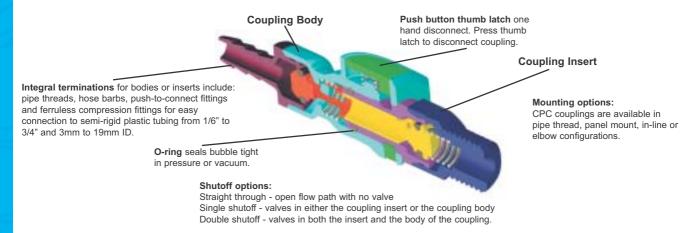


# **CPC QUICK DISCONNECT COUPLINGS**



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.

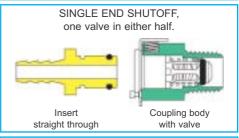
## 7. Tubing Connections

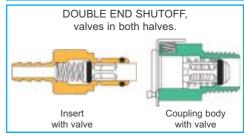
Before selecting a coupling, consider the variety of available terminations. CPC couplings are made for 1/16" to 3/4"ID tubing. Hose barb, ferruless polytube fittings, and push-to-connect are the most common termination options. Threaded and panel mount options are also available.

# 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.

# STRAIGHT THROUGH FLOW, no valve in either half. Insert Coupling body straight through





# **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 metalic 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.



# **CPC TECHNICAL DETAILS**



# **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	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		
6061 Aluminium	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ		
Chrome Plated Brass-CDA 360	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ		
POLYMERS										
ABS	N	N/A	Υ	Υ	N	Υ	Υ	N		
Acetal	Υ	Υ	Υ	Υ	Υ	N	N	N		
HDPE (HMWPE)	Υ	Υ	Υ	N	N	Υ	Υ	N		
LDPE	Υ	Υ	Υ	Υ	N	Υ	Υ	N		
Nylon	Υ	N	N	Υ	N	N	N	N		
Polycarbonate	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		
Polypropylene	Υ	Υ	Υ	Υ	N	Υ	Υ	N		
Polysulfone	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		
ELASTOMERS										
Buna-N (Nitrile)	Υ	Υ	Υ	N	N	Υ	Υ	Υ		
EPR / EPDM	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		
Silicone	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		
Fluorocarbon (Viton®)	Υ	Υ	Υ	N	N	N	N	Υ		
Chemraz® Kalrez®	Υ	Υ	Υ	Υ	Υ	N	N	Υ		

## STERILISATION METHODS

NOTE: Testing conducted at room temperature except where noted.

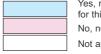
Disinfectants 70°F (20°C), Formalin, ethyl, alcohol, etc. Sterilise coupled or uncoupled. Ethylene Oxide, ETO 4 hours, 100% Et0 @ 110°F (43°C), up to 5 repetitions, coupled or uncoupled.

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.



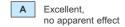
Yes, recommended material for this sterilisation method No, not recommended Not applicable

# **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	Α	Α	D	N/A	Α	D	Α	В	Α	D	D	В	Α	Α	Α	N/A	D	Α	С	Α	В	С
Stainless Steel (316)	Α	Α	Α	Α	В	Α	С	Α	Α	Α	D	В	В	Α	Α	Α	Α	N/A	Α	В	Α	В	Α
Aluminium	В	Α	Α	Α	В	В	D	В	Α	Α	D	D	В	В	Α	Α	В	D	В	D	Α	D	В
POLYMERS																							
Acetal	D	Α	Α	D	Α	Α	D	Α	В	Α	С	D	Α	В	Α	Α	С	D	С	N/A	С	D	Α
Polycarbonate	В	D	Α	D	D	N/A	N/A	В	В	Α	D	D	Α	D	В	Α	Α	N/A	Α	D	D	N/A	Α
Polypropylene	В	Α	Α	Α	D	Α	D	Α	Α	С	В	С	Α	В	Α	Α	В	В	Α	С	С	С	Α
Polysulfone	Α	D	Α	Α	D	N/A	В	С	Α	Α	Α	D	В	D	С	Α	Α	Α	Α	D	D	С	Α
Peek™	Α	Α	Α	Α	Α	Α	С	Α	Α	Α	Α	С	Α	Α	Α	Α	Α	Α	Α	С	Α	Α	Α
ELASTOMERS																							
Buna-N (Nitrile)	D	D	Α	В	D	Α	D	Α	Α	Α	D	D	В	D	Α	В	D	С	D	D	D	D	Α
EPR/EPDM	Α	Α	Α	Α	D	В	С	Α	Α	D	С	D	В	Α	Α	Α	Α	В	Α	D	D	D	Α
Fluorocarbon (Viton®)	D	D	Α	D	Α	В	Α	Α	Α	Α	Α	В	В	D	D	Α	Α	Α	D	Α	С	Α	В
Chemraz® Kalrez®	Α	Α	Α	Α	Α	Α	N/A	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	В	Α

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



B Good, little or no effect C Fair, so not lon

Fair, some effect, not long term

D Not recommended, severe effect

N/A Not applicable



# **CPC CHROME-PLATED BRASS COUPLINGS**



# 1/4" FLOW, LC SERIES

LC Series couplings have the durability and attractiveness of chrome-plated brass in 1/4" flow. For excellent service at higher pressures.

# **LC SERIES FEATURES**

- Pipe thread, panel mount, in line and elbow configurations
- · Available in NSF C-2 listed versions
- Single side, double side shutoff or straight through flow
- Stainless steel valves and Viton seals for high temperature applications available

# **APPLICATIONS**

- · Air lines
- · Beverage supply lines
- Instrumentation
- · Ink transfer
- Heating / cooling baths (high temperature version)



COUPLING BODIES 1/4	" FLOW									
COOI EINO DODIES 1/4	PART NO.	CONNECTION TUBI	NG SIZE	METRIC EQ.	LENGTH	PRICE				
	TAKT NO.	COMMEDITION TODA	NO OILL	METRIO EQ.	LLINGIII	TRIOL				
		PIPE THREAD								
		Male Thread - Valved								
	LCD 100-04	1/4" NPT			1.15"	£10.81				
ST P	LCD 100-06	3/8" NPT			1.15"	£10.81				
	LCD 100-040	1/4" BSPT			1.15"	£10.83				
	LCD 100-060	3/8" BSPT			1.15"	£10.83				
		Male Thread - Un-Valve	d							
	LC 100-04	1/4" NPT			1.15"	£ 9.83				
AND THE RESERVE	LC 100-06	3/8" NPT			1.15"	£ 9.83				
	LC 100-040	1/4" BSPT			1.15"	£ 9.84				
	LC 100-060	3/8" BSPT			1.15"	£ 9.78				
1		PANEL MOUNT								
		Ferruless Polytube Fitting, PTF - Valved								
	LCD 120-04	1/4"0	1.87"	£18.20						
	LCD 120-06	3/8"C	DD .250"ID	9.5 x 6 mm	2.00"	£18.36				
		Ferruless Polytube Fitting, PTF - Un-Valved								
The state of the s	LC 120-04		DD .170"ID	6 x 4.3 mm	1.87"	£16.17				
0.00	LC 120-06	3/8"C	DD .250"ID	9.5 x 6 mm	2.00"	£16.34				
		Hose Barb - Valved								
3	LCD 160-04	1/4"		6.4 mm ID	2.00"	£16.95				
	LCD 160-05	5/16"		7.9 mm ID	2.00"	£17.76				
	LCD 160-06	3/8"II	D	9.5 mm ID	2.00"	£16.95				
No. of the last of		Hose Barb - Un-Valved								
	LC 160-04	1/4"		6.4 mm ID	2.00"	£15.03				
	LC 160-05	5/16"		7.9mm ID	2.00"	£15.03				
Ma	LC 160-06	3/8"	ט	9.5 mm ID	2.00"	£15.03				
		Male Thread - Valved								
4	LCD 150-04	1/4" NPT			1.50"	£14.99				
1		Male Thread - Un-Valve	d							
	LC 150-04	1/4" NPT			1.50"	£12.12				
		IN LINE								
		Ferruless Polytube Fitti								
	LCD 130-04		DD .170"ID	6 x 4.3 mm	1.87"	£19.71				
	LCD 130-06	3/8"0	DD .250"ID	9.5 x 6 mm	2.00"	£19.90				
		Ferruless Polytube Fitti	٠,							
	LC 130-04		DD .170"ID	6 x 4.3 mm	1.87"	£18.55				
	LC 130-06	3/8"0	DD .250"ID	9.5 x 6 mm	2.00"	£18.73				
100		Hose Barb - Valved	_							
	LCD 170-04	1/4"		6.4 mm ID	2.00"	£16.74				
	LCD 170-05 LCD 170-06	5/16"		7.9 mm ID 9.5 mm ID	2.00"	£17.56				
	LCD 170-06	3/8"	ט	9.5 mm IU	2.00"	£16.74				
	1.0.470.04	Hose Barb - Un-Valved		C 4 mm 1D	2.00"	045.00				
	LC 170-04	1/4"		6.4 mm ID	2.00" 2.00"	£15.90				
101	LC 170-05 LC 170-06	5/16" 3/8"II		7.9 mm ID 9.5 mm ID	2.00"	£16.69 £15.90				
100	LO 110-00	3/0 11		5.5 mm ib	2.00	210.00				
		STAINLESS STEEL VERS	ION FOR HIG	H TEMPERATUR	RE AVAILABLE					