



Patented HFC12 Series couplings have flow comparable to many 1/2" flow couplings in a 3/8" body size. Compact and lightweight, HFC couplings replace bulky and heavy brass ball-and-sleeve couplings in a wide range of applications. An ergonomic design and a large, shrouded thumb latch pad produce a coupling that is easy to grip and simple to operate. An efficient valve design leads to high flow and low spillage.

Features

- High efficiency valve
- Ergonomic design
- Polypropylene material
- Compatible

Benefits

- More flow in a compact size
- Easy to grip, simple to operate
- Chemically resistant and gamma sterilizable
- Mates with HFC35 and HFC57 couplings

HFC12 SERIES

Specifications

Pressure:
Vacuum to 60 psi, 4.2 bar

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

Materials:
Main components and valves: Polypropylene
Thumb latch: Polypropylene
Valve spring (wetted): 316 stainless steel
External springs: 316 stainless steel
O-rings: EPDM
Panel mount gasket: EPDM
Compression nut, gripper, ferrule: Polypropylene

Color:
Gray with dark gray latch

Tubing Sizes:
3/8" to 3/4" ID, 9.5mm to 19.0mm ID

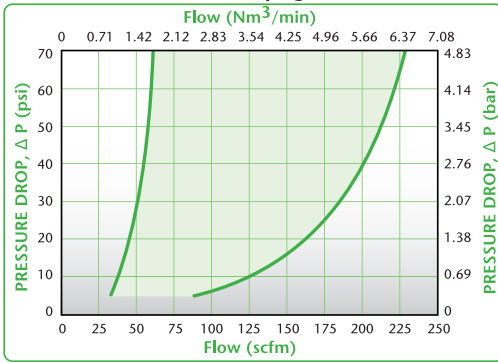
For compression termination specifications:
3/8" OD or 1/2" OD, +0.010/-0.000
WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of Colder products in their own application conditions. Use the graphs on the following page as a guide.

*Note:
Optional o-ring and
spring materials are
available, please
contact Colder
for details.*

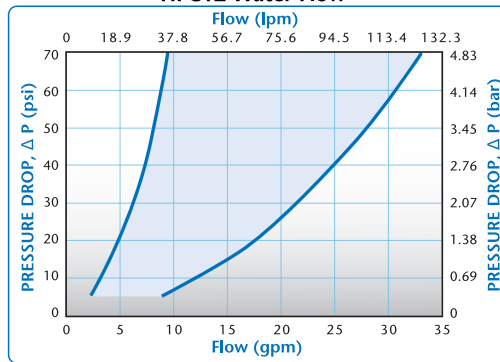
*Also available in
NSF listed versions,
please visit our web
site for part number
information*



HFC12 Air Flow, 100 psig Inlet Pressure

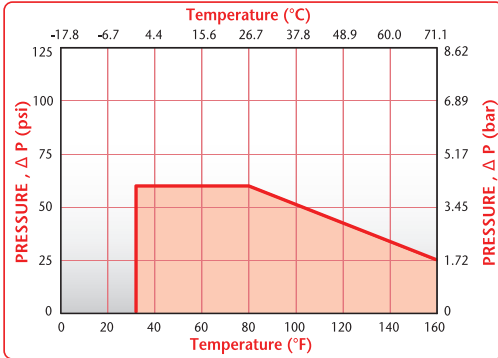


HFC12 Water Flow



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.

HFC12 Pressure Range



Don't forget: you can always visit www.colder.com for more product information.



DID YOU KNOW ...
 Colder offers over 7,000 couplings for a wide variety of applications such as low-pressure air and fluid line connections, high-purity chemical management and bioprocessing connectors. Contact us at 1-800-444-2474 or 651-645-0091 to learn how Colder can make your connections *cleaner, faster, safer and smarter!*

Liquid Flow Rates

Liquid Flow Rate Information for Couplings

The chart below shows the flow rate for Colder 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.

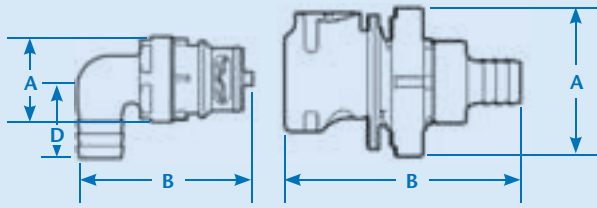
$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

Q=Flow rate in gallons per minute
 C_v=Average coefficient across various flow rates (see chart)
 ΔP=Pressure drop across coupling (psi)
 S=Specific gravity of liquid

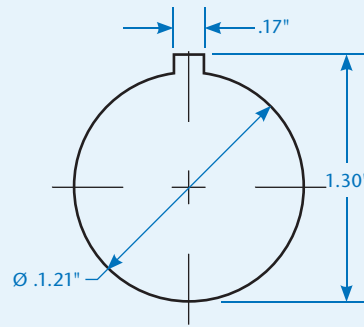
C_v Values for High Flow Couplings (HFC12)

BODIES	HFC 22612	HFCD 22612	HFC 22812	HFCD 22812	HFC 23612	HFCD 23612	HFC 23812	HFCD 23812	HFC 24612	HFCD 24612	HFC 24812	HFCD 24812	HFC 221212	HFCD 221212
HFCD10612	1.27	1.27	1.62	1.51	1.14	1.14	1.46	1.36	1.80	1.58	1.70	1.65	-	-
HFCD10812	1.28	1.34	1.62	1.51	1.15	1.24	1.46	1.36	1.81	1.54	1.72	1.56	-	-
HFCD16612	1.07	1.00	1.17	1.14	0.96	0.90	1.05	1.03	1.33	1.26	1.30	1.24	-	-
HFCD16812	1.25	1.23	1.61	1.52	1.13	1.11	1.45	1.37	1.79	1.60	1.68	1.56	-	-
HFCD17612	1.07	1.00	1.17	1.14	0.96	0.90	1.05	1.03	1.33	1.26	1.30	1.24	-	-
HFCD17812	1.25	1.23	1.61	1.52	1.13	1.11	1.45	1.37	1.79	1.60	1.68	1.56	-	-
HFC171212	-	-	-	-	-	-	-	-	-	-	-	-	3.94	-
HFCD171212	-	-	-	-	-	-	-	-	-	-	-	-	-	2.04

Product Dimensions



A = Height/Diameter
 B = Total Length (including valve)
 D = Elbow Radial Length



Gasket Thickness: .06"
 Mounting Hole: 1.21" diameter
 Coupling Spacing: 1.62" minimum

	PANEL OPENING	MAX. PANEL THICKNESS	MIN. PANEL THICKNESS
COUPLING BODIES	see drawing	.25	.03

Coupling Bodies

POLYPROPYLENE



TERMINATION
 IN-LINE
 PIPE THREAD

THREAD SIZE
 3/8" NPT
 3/8" BSPT
 1/2" NPT
 3/4" NPT

STRAIGHT THRU
 HFC10612
 HFC10612BSPT
 HFC10812
 HFC101212

SHUTOFF
 HFCD10612
 HFCD10612BSPT
 HFCD10812
 HFCD101212

A	B
1.44	2.69
1.44	2.72
1.44	2.88
1.44	3.07



TERMINATION
 BULKHEAD PANEL
 MOUNT
 HOSE BARB

TUBING SIZE
 3/8" ID
 1/2" ID
 5/8" ID
 3/4" ID

METRIC EQ.
 9.5mm ID
 12.7mm ID
 15.9mm ID
 19.0mm ID

STRAIGHT THRU
 HFC16612
 HFC16812
 HFC161012
 HFC161212

SHUTOFF
 HFCD16612
 HFCD16812
 HFCD161012
 HFCD161212

A	B
1.82	2.82
1.82	2.82
1.82	2.94
1.82	2.94



TERMINATION
 BULKHEAD
 PANEL MOUNT
 COMPRESSION

TUBING SIZE
 3/8" OD
 1/2" OD

METRIC EQ.
 9.5mm OD
 12.7mm OD

STRAIGHT THRU
 HFC12612
 HFC12812

SHUTOFF
 HFCD12612
 HFCD12812

A	B
1.82	2.96
1.82	3.11



TERMINATION
 IN-LINE
 HOSE BARB

TUBING SIZE
 3/8" ID
 1/2" ID
 5/8" ID
 3/4" ID

METRIC EQ.
 9.5mm ID
 12.7mm ID
 15.9mm ID
 19.0mm ID

STRAIGHT THRU
 HFC17612
 HFC17812
 HFC171012
 HFC171212

SHUTOFF
 HFCD17612
 HFCD17812
 HFCD171012
 HFCD171212

A	B
1.44	2.79
1.44	2.79
1.44	2.94
1.44	2.94



TERMINATION
 IN-LINE
 COMPRESSION

TUBING SIZE
 3/8" OD
 1/2" OD

METRIC EQ.
 9.5mm OD
 12.7mm OD

STRAIGHT THRU
 HFC13612
 HFC13812

SHUTOFF
 HFCD13612
 HFCD13812

A	B
1.44	2.96
1.44	3.11

Accessories



**PANEL MOUNT
 GASKET
 REPLACEMENT**

For sealing panel mount bodies listed above

MATERIAL
 EPDM

PART NO.
 621200

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

POLYPROPYLENE

TERMINATION <i>IN-LINE</i> <i>PIPE THREAD</i>	THREAD SIZE 3/8" NPT 3/8" BSPT 1/2" NPT 3/4" NPT		STRAIGHT THRU HFC24612 HFC24612BSPT HFC24812 HFC241212	SHUTOFF HFCD24612 HFCD24612BSPT HFCD24812 HFCD241212	A 1.16 1.16 1.16 1.23	B 1.77/1.89 1.80/1.92 1.95/2.07 2.14/2.26	
TERMINATION <i>IN-LINE</i> <i>HOSE BARB</i>	TUBING SIZE 3/8" ID 1/2" ID 5/8" ID 3/4" ID	METRIC EQ. 9.5mm ID 12.7mm ID 15.9mm ID 19.0mm ID	STRAIGHT THRU HFC22612 HFC22812 HFC221012 HFC221212	SHUTOFF HFCD22612 HFCD22812 HFCD221012 HFCD221212	A 1.00 1.00 1.00 1.00	B 1.97/2.09 1.97/2.09 2.01/2.13 2.14/2.26	
TERMINATION <i>IN-LINE</i> <i>COMPRESSION</i>	TUBING SIZE 3/8" OD 1/2" OD	METRIC EQ. 9.5mm OD 12.7mm OD	STRAIGHT THRU HFC20612 HFC20812	SHUTOFF HFCD20612 HFCD20812	A 1.00 1.00	B 2.14/2.26 2.29/2.41	
TERMINATION <i>ELBOW</i> <i>HOSE BARB</i>	TUBING SIZE 3/8" ID 1/2" ID 3/4" ID	METRIC EQ. 9.5mm ID 12.7mm ID 19.0mm ID	STRAIGHT THRU HFC23612 HFC23812 HFC231212	SHUTOFF HFCD23612 HFCD23812 HFCD231212	A 1.00 1.00 1.00	B 1.93/2.05 1.97/2.09 1.95/2.07	D .93 .93 .93



When selecting a valved coupling for your application, make sure to order a part number with a D just before the numeric portion of the part number. For example, HFC101212 does not have a shut-off valve; HFCD101212 would be the correct part number to order for a valved coupling.

To visually identify a part to determine whether or not it is valved, disconnect the coupling body and insert, and then look through the part. If you can see light all the way through, your part is non-valved. If there is anything obstructing the light, you probably have a valved part. Please contact Customer Service at 1-800-444-2474 or 651-645-0091 if you need further assistance.

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.



Call toll free 1-800-444-2474 or visit us at www.colder.com

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