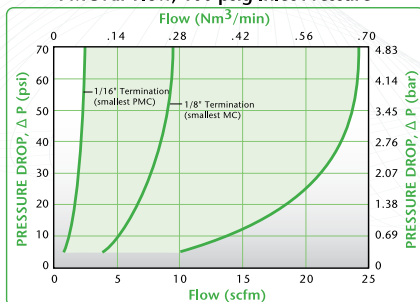
Fewer leak points, shorter assemblies, faster installations

Mates with PMC12 and MC Series couplings (see pages 30 and 34)

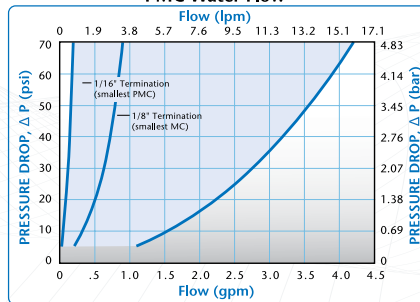
Assurance of a reliable connection

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.

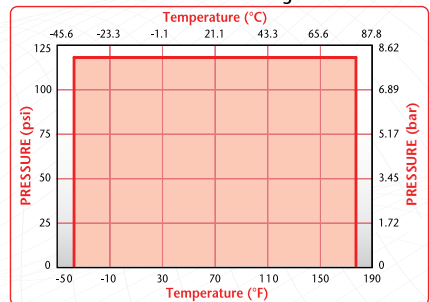
PMC Air Flow, 100 psig Inlet Pressure



PMC Water Flow



PMC Pressure Range



# NU-SEAL® QUICK DISCONNECT COUPLING

## Nu-Seal® Specifications

### PRESSURE:

Vacuum to 20 psi, 1.4 bar

### MATERIALS:

#### Main components:

Low density polyethylene

### COLOR:

Translucent

### TUBING SIZE:

1/8" ID, 3.2mm ID

Nu-Seal® quick disconnect coupling inserts feature a patented integral seal and are USP Class VI compliant. These economic inserts are ideal for applications that require limited connect/disconnect cycles.

### FEATURES

Patented integral seal

Low density polyethylene

Chemically resistant

Compatible

### BENEFITS

Economical, allows for disposability and provides leak-free connections

Sterilizable by EtO, E-beam & gamma

Works in many critical USP Class VI material applications

Mates with MC, PMC, PMC12 couplings



TERMINATION  
IN-LINE  
HOSE BARB

TUBING SIZE  
1/8" ID

METRIC EQ.  
3.2 mm ID

PART NO.  
DSM2202

HEIGHT  
.50

LENGTH  
.98

## 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.

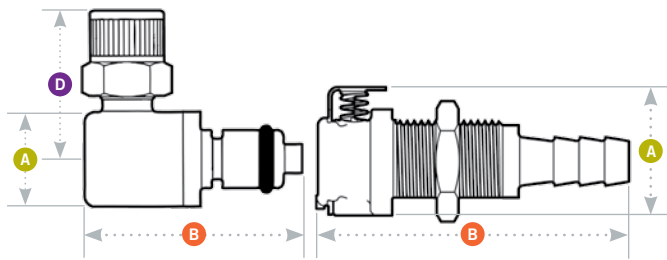
$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

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 PMC COUPLINGS

INSERTS BODIES	PMC	PMCD	PMC	PMCD	PMC	PMCD	PMC	PMCD	PMC	PMCD	PMC	PMCD	PMC	PMCD	PMC	PMCD	PMC	PMCD	PMC	PMCD
	2004	2004	2006	2006	2202	2202	2204	2204	2402	2402	2404	2304	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	.03	.02

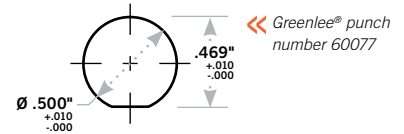
# PMC DIMENSIONS



- A** = Height/Diameter
- B** = Total Length
- D** = Elbow Radial Length

## Panel Dimensions

	PANEL OPENING	PANEL THICKNESS MAX. – MIN.	PANEL NUT HEX	PANEL NUT THREAD
<b>COUPLING BODIES</b>	see drawing	.50 – .05	5/8	1/2-24UNS
<b>COUPLING INSERTS</b>	1/2	.30 – .05	5/8	1/2-24UNS











## Coupling Bodies • ACETAL

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

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. †NOTE: CPC'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 • ACETAL

	TUBING/THREAD SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	D
	<b>TERMINATION IN-LINE PIPE THREAD</b>						
	1/8" NPT		PMC2402	PMCD2402	.58	1.03/1.45	
	1/8" BSPT		PMC2402BSPT	PMCD2402BSPT	.58	1.03/1.44	
	1/4" NPT		PMC2404	PMCD2404	.65	1.13/1.42	
	1/4" BSPT		PMC2404BSPT	PMCD2404BSPT	.65	1.13/1.42	
	<b>PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†</b> <i>(non-valved shown)</i>						
	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	PMC4004	PMCD4004	.72	1.70/1.82	
	<b>PANEL MOUNT HOSE BARB</b>						
	1/16" ID	1.6mm ID	PMC4201	PMCD4201	.72	1.38/1.50	
	1/8" ID	3.2mm ID	PMC4202	PMCD4202	.72	1.63/1.75	
	3/16" ID	4.8mm ID	PMC4203	PMCD4203	.72	1.83/1.95	
	1/4" ID	6.4mm ID	PMC4204	PMCD4204	.72	1.83/1.95	
	<b>IN-LINE FERRULELESS POLYTUBE FITTING, PTF†</b>						
	5/32" OD, .10" ID	4.0mm OD, 2.0mm ID	PMC20M42	PMCD20M42	.58	1.08/1.60	
	1/4" OD, .17" ID	4.0mm OD, 2.5mm ID	PMC20025	PMCD20025	.58	1.13/1.65	
	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	PMC2004	PMCD2004	.58	1.15/1.57	
	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	PMC2006	PMCD2006	.65	1.40/1.52	
	<b>IN-LINE HOSE BARB</b> <i>(non-valved shown)</i>						
	1/16" ID	1.6mm ID	PMC2201	PMCD2201	.50	.80/1.47	
	1/8" ID	3.2mm ID	PMC2202	PMCD2202	.50	1.00/1.67	
	3/16" ID	4.8mm ID	PMC2203	PMCD2203	.50	1.20/1.88	
	1/4" ID	6.4mm ID	PMC2204	PMCD2204	.50	1.22/1.70	
	<b>IN-LINE FEMALE THREAD</b>						
	10-32 UNF		PMC281032	PMCD281032	.58	.63/1.31	
	<b>ELBOW FERRULELESS POLYTUBE FITTING, PTF†</b>						
	5/32" OD, .10" ID	4.0mm OD, 2.5mm ID	PMC21025		.50	1.17	.75
	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	PMC2104	PMCD2104	.50	1.17/1.21	.77
	<b>ELBOW HOSE BARB</b> <i>(non-valved shown)</i>						
	1/8" ID	3.2mm ID	PMC2302	PMCD2302	.50	.85/1.21	.75/.69
	1/4" ID	6.4mm ID	PMC2304	PMCD2304	.50	1.00/1.21	.95/.90

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: CPC'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.