EFC12 SERIES CONNECTOR

Specifications

PRESSURE:
Vacuum to 105 psi, 7.2 bar

TEMPERATURE:
32°F to 160°F (0°C to 71°C)

MATERIALS:
Main components and valves: Polypropylene
Thumb latch: Polypropylene
Valve spring: 316 stainless steel
Panel mount gasket: EPDM
External springs: 302 stainless steel
O-rings: EPDM

COLOR:
Gray with dark gray latch

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

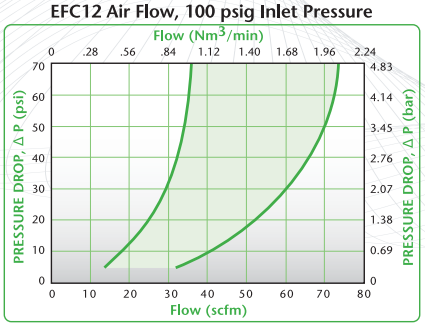
***WARNING**: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of CPC's products in their own application conditions.a*

The 9/32" flow EFC12 Series couplings feature a high efficiency valve design that provides a greater flow capability than any other coupling its size. Chemically resistant polypropylene material makes it ideal for harsh environments. The EFC12 Series adds a bulkhead panel mount option for tight seals against tank walls and drums.

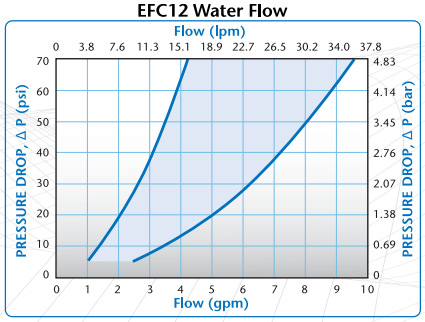
FEATURES	BENEFITS
High efficiency valve	More flow than PLC Series in a compact size
Plastic thumb latch	Fewer moving parts
Polypropylene material	Chemically resistant and gamma sterilizable
Compatible	Mates with most APC couplings

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.

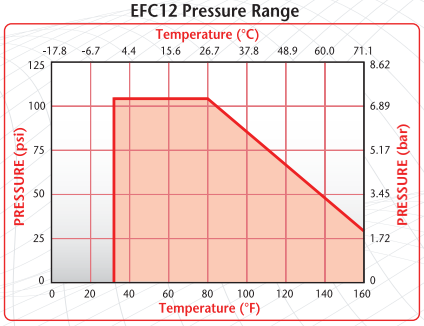
EFC12 Air Flow, 100 psig Inlet Pressure



EFC12 Water Flow



EFC12 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.

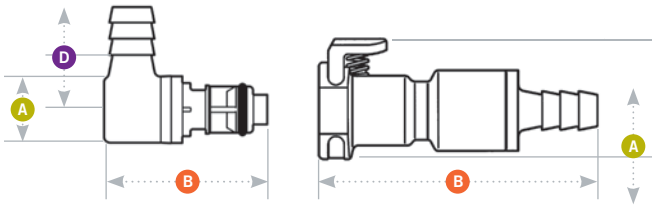
$$Q = C_v\sqrt{\frac{\Delta P}{S}}$$

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 EFC12 COUPLINGS

BODIES \ INSERTS	EFC 2000412	EFCD 2000412	EFC 2000612	EFCD 2000612	EFC 2200412	EFCD 2200412	EFC 2200612	EFCD 2200612	EFC 2400412	EFCD 2400412
EFCD10412	0.51	0.51	0.51	0.51	0.50	0.45	0.50	0.50	0.51	0.51
EFCD10612	0.61	0.51	1.13	0.72	0.50	0.45	0.81	0.69	0.51	0.72
EFCD16412	0.51	0.51	0.51	0.51	0.50	0.45	0.50	0.50	0.51	0.51
EFCD16612	0.61	0.51	1.13	0.72	0.50	0.45	0.81	0.69	0.51	0.72
EFCD17412	0.51	0.51	0.51	0.51	0.50	0.45	0.50	0.50	0.51	0.51
EFCD17612	0.61	0.51	1.13	0.72	0.50	0.45	0.81	0.69	0.51	0.72

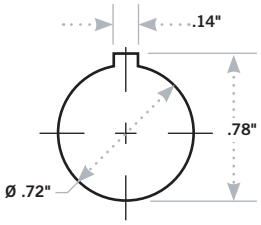
EFC12 DIMENSIONS



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

Panel Dimensions

	PANEL OPENING	*PANEL THICKNESS MAX.–MIN.*	*PANEL NUT HEX*	*PANEL NUT THREAD*
COUPLING BODIES	see drawing	.25 – .03	13/16	11/16-24UNF



EFC Series
Gasket Thickness: .06"
Mounting Hole: .720" diameter
Coupling Spacing: 1.25" min.
Greenlee® 720 Keyway Punch and 730BB-3/4 Hole Punch.

Coupling Bodies • POLYPROPYLENE

TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	D
IN-LINE PIPE THREAD	1/4" NPT			EFCD10412	.93	2.29	
	3/8" NPT			EFCD10612	.93	2.29	
BULKHEAD PANEL MOUNT HOSE BARB	1/4" ID	6.4mm ID		EFCD16412	.93	2.23	
	3/8" ID	9.5mm ID		EFCD16612	.93	2.23	
IN-LINE HOSE BARB	1/4" ID	6.4mm ID		EFCD17412	.93	2.23	
	3/8" ID	9.5mm ID		EFCD17612	.93	2.23	

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. MBLK = molded black material.

Coupling Inserts • POLYPROPYLENE

TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	D
IN-LINE PIPE THREAD	1/4" NPT			EFCD24412	.72	1.77	
	3/8" NPT			EFCD24612	.72	1.77	
IN-LINE HOSE BARB	1/4" ID	6.4mm ID	EFC22412	EFCD22412	.60/.72	1.33/2.08	
	3/8" ID	9.5mm ID	EFC22612	EFCD22612	.60/.72	1.33/1.90	
ELBOW HOSE BARB	1/4" ID	6.4mm ID	EFC23412	EFCD23412	.63	1.32/1.45	.96
	3/8" ID	9.5mm ID	EFC23612	EFCD23612	.63	1.32/1.45	.96

Accessories

DESCRIPTION		MATERIAL	PART NO.
PANEL MOUNT GASKET REPLACEMENT	For sealing panel mount bodies listed above	Buna-N	1830300