

# 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.

**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

High efficiency valve

Plastic thumb latch

Polypropylene material

Compatible

## BENEFITS

More flow than PLC Series in a compact size

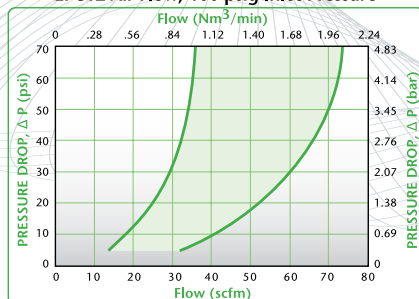
Fewer moving parts

Chemically resistant and gamma sterilizable

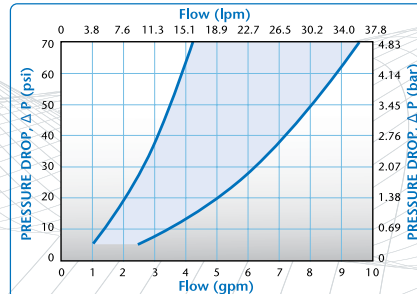
Mates with most APC couplings

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.

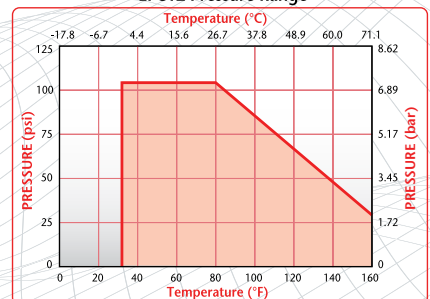
**EFC12 Air Flow, 100 psig Inlet Pressure**



**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<sub>v</sub> = Average coefficient across various flow rates (see chart)

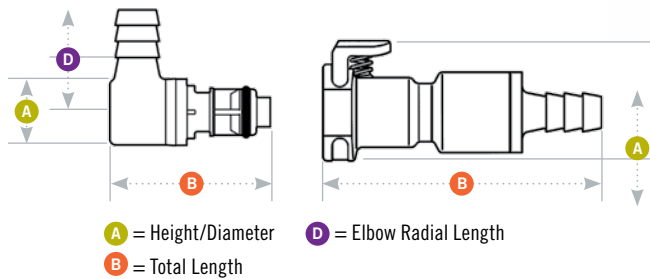
ΔP = Pressure drop across coupling (psi)

S = Specific gravity of liquid

### C<sub>v</sub> VALUES FOR EFC12 COUPLINGS

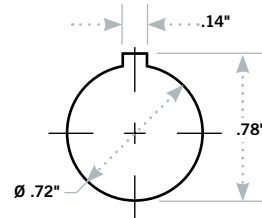
BODIES	EFCD10412	EFCD10612	EFCD16412	EFCD16612	EFCD17412	EFCD17612	EFCD12 20004	EFCD12 20006	EFCD12 22004	EFCD12 22006	EFCD12 24004	EFCD12 24006
EFCD10412	0.51	0.51	0.51	0.51	0.51	0.51	0.50	0.45	0.50	0.50	0.51	0.51
EFCD10612	0.61	0.51	1.13	0.72	0.50	0.45	0.81	0.69	0.51	0.72		
EFCD16412	0.51	0.51	0.51	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



### 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  
IN-LINE  
PIPE THREAD

BULKHEAD  
PANEL MOUNT  
HOSE BARB

IN-LINE  
HOSE BARB

TUBING/THREAD SIZE METRIC EQ.  
1/4" NPT  
3/8" NPT

1/4" ID 6.4mm ID  
3/8" ID 9.5mm ID

1/4" ID 6.4mm ID  
3/8" ID 9.5mm ID

STRAIGHT THRU

SHUTOFF

EFCD10412  
EFCD10612

A

B

D

.93  
.93

2.29  
2.29

EFCD16412  
EFCD16612

.93  
.93

2.23  
2.23

EFCD17412  
EFCD17612

.93  
.93

2.23  
2.23

### Coupling Inserts • POLYPROPYLENE



TERMINATION  
IN-LINE  
PIPE THREAD

IN-LINE  
HOSE BARB

ELBOW  
HOSE BARB

TUBING/THREAD SIZE METRIC EQ.  
1/4" NPT  
3/8" NPT

1/4" ID 6.4mm ID  
3/8" ID 9.5mm ID

1/4" ID 6.4mm ID  
3/8" ID 9.5mm ID

STRAIGHT THRU

SHUTOFF

EFCD24412  
EFCD24612

A

B

D

.72  
.72

1.77  
1.77

EFCD22412  
EFCD22612

.60/.72  
.60/.72

1.33/2.08  
1.33/1.90

EFCD23412  
EFCD23612

.63  
.63

1.32/1.45  
1.32/1.45

.96  
.96

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

### Accessories

DESCRIPTION

PANEL MOUNT GASKET REPLACEMENT

For sealing panel mount bodies listed above

MATERIAL

Buna-N

PART NO.

1830300