



APC SERIES

Specifications

Pressure:

Vacuum to 120 psi, 8.3 bar

Temperature:

-40°F to 180°F (-40°C to 82°C)

Materials:

Main components and valves: Acetal

Thumb latch: Acetal

Valve spring: 316 stainless steel

External spring: 302 stainless steel

O-rings: Buna-N

Color:

Natural white with light gray latch

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 Colder products in their own application conditions.

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



The 1/4" flow APC Series couplings feature a plastic thumb latch, fewer moving parts and a smooth contoured design to deliver ease-of-use and excellent flow in a compact size. The patented APC Series has been expanded to include couplings with valves and thumb latch shrouds. A more rugged design on some models adds durability to increase the APC's application range.

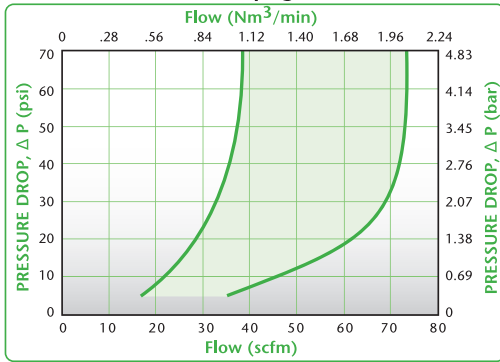
Features

- Plastic thumb latch
- Shrouded thumb latch
- Integral terminations
- Compatibility

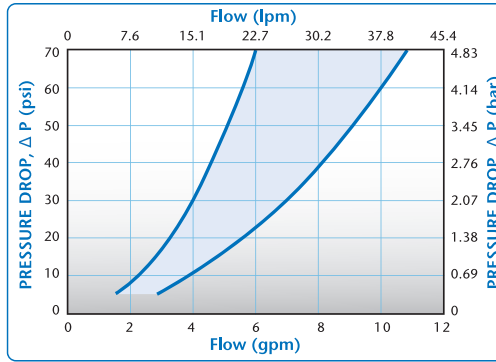
Benefits

- No exposed metal parts
- Protects against accidental disconnects
- Fewer leak points, shorter assemblies, faster installations
- Mates with most EFC couplings

APC Air Flow, 100 psig Inlet Pressure



APC 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.

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 APC Couplings

BODIES	APC 20004	APCD 20004	APC 20006	APCD 20006	APC 22004	APCD 22004	APC 22006	APCD 22006	APC 24004	APCD 24004	APC 24006	APCD 24006
APC10004	0.4	0.4	1.2	0.9	1.0	0.9	2.0	0.9	1.9	0.8	1.7	0.8
APCD10004	0.4	0.4	1.0	0.7	1.0	0.7	0.8	0.7	1.2	0.6	0.8	0.6
APC10006	0.4	0.4	1.2	0.9	1.2	0.7	1.8	0.9	2.0	0.9	1.7	0.8
APCD10006	0.4	0.4	1.3	0.8	0.6	0.5	1.1	0.7	1.3	0.7	1.0	0.7
APC13004SH	0.6	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.4
APCD13004SH	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
APC13006SH	0.4	0.4	1.0	0.7	0.9	0.6	1.1	0.7	1.1	0.7	1.0	0.7
APCD13006SH	0.4	0.4	0.8	0.6	0.7	0.5	0.8	0.6	0.9	0.6	0.8	0.6
APC17004SH	0.4	0.4	0.8	0.6	1.0	0.7	0.9	0.7	0.8	0.6	0.7	0.6
APCD17004SH	0.4	0.4	0.7	0.5	0.8	0.6	0.7	0.6	0.7	0.5	0.6	0.5
APC17006SH	0.4	0.4	1.2	0.9	4.0	0.9	2.4	0.9	2.0	0.9	1.9	0.8
APCD17006SH	0.4	0.4	1.2	0.8	1.3	0.8	1.2	0.7	1.2	0.7	1.1	0.7



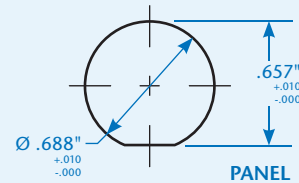
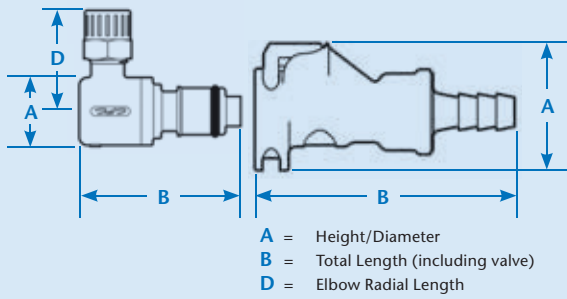
DID YOU KNOW ...

The shelf life of a connector is dependent upon the connector materials and the storage conditions. Colder manufactures quick disconnect couplings and connections made from a variety of metal, plastic and elastomeric raw materials. In general, it is best to store any Colder product in an environment shielded from light at a temperature between 50 °F and 90 °F.

The shelf life of Colder couplings and connections is estimated to be 3 years minimum if the storage conditions comply with those shown above.

NOTE: For product containing lubricated o-rings, the lubricant will dry out over time. Prior to use, it may be advisable to re-lubricate external o-rings. For product containing silicone o-rings, if lube is allowable, use of a synthetic lube is recommended.

Product Dimensions



COUPLING BODIES	PANEL OPENING	MAX. PANEL THICKNESS	MIN. PANEL THICKNESS
	see drawing	.50	.02



PANEL NUT HEX	PANEL NUT THREAD
13/16	11/16-24 UNS

Coupling Bodies

ACETAL

	TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/4" NPT 1/4" BSPT 3/8" NPT 3/8" BSPT		STRAIGHT THRU APC10004 APC10004BSPT APC10006 APC10006BSPT	SHUTOFF APCD10004 APCD10004BSPT APCD10006 APCD10006BSPT	A .93 .93 .93 .93	B 1.40 1.40 1.40 1.40
	TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	STRAIGHT THRU APC17004 APC17006		A .93 .93	B 1.35 1.35
	TERMINATION IN-LINE WITH SHROUD FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17" ID 3/8" OD, .25" ID	METRIC EQ. 6.4mm OD, 4.3mm ID 8.0mm OD, 6.0mm ID 9.5mm OD, 6.4mm ID 10.0mm OD, 8.0mm ID	STRAIGHT THRU APC13004SH APC130M8SH APC13006SH APC130M10SH	SHUTOFF APCD13004SH APCD130M8SH APCD13006SH APCD130M10SH	A 1.30 1.30 1.30 1.30	B 1.94 2.07 2.07 2.07
	TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	STRAIGHT THRU APC17004SH APC17006SH	SHUTOFF APCD17004SH APCD17006SH	A 1.30 1.30	B 2.07 2.07
	TERMINATION PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17" ID 3/8" OD, .25" ID	METRIC EQ. 6.4mm OD, 4.3mm ID 8.0mm OD, 6.0mm ID 9.5mm OD, 6.4mm ID 10.0mm OD, 8.0mm ID	STRAIGHT THRU APC12004 APC120M8 APC12006 APC120M10	SHUTOFF APCD12004 APCD120M8 APCD12006 APCD120M10	A 1.03 1.03 1.03 1.03	B 1.97 2.10 2.10 2.10
	TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/4" ID 5/16" ID 3/8" ID	METRIC EQ. 6.4mm ID 7.9mm ID 9.5mm ID	STRAIGHT THRU APC16004 APC16005 APC16006	SHUTOFF APCD16004 APCD16005 APCD16006	A 1.03 1.03 1.03	B 2.10 2.10 2.10

Accessories



**PANEL MOUNT
GASKET
REPLACEMENT**

For sealing panel mount bodies listed above

MATERIAL
Buna-N

PART NO.
1830300

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. †NOTE: Colder's Ferruleless Polytube Fitting terminations do not require ferrules to achieve a secure connection, which makes them easier to use and reuse. PTF fittings are designed for semi-rigid tubing, i.e., polyethylene, nylon, polyurethane, etc.

Coupling Inserts ACETAL

TERMINATION <i>IN-LINE</i> <i>PIPE THREAD</i>	THREAD SIZE		STRAIGHT THRU	SHUTOFF	A	B	
	1/4" NPT		APC24004	APCD24004	.72	1.43/1.77	
	1/4" BSPT		APC24004BSPT	APCD24004BSPT	.72	1.63/1.77	
	3/8" NPT		APC24006	APCD24006	.72	1.50/1.64	
	3/8" BSPT		APC24006BSPT	APCD24006BSPT	.72	1.51/1.65	
TERMINATION <i>IN-LINE</i> <i>FERRULELESS</i> <i>POLYTUBE</i> <i>FITTING, PTF†</i>	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	
	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	APC20004	APCD20004	.72	1.86/1.99	
		8.0mm OD, 6.0mm ID	APC200M8	APCD200M8	.72	1.79/1.93	
	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	APC20006	APCD20006	.72	1.78/1.91	
		10.0mm OD, 8.0mm ID	APC200M10	APCD200M10	.72	1.79/1.93	
TERMINATION <i>IN-LINE</i> <i>HOSE BARB</i>	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	
	1/4" ID	6.4mm ID	APC22004	APCD22004	.60/.72	1.40/2.10	
	3/8" ID	9.5mm ID	APC22006	APCD22006	.63/.72	1.40/1.92	
TERMINATION <i>ELBOW</i> <i>FERRULELESS</i> <i>POLYTUBE</i> <i>FITTING, PTF†</i>	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	D
	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	APC21004	APCD21004	1.22	1.32/1.45	.91
	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	APC21006	APCD21006	1.27	1.33/1.46	.96
TERMINATION <i>ELBOW</i> <i>HOSE BARB</i>	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	D
	1/4" ID	6.4mm ID	APC23004	APCD23004	.63	1.20/1.45	.96
	3/8" ID	9.5mm ID	APC23006	APCD23006	.63	1.20/1.50	.96



DID YOU KNOW ...

One of the most versatile coupling series, the APC can be found in such diverse applications as hospital beds and support surfaces, sports hydration equipment, cold and compression therapy and many more! This product platform is also frequently used to develop custom designs. Contact Customer Service at 1-800-444-2474 or 651-645-0091 to learn how we can adapt the APC coupling to your specific requirements.

Quick Tip: These cost-effective, high-value connectors are also available in NSF listed versions for food and beverage dispensing. Visit www.colder.com for equivalent NSF part numbers.

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. †NOTE: Colder's Ferruleless Polytube Fitting terminations do not require ferrules to achieve a secure connection, which makes them easier to use and reuse. PTF fittings are designed for semi-rigid tubing, i.e., polyethylene, nylon, polyurethane, etc.



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

Copyright © 2009 by Colder Products Company. All rights reserved. Colder Products Company, Colder Products and CPC are registered trademarks with the US Patent & Trademark Office.