PLC12 SERIES CONNECTOR

The 1/4" flow polypropylene PLC12 offers many of the same configuration options as the PLC. The polypropylene material adds greater chemical resistance for more demanding applications. PLC12 couplings are also gamma sterilizable. PLC12 coulings are also gamma sterilizable and available with optional RFID (Radio Frequency Identification) capability (see page 96).

FEATURES	BENEFITS
Polypropylene material	Chemically resistant and gamma sterilizable
EPDM o-rings	Greater chemical resistance
CPC thumb latch	One-hand connection and disconnection
Integral terminations	Fewer leak points, shorter assemblies, faster installations

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 springs and pin: Stainless steel

O-rings: EPDM

STERILIZATION:
Gamma: Up to 50 kGy irradiation

COLOR: Almond

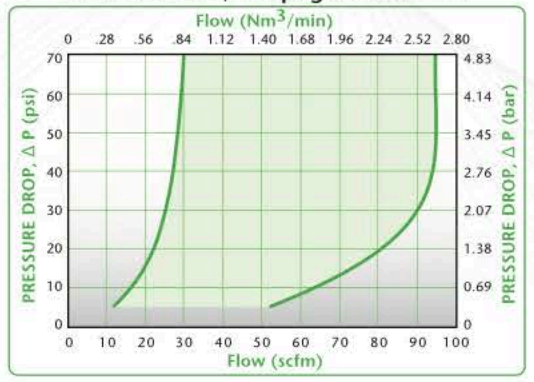
TUBING SIZES:
1/4" to 3/8" ID, 6.4mm to 9.5mm ID

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's products in their own application conditions. Use the graph at the right as a guide.*

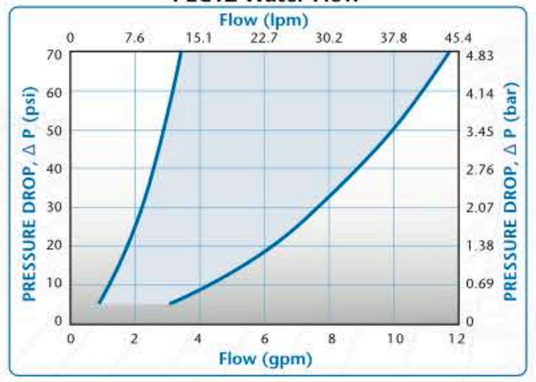
PLC12 Couplings are gamma sterilizable; see page 162 for more information on sterilization and disinfection

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.

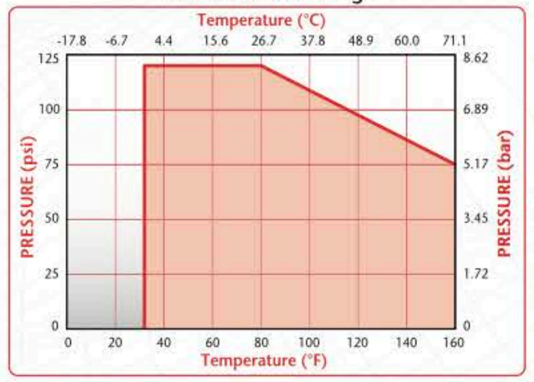
PLC12 Air Flow, 100 psig Inlet Pressure



PLC12 Water Flow



PLC12 Pressure Range



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_V = Average coefficient across various flow rates (see chart)
ΔP = Pressure drop across coupling (psi)
S = Specific gravity of liquid

C_V VALUES FOR 1/4" FLOW PLC12 COUPLINGS

BODIES \ INSERTS	PLC 2000412	PLCD 2000412	PLC 2000612	PLCD 2000612	PLC 2200412	PLCD 2200412	PLC 2200612	PLCD 2200612	PLC 2400412	PLCD 2400412	PLC 2400612	PLCD 2400612	PLC 2600412
PLC1000412	.40	.36	1.05	.58	.83	.56	1.40	.82	1.40	.75	1.40	.77	.83
PLCD1000412	.36	.31	.73	.48	.66	.41	.82	.50	.80	.45	.77	.45	.81
PLC1000612	.40	.36	1.05	.60	.83	.56	1.40	.81	1.40	.76	1.40	.76	.83
PLCD1000612	.37	.31	.81	.47	.70	.43	1.02	.51	.98	.46	.99	.48	.98
PLC1200612	.38	.36	.84	.63	.74	.56	1.14	.75	1.14	.70	1.14	.72	.74
PLCD1200612	.38	.33	.78	.49	.68	.44	.84	.49	.81	.43	.82	.44	.81
PLC1600412	.38	.37	.87	.54	.95	.51	1.00	.70	.95	.64	1.00	.66	.95
PLCD1600412	.37	.31	.61	.44	.57	.41	.78	.44	.78	.43	.75	.46	.78
PLC1600612	.38	.37	1.00	.57	.95	.53	1.40	.80	1.40	.71	1.40	.73	1.40
PLCD1600612	.38	.32	.71	.49	.63	.42	.89	.51	.96	.45	.92	.49	.97

NOTES: