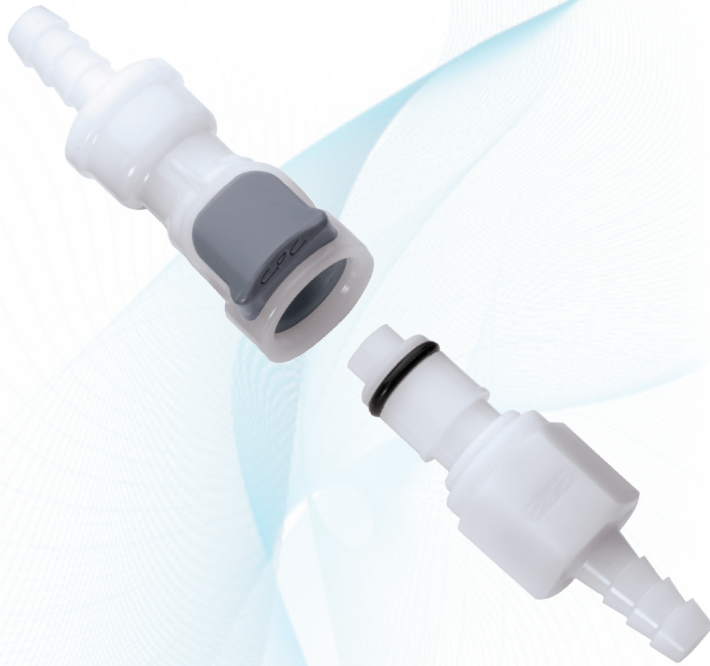


APC SERIES CONNECTOR



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 springs: 316 stainless steel

External springs and pin: 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 CPC's products in their own application conditions.

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 APC Series includes 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

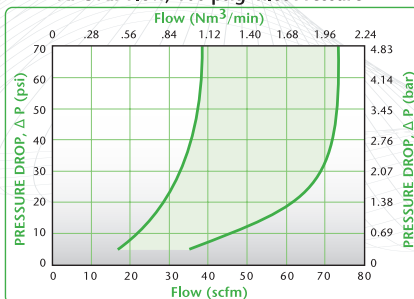
BENEFITS

No exposed metal parts

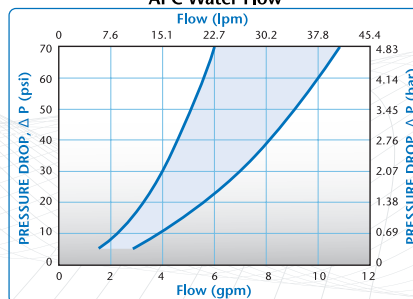
Protects against accidental disconnects

Fewer leak points, shorter assemblies, faster installations

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.

DID YOU KNOW?

THE SHELF LIFE OF A CONNECTOR IS DEPENDENT UPON THE CONNECTOR MATERIALS AND THE STORAGE CONDITIONS. CPC 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 CPC product in an environment shielded from light at a temperature between 50°F and 90°F.

The shelf life of CPC 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.

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.

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

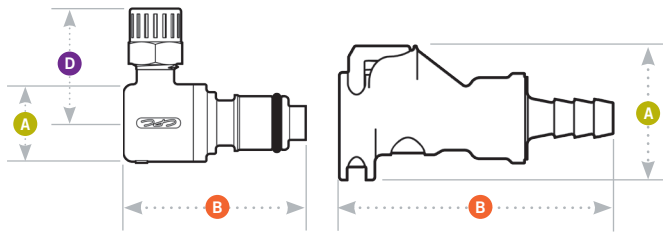
- Q = Flow rate in gallons per minute
- C_v = Average coefficient across various flow rates (see chart)
- ΔP = Pressure drop across coupling (psi)
- S = Specific gravity of liquid

C_v VALUES FOR APC COUPLINGS

BODIES	INSERTS	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	0.36	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	0.37	0.4	1.3	0.8	0.6	0.5	1.1	0.7	1.3	0.7	1.0	0.7
	APC13004SH	0.38	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.4
	APCD13004SH	0.38	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	APC13006SH	0.38	0.4	1.0	0.7	0.9	0.6	1.1	0.7	1.1	0.7	1.0	0.7
	APCD13006SH	0.37	0.4	0.8	0.6	0.7	0.5	0.8	0.6	0.9	0.6	0.8	0.6
	APC17004SH	0.38	0.4	0.8	0.6	1.0	0.7	0.9	0.7	0.8	0.6	0.7	0.6
	APCD17004SH	0.38	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	1.4	0.9	1.4	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

NOTES:

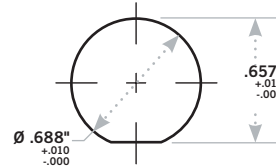
APC DIMENSIONS



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

Panel Dimensions

	PANEL OPENING	PANEL THICKNESS MAX.-MIN.	PANEL NUT HEX	PANEL NUT THREAD
COUPLING BODIES	see drawing	.05- .02	13/16	11/16-24UNF



Coupling Bodies • ACETAL



TERMINATION IN-LINE PIPE THREAD

TUBING/THREAD SIZE	METRIC EQ.	NSF PN	STANDARD PN	A	B
1/4" NPT		44400	APC10004 NSF	.93	1.40
1/4" NPT		45600	APCD10004 NSF	.93	1.40
3/8" NPT		49200	APC10006	.93	1.40
3/8" NPT		45700	APCD10006 NSF	.93	1.40
3/8" BSPT		9203301	APCD10006BPST NSF	.93	1.40

IN-LINE HOSE BARB

1/4" ID	6.4mm ID	40700	APC17004 NSF	.93	1.35
3/8" ID	9.5mm ID	40800	APC17006 NSF	.93	1.35

IN-LINE HOSE BARB WITH SHROUD

1/4" ID	6.4mm ID	42100	APCD17004SH NSF	1.30	2.07
3/8" ID	9.5mm ID	42200	APCD17006SH NSF	1.30	2.07

IN-LINE WITH SHROUD FERRULELESS POLYTUBE FITTING, PTF†

1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	49300	APC13004SH NSF	1.30	1.94
1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	43200	APCD13004SH NSF	1.30	1.94
3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	43300	APCD13006SH NSF	1.03	2.10

IN-LINE FLARE (FEMALE)

1/4" Flare		42000	APC NSF NON-VALVED BODY		
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PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†

1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	9207100	APCD12004	1.03	1.97
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PANEL MOUNT HOSE BARB

1/4" ID	6.4mm ID	9207900	APC16004 NSF	1.03	2.10
1/4" ID	6.4mm ID	9208200	APCD16004 NSF	1.03	2.10
3/8" ID	9.5mm ID	9208400	APCD16006 NSF	1.03	2.10

PANEL MOUNT FEMAL THREAD

5/8-UNF		45500	APC NSF VALVED BODY		
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IN-LINE COMPRESSION

1/4" Compression		9203800	APC NSF NON-VALVED BODY		
1/4" Compression		46000	APC NSF VALVED BODY		
3/8" Compression		46100	APC NSF VALVED BODY		

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters.
†NOTE: CPC'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
IN-LINE
PIPE THREAD

TUBING/THREAD SIZE	METRIC EQ.	NSF PN	STANDARD PN	A	B	D
1/4" NPT		42300	APC24004 NSF	.72	1.43	
1/4" NPT		42400	APCD24004 NSF	.72	1.77	
3/8" NPT		42500	APC24006 NSF	.72	1.50	
3/8" NPT		48600	APCD24006 NSF	.72	1.64	

IN-LINE
FERRULELESS
POLYTUBE FITTING,
PTF†

1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	43400	APCD20004 NSF	.72	1.99	
3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	43500	APCD20006 NSF	.72	1.91	

IN-LINE
HOSE BARB

1/4" ID	6.4mm ID	40900	APC22004 NSF	.60	1.40	
1/4" ID	6.4mm ID	42600	APCD22004 NSF	.72	2.10	
3/8" ID	9.5mm ID	41000	APC22006 NSF	.63	1.40	
3/8" ID	9.5mm ID	42700	APCD22006 NSF	.72	1.92	

ELBOW
FERRULELESS
POLYTUBE FITTING,
PTF†

1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	49500	APC21004 NSF	1.22	1.32	.91
1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	43000	APCD21004 NSF	1.22	1.45	.91
3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	43100	APCD21006 NSF	1.27	1.46	.96

ELBOW
HOSE BARB

1/4" ID	6.4mm ID	46200	APC23004 NSF	.63	1.20	.96
1/4" ID	6.4mm ID	42800	APCD23004 NSF	.63	1.45	.96
3/8" ID	9.5mm ID	44700	APC23006 NSF	.63	1.20	.96
3/8" ID	9.5mm ID	42900	APCD23006 NSF	.63	1.50	.96

IN-LINE
COMPRESSION

1/4" Compression		44900	APC NSF VALVED INSERT			
3/8" Compression		45000	APC NSF VALVED INSERT			

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