

# EFC12 SERIES CONNECTOR

*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.



## 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. Use the graph at the right as a guide.*



cpcworldwide.com/EFC12

## FEATURES

High efficiency valve

Plastic thumb latch

Polypropylene material

Compatible

## BENEFITS

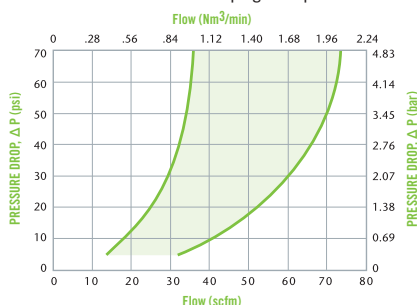
More flow than PLC Series in a compact size

Fewer moving parts

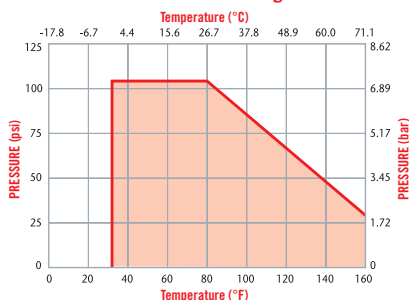
Chemically resistant and gamma sterilizable

Mates with most APC couplings

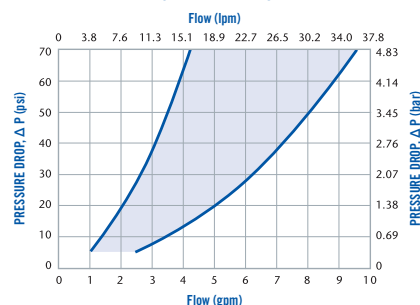
EFC12 AIR FLOW • 100 psig inlet pressure



EFC12 Pressure Range



EFC12 WATER FLOW



*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.*



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# EFC12 SERIES DIMENSIONS

## COUPLING BODIES - Polypropylene



TERMINATION	TUBING/THREAD SIZE	METRIC EQ	STRAIGHT THRU	SHUTOFF	A	B	D
IN-LINE PIPE THREAD	1/4" NPT			EFC10412	0.93 (23.6)	2.29 (58.2)	
	3/8" NPT			EFC10612	0.93 (23.6)	2.29 (58.2)	
BULKHEAD PANEL MOUNT HOSE BARB	1/4" ID	6.4mm ID		EFC16412	0.93 (23.6)	2.23 (56.6)	
	3/8" ID	9.5mm ID		EFC16612	0.93 (23.6)	2.23 (56.6)	
IN-LINE HOSE BARB	1/4" ID	6.4mm ID		EFC17412	0.93 (23.6)	2.23 (56.6)	
	3/8" ID	9.5mm ID		EFC17612	0.93 (23.6)	2.23 (56.6)	

## COUPLING INSERT - Polypropylene



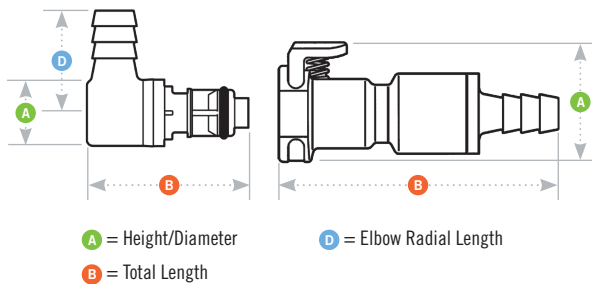
TERMINATION	TUBING/THREAD SIZE	METRIC EQ	STRAIGHT THRU	SHUTOFF	A	B	D
IN-LINE PIPE THREAD	1/4" NPT			EFC24412	0.72 (18.3)	1.77 (45.0)	
	3/8" NPT			EFC24612	0.72 (18.3)	1.77 (45.0)	
IN-LINE HOSE BARB	1/4" ID	6.4mm ID	EFC22412	EFC22412	0.60/0.72 (15.2/18.3)	1.33/2.08 (33.8/52.8)	
	3/8" ID	9.5mm ID	EFC22612	EFC22612	0.60/0.72 (15.2/18.3)	1.33/2.08 (33.8/52.8)	
ELBOW HOSE BARB	1/4" ID	6.4mm ID	EFC23412	EFC23412	0.63 (16.0)	1.32/1.45 (33.5/36.8)	0.96 (24.4)
	3/8" ID	9.5mm ID	EFC23612	EFC23612	0.63 (16.0)	1.32/1.45 (33.5/36.8)	0.96 (24.4)

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

## ACCESSORIES

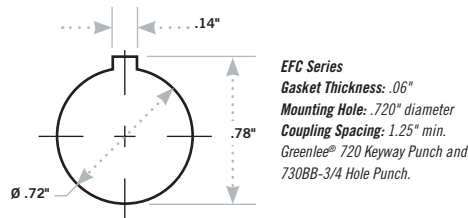
DESCRIPTION	MATERIAL	PART NO.
PANEL MOUNT GASKET REPLACEMENT	Buna-N	1830300

## PRODUCT DIMENSIONS



## PANEL DIMENSIONS

	PANEL OPENING	PANEL THICKNESS MAX.-MIN.	PANEL NUT HEX	PANEL NUT THREAD
COUPLING BODIES	see drawing	0.25 - 0.03	13/16	11/16-24UNF



## 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 to 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

## INSERTS

	EFC 2000412	EFC12 2000412	EFC 2000612	EFC12 2000612	EFC 2200412	EFC12 2200412	EFC 2200612	EFC12 2200612	EFC 2400412	EFC12 2400412
EFC10412	0.51	0.51	0.51	0.51	0.50	0.45	0.50	0.50	0.51	0.51
EFC10612	0.61	0.51	1.13	0.72	0.50	0.45	0.81	0.69	0.51	0.72
EFC16412	0.51	0.51	0.51	0.51	0.50	0.45	0.50	0.50	0.51	0.51
EFC16612	0.61	0.51	1.13	0.72	0.50	0.45	0.81	0.69	0.51	0.72
EFC17412	0.51	0.51	0.51	0.51	0.50	0.45	0.50	0.50	0.51	0.51
EFC17612	0.61	0.51	1.13	0.72	0.50	0.45	0.81	0.69	0.51	0.72

WARRANTY: All sales are subject to Colder Products Company's limited express warranty set forth in the CPC catalog. Contact your local distributor or CPC Customer Service for warranty provisions.

Warning: Due to the wide variety of possible fluid media and operating conditions, unintended consequences may result from the use of this product, all of which are beyond the control of CPC. It is the user's responsibility to carefully determine and test for compatibility for use with their application. All such risks shall be assumed by the buyer.

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