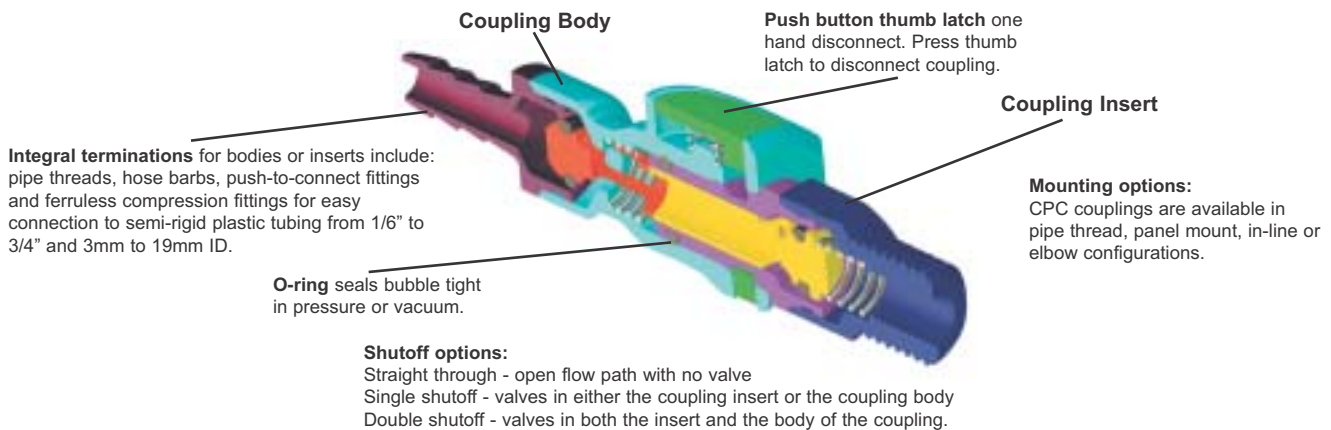




CPC quick disconnect couplings for plastic tubing provide numerous benefits: easy automatic latching, an “audible” click when engaged, reliable and convenient one-hand disconnect. They provide flexibility in a variety of materials, mounting options and terminations. CPC couplings can fit the most difficult tubing applications for reusable or disposable use.



Guide for Selecting a CPC Quick Disconnect Coupling

Low pressure (under 250 psi) applications for fluid power and fluid handling involve a great variety of media, pressure and temperatures. Use the following criteria checklist to simplify your selection process.

1. Media

The corrosiveness and viscosity of the fluid going through the coupling needs to be considered. Also be aware of any media the coupling may be exposed to externally.

2. Pressure

Consider the maximum pressure your coupling will need to withstand during operation. Couplings rated at 250 psi handle most low pressure applications. Make sure your application will never exceed the maximum coupling rating.

3. Temperature

To choose the most appropriate material, know your minimum and maximum temperature range. Standard temperature tolerances range from -40°F to 200 °F, depending on coupling material.

4. Flow

Determine flow requirements for your application such as GPM and pressure drop. Also consider the effects of shutoff options and your tubing connection on the coupling flow.

5. Mounting Options

Determine how the coupling is configured into your application. Common configurations include pipe thread, panel mount, in-line or elbow.

6. Shutoff Options

Shutoffs are convenient when a user needs to disconnect tubing and stop the flow of the media through the coupling. CPC couplings can provide shutoffs in either the insert or the body half or both.

7. Tubing Connections

Before selecting a coupling, consider the variety of available terminations. CPC couplings are made for 1/16" to 3/4" ID tubing. Hose barb, ferrules polytube fittings, and push-to-connect are the most common termination options. Threaded and panel mount options are also available.

8. Installation and Serviceability

Consider these three important elements when specifying a coupling into your design. Ease of installation, replacement and service are all improved by specifying CPC couplings.

Finding The Best Material For The Job

Acetal: Acetal thermoplastic (Polyoxymethylene) is strong, lightweight, and economical and used for a wide variety of chemical and mechanical components.

Polypropylene: Polypropylene thermoplastic has excellent chemical resistance and withstands sterilisation. It is commonly used in water filtration and bioprocessing applications.

Polysulfone (PSO): Polysulfone thermoplastic has excellent strength, good chemical resistance, withstands repeated sterilisation, and withstands higher temperatures than other thermoplastics.

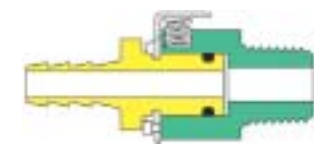
Polycarbonate (PC): Polycarbonate thermoplastic is resistant to chemicals, withstands sterilisation, and is transparent. It is commonly used in medical devices.

Chrome-Plated Brass: A rugged metallic material with an attractive appearance, excellent for higher pressure and temperature. It is commonly used in instrumentation, air and vacuum line applications.

Stainless Steel: A superior grade of steel with excellent chemical resistance and durability. Applications include instrumentation, pharmaceutical, semiconductor and speciality chemical.

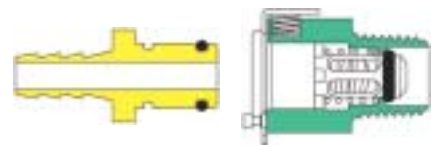
Aluminium: A light weight and durable material that has good chemical resistance. Applications include automotive fluid recovery, marine and RV fluids, and cooling lines.

STRAIGHT THROUGH FLOW, no valve in either half.



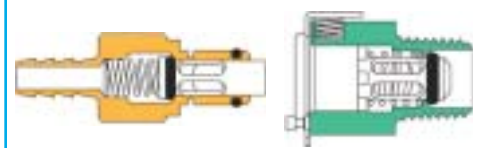
Insert straight through Coupling body straight through

SINGLE END SHUTOFF, one valve in either half.



Insert straight through Coupling body with valve

DOUBLE END SHUTOFF, valves in both halves.



Insert with valve Coupling body with valve



Sterilisation & Disinfectant Methods

Sterilisation processes vary substantially depending on equipment and specific process. Therefore, we present this sterilisation method chart as a basic guide only. Since so many factors affect the sterilisation capability of a material or device, it is the customer's responsibility to test CPC products under their own sterilisation conditions.

MATERIAL	Disinfectants			Ethylene Oxide	Autoclave	E-Beam Irradiation	Gamma Irradiation	Dry Heat
	Formalin	Isopropyl Alcohol	Ethyl Alcohol					
						5 Megarads	5 Megarads	250°F
METALS								
302 / 316 Stainless Steel	Y	Y	Y	Y	Y	Y	Y	Y
6061 Aluminium	Y	Y	Y	N	Y	Y	Y	Y
Chrome Plated Brass-CDA 360	N	Y	Y	Y	Y	Y	Y	Y
POLYMERS								
ABS	N	N/A	Y	Y	N	Y	Y	N
Acetal	Y	Y	Y	Y	Y	N	N	N
HDPE (HMWPE)	Y	Y	Y	N	N	Y	Y	N
LDPE	Y	Y	Y	Y	N	Y	Y	N
Nylon	Y	N	N	Y	N	N	N	N
Polycarbonate	Y	Y	Y	Y	Y	Y	Y	Y
Polypropylene	Y	Y	Y	Y	N	Y	Y	N
Polysulfone	Y	Y	Y	Y	Y	Y	Y	Y
ELASTOMERS								
Buna-N (Nitrile)	Y	Y	Y	N	N	Y	Y	Y
EPR / EPDM	Y	Y	Y	Y	Y	Y	Y	Y
Silicone	Y	Y	Y	Y	Y	Y	Y	Y
Fluorocarbon (Viton®)	Y	Y	Y	N	N	N	N	Y
Chemraz® Kalrez®	Y	Y	Y	Y	Y	N	N	Y

STERILISATION METHODS

Disinfectants 70°F (20°C), Formalin, ethyl, alcohol, etc. Sterilise coupled or uncoupled.

Ethylene Oxide, ETO 4 hours, 100% Eto @ 110°F (43°C), up to 5 repetitions, coupled or uncoupled.

Autoclave 250°F (121°C), 30 min. max., up to 10 repetitions. Sterilise uncoupled only.

Electron Beam Maximum cumulative exposure of 50 kilograys. Sterilise coupled or uncoupled.

Gamma Maximum cumulative exposure of 50 kilograys. Sterilise coupled or uncoupled.

Dry Heat 250°F (121°C), 12 hour, no pressure. Sterilise uncoupled only.

NOTE: Testing conducted at room temperature except where noted.

	Yes, recommended material for this sterilisation method
	No, not recommended
	Not applicable

Chemical Compatibility

Chemicals can affect the strength, surface appearance, colour, dimensions or weight of plastics. Therefore, we present this chemical resistance chart as a basic guide only. Because many factors affect the chemical resistance of a given material, it is the customer's responsibility to test CPC products under their own application conditions.

MATERIAL	Acetic Acid	Acetone	Air	Ammonia, Anhydrous	Benzene	Carbon Dioxide	Chlorine Water	Ethanol (Ethyl Alcohol)	Ethylene Glycol	Gasoline, Unleaded	Hydrochloric Acid	Hydrofluoric Acid	Isopropyl Alcohol	Methyl Ethyl Ketone (MEK)	Methanol (Methyl Alcohol)	Oxygen	Ozone	Sodium Hypochlorite	Steam	Sulfuric Acid, Air Free	Toluene	Trichloroethylene	Water, Fresh
METALS																							
Chrome-Plated Brass	D	A	A	D	N/A	A	D	A	B	A	D	D	B	A	A	A	N/A	D	A	C	A	B	C
Stainless Steel (316)	A	A	A	A	B	A	C	A	A	A	D	B	B	A	A	A	A	N/A	A	B	A	B	A
Aluminium	B	A	A	A	B	B	D	B	A	A	D	D	B	B	A	A	B	D	B	D	A	D	B
POLYMERS																							
Acetal	D	A	A	D	A	A	D	A	B	A	C	D	A	B	A	A	C	D	C	N/A	C	D	A
Polycarbonate	B	D	A	D	D	N/A	N/A	B	B	A	D	D	A	D	B	A	A	N/A	A	D	D	N/A	A
Polypropylene	B	A	A	A	D	A	D	A	A	C	B	C	A	B	A	A	B	B	A	C	C	C	A
Polysulfone	A	D	A	A	D	N/A	B	C	A	A	A	D	B	D	C	A	A	A	A	D	D	C	A
Peek™	A	A	A	A	A	A	C	A	A	A	A	C	A	A	A	A	A	A	A	C	A	A	A
ELASTOMERS																							
Buna-N (Nitrile)	D	D	A	B	D	A	D	A	A	A	D	D	B	D	A	B	D	C	D	D	D	D	A
EPR/EPDM	A	A	A	A	D	B	C	A	A	D	C	D	B	A	A	A	A	B	A	D	D	D	A
Fluorocarbon (Viton®)	D	D	A	D	A	B	A	A	A	A	A	B	B	D	D	A	A	A	D	A	C	A	B
Chemraz® Kalrez®	A	A	A	A	A	A	N/A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	A

NOTE: All ratings are based on concentration level at 100% and temperature at 21°C.

A	Excellent, no apparent effect	B	Good, little or no effect	C	Fair, some effect, not long term	D	Not recommended, severe effect	N/A	Not applicable
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1/8" FLOW, PMC SERIES FOR 1/16" TO 1/4" TUBING

Acetal couplings offer the widest selection of configurations and cover the greatest variety of applications.

PMC SERIES FEATURES

- Leak-free O-Ring seals
- Straight, single or double shutoff
- Special configuration quoted, including NSF C-2 listed versions
- Connects with MC and PMC Stainless Steel Series

APPLICATIONS

- Water and air supply lines
- Mild chemical handling
- Ink lines
- Potable water
- Vacuum lines



SEE PAGES 102-103 FOR BRASS VERSION

COUPLING BODIES 1/8" FLOW

PART NO.	CONNECTION	TUBING SIZE	METRIC EQ.	LENGTH	PRICE
PIPE THREAD					
Male Thread- Valved					
PMCD 10-02	1/8" NPT			1.00"	£ 4.83
PMCD 10-04	1/4" NPT			1.10"	£ 4.83
PMCD 10-020	1/8" BSPT			1.00"	£ 4.83
PMCD 10-040	1/4" BSPT			1.10"	£ 5.11
Male Thread - Un-Valved					
PMC 10-02	1/8" NPT			1.00"	£ 3.77
PMC 10-04	1/4" NPT			1.10"	£ 3.77
PMC 10-020	1/8" BSPT			1.00"	£ 3.77
PMC 10-040	1/4" BSPT			1.10"	£ 6.38
PANEL MOUNT					
Ferruleless Polytube Fitting, PTF - Valved					
PMCD 12-M42			4 x 2 mm	1.65"	£ 7.12
PMCD 12-025		5/32"OD .10"ID	4 x 2.5 mm	1.70"	£ 7.40
PMCD 12-04		1/4"OD .170"ID	6 x 4.3 mm	1.72"	£ 7.06
Ferruleless Polytube Fitting, PTF - Un-Valved					
PMC 12-M42			4 x 2 mm	1.65"	£ 6.33
PMC 12-025		5/32"OD .10"ID	4 x 2.5 mm	1.70"	£ 6.68
PMC 12-04		1/4"OD .170"ID	6 x 4.3 mm	1.72"	£ 6.31
Hose Barb - Valved					
PMCD 16-01		1/16"ID		1.40"	£ 7.47
PMCD 16-02		1/8"ID	3.2 mm ID	1.65"	£ 6.82
PMCD 16-03		3/16"ID	4.8 mm ID	1.85"	£ 6.94
PMCD 16-04		1/4"ID	6.4 mm ID	1.85"	£ 6.94
Hose Barb - Un-Valved					
PMC 16-01		1/16"ID		1.40"	£ 6.48
PMC 16-02		1/8"ID	3.2 mm ID	1.65"	£ 6.01
PMC 16-03		3/16"ID	4.8 mm ID	1.85"	£ 6.01
PMC 16-04		1/4"ID	6.4 mm ID	1.85"	£ 6.13
Female Thread - Valved					
PMCD 18-1032	10-32 UNF			1.25"	£ 9.13
Female Thread - Un-Valved					
PMC 18-1032	10-32 UNF			1.25"	£ 8.02
IN LINE					
Ferruleless Polytube Fitting, PTF - Valved					
PMCD 13-M42			4 x 2 mm	1.65"	£ 9.03
PMCD 13-025		5/32"OD .10"ID	4 x 2.5 mm	1.65"	£ 6.97
PMCD 13-04		1/4"OD .170"ID	6 x 4.3 mm	1.75"	£ 5.20
Ferruleless Polytube Fitting, PTF - Un-Valved					
PMC 13-M42			4 x 2 mm	1.65"	£ 8.02
PMC 13-025		5/32"OD .10"ID	4 x 2.5 mm	1.65"	£ 6.09
PMC 13-04		1/4"OD .170"ID	6 x 4.3 mm	1.75"	£ 4.47
Hose Barb - Valved					
PMCD 17-01		1/16"ID		1.41"	£ 5.38
PMCD 17-02		1/8"ID	3.2 mm ID	1.65"	£ 4.91
PMCD 17-03		3/16"ID	4.8 mm ID	1.85"	£ 5.02
PMCD 17-04		1/4"ID	6.4 mm ID	1.85"	£ 4.91
Hose Barb - Un-Valved					
PMC 17-01		1/16"ID		1.41"	£ 3.95
PMC 17-02		1/8"ID	3.2 mm ID	1.65"	£ 3.44
PMC 17-03		3/16"ID	4.8 mm ID	1.85"	£ 3.54
PMC 17-04		1/4"ID	6.4 mm ID	1.85"	£ 3.44
Female Thread - Valved					
PMCD 19-1032	10-32 UNF			1.25"	£ 6.41
Female Thread - Un-Valved					
PMC 19-1032	10-32 UNF			1.25"	£ 5.42

