

# LC SERIES CONNECTOR



**CPC's LC Series chrome-plated brass** couplings are built tough and made to last in the most demanding applications. Ideal for use with higher temperature or pressure, the LC Series features a one-hand operation for swift and easy connects and disconnects. These couplings offer the flexibility of multiple configurations and terminations to mate with both the PLC acetal and PLC12 polypropylene couplings.

## FEATURES

Brass material

Chrome plating

High temperature capability

CPC thumb latch

Compatible

## BENEFITS

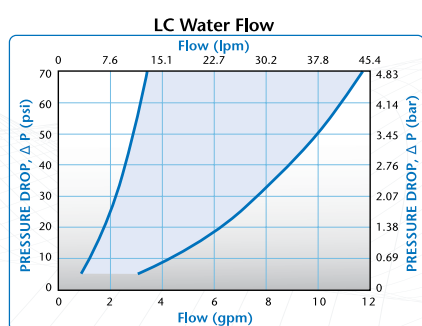
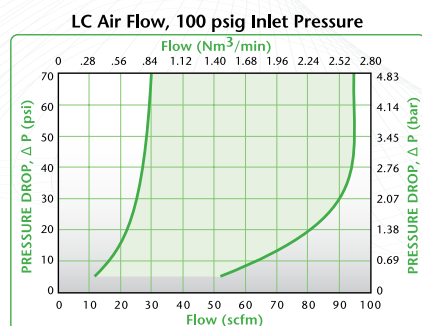
Durable construction withstands higher pressure and temperature

Attractive appearance

Versions rated to 400°F (204°C)

One-hand connection and disconnection

LC mates with PLC Series couplings



## Specifications

### PRESSURE:

Vacuum to 250 psi, 17.3 bar

### TEMPERATURE:

-40°F to 180°F (-40°C to 82°C)  
(High temperature versions available with ratings to 400°F)

### MATERIALS:

**Main components:** Chrome-plated brass

**Thumb latch:** Stainless steel

**Valves:** Acetal

**Valve springs:** 316 stainless steel

**External springs and pin:** Stainless steel

**O-rings:** Buna-N

### FINISH:

Chrome

### 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.

*Note:  
High temperature  
versions available with  
ratings to 400 F. Call  
customer service for  
more information.*

*Also available in NSF  
listed versions for food-  
based applications, please  
visit our website for part  
number information.*



« 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?

**O-RING SELECTION IS A KEY DECISION** in determining which connector will perform best in your specific application. Understanding the material characteristics and how they can be affected by both the media being transferred and the environment in which the connector is being used is important.

**BUNA-N** is the most common o-ring seal due to its solvent, oil and water resistance. Temperature range is -40°F to 250°F.

**FKM** is best suited for applications where chemical and strong acid resistance and/or high temperatures are a requirement. The temperature range is -15°F to 400°F.

**EPDM** has excellent resistance to polar solvents. This o-ring is not compatible with petroleum. The temperature range is -70°F to 300°F.

**SILICONE** seals have good temperature resistance. The temperature range is -70°F to 400°F and with special compounds can reach 175°F to 450°F. Silicone can also be supplied with Class VI requirements for medical/bioprocessing applications.

For further information about which o-ring is best suited for your application, please contact CPC Customer Service at 1-800-444-2474 or 651-645-0091.

### NOTES:

## 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.

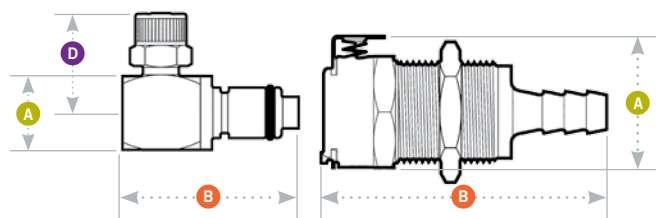
$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

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

### C<sub>v</sub> VALUES FOR 1/4" FLOW LC COUPLINGS

BODIES	INSERTS	LC 20004	LCD 20004	LC 20006	LCD 20006	LC 22004	LCD 22004	LC 22006	LCD 22006	LC 24004	LCD 24004	LC 24006	LCD 24006	LC 26004
	LC10004	.40	.36	1.05	.58	.83	.56	1.40	.82	1.40	.75	1.40	.77	.83
	LCD10004	.36	.31	.73	.48	.66	.41	.82	.50	.80	.45	.77	.45	.81
	LC10006	.40	.36	1.05	.60	.83	.56	1.40	.81	1.40	.76	1.40	.76	.83
	LCD10006	.37	.31	.81	.47	.70	.43	1.02	.51	.98	.46	.99	.48	.98
	LC12006	.38	.36	.84	.63	.74	.56	1.14	.75	1.14	.70	1.14	.72	.74
	LCD12006	.38	.33	.78	.49	.68	.44	.84	.49	.81	.43	.82	.44	.81
	LC16004	.38	.37	.87	.54	.95	.51	1.00	.70	.95	.64	1.00	.66	.95
	LCD16004	.37	.31	.61	.44	.57	.41	.78	.44	.78	.43	.75	.46	.78
	LC16006	.38	.37	1.00	.57	.95	.53	1.40	.80	1.40	.71	1.40	.73	1.40
	LCD16006	.38	.32	.71	.49	.63	.42	.89	.51	.96	.45	.92	.49	.97

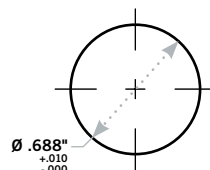
# LC DIMENSIONS



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

## Product Dimensions

	PANEL OPENING	PANEL THICKNESS MAX.-MIN.	PANEL NUT HEX	PANEL NUT THREAD
<b>COUPLING BODIES</b>	see drawing	.50 — .05	13/16	11/16-24UNEF
<b>COUPLING INSERTS</b>	see drawing	.090 — .300	13/16	11/16-24UNEF



## Coupling Bodies • CHROME-PLATED BRASS



**TERMINATION  
IN-LINE  
PIPE THREAD**



**PANEL MOUNT  
FERRULELESS  
POLYTUBE FITTING,  
PTF†**



**PANEL MOUNT  
HOSE BARB**



**PANEL MOUNT  
MALE THREAD**



**IN-LINE  
FERRULELESS  
POLYTUBE FITTING,  
PTF†**



**IN-LINE  
HOSE BARB**

### TUBING/THREAD SIZE METRIC EQ.

1/4" NPT  
1/4" BSPT  
3/8" NPT  
3/8" BSPT

### STRAIGHT THRU

LC10004  
LC10004BSPT  
LC10006  
LC10006BSPT

### SHUTOFF

LCD10004  
LCD10004BSPT  
LCD10006  
LCD10006BSPT

A .88  
1.15  
1.15  
1.15

B 1.15  
1.15  
1.15  
1.15

1/4" OD, .17" ID  
3/8" OD, .25" ID

6.4mm OD, 4.3mm ID  
9.5mm OD, 6.4mm ID

LC12004  
LC12006

LCD12004  
LCD12006

.88  
.88

1.87  
2.00

1/4" ID  
5/16" ID  
3/8" ID

6.4mm ID  
7.9mm ID  
9.5mm ID

LC16004  
LC16005  
LC16006

LCD16004  
LCD16005  
LCD16006

.88  
.88  
.88

2.00  
2.00  
2.00

1/4" NPT

LC15004

LCD15004

.88

1.50

1/4" OD, .17" ID  
3/8" OD, .25" ID

6.4mm OD, 4.3mm ID  
9.5mm OD, 6.4mm ID

LC13004  
LC13006

LCD13004  
LCD13006

.88  
.88

1.87  
2.00

1/4" ID  
5/16" ID  
3/8" ID

6.4mm ID  
7.9mm ID  
9.5mm ID

LC17004  
LC17005  
LC17006

LCD17004  
LCD17005  
LCD17006

.88  
.88  
.88

2.00  
2.00  
2.00

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 • CHROME-PLATED BRASS



**TERMINATION  
IN-LINE  
PIPE THREAD**



**IN-LINE  
PIPE THREAD  
(FEMALE)**



**PANEL MOUNT  
FERRULELESS  
POLYTUBE FITTING,  
PTF†**



**PANEL MOUNT  
HOSE BARB**



**IN-LINE  
FERRULELESS  
POLYTUBE FITTING,  
PTF†**



**IN-LINE  
HOSE BARB**



**ELBOW  
FERRULELESS  
POLYTUBE FITTING,  
PTF†**



**ELBOW  
HOSE BARB**

### TUBING/THREAD SIZE METRIC EQ.

TUBING/THREAD SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	D
1/4" NPT		LC24004	LCD24004	.72	1.25/1.68	
1/4" BSPT		LC24004BSPT	LCD24004BSPT	.72	1.25/1.68	
3/8" NPT		LC24006	LCD24006	.87	1.25/1.55	
3/8" BSPT		LC24006BSPT	LCD24006BSPT	.87	1.25/1.55	

1/4" NPT Female		LC26004	LCD26004	.72	1.25/1.90	
1/4" BSPP Female		LC26004BSPP	LCD26004BSPP	.72	1.25/1.75	

1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	LC40004	LCD40004	.94	1.83/1.98	
3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	LC40006	LCD40006	.94	1.96/2.11	

1/4" ID	6.4mm ID	LC42004	LCD42004	.94	1.96/2.11	
5/16" ID	7.9mm ID	LC42005	LCD42005	.94	1.96/2.11	
3/8" ID	9.5mm ID	LC42006	LCD42006	.94	1.96/2.11	

1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	LC20004	LCD20004	.72	1.25/1.87	
3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	LC20006	LCD20006	.72	1.38/1.83	

1/4" ID	6.4mm ID	LC22004	LCD22004	.63	1.35/2.00	
5/16" ID	7.9mm ID	LC22005	LCD22005	.63	1.35/1.85	
3/8" ID	9.5mm ID	LC22006	LCD22006	.63	1.35/1.83	

1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	LC21004	LCD21004	.63	1.28/1.43	.96
3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	LC21006	LCD21006	.63	1.28/1.43	.83

1/4" ID	6.4mm ID	LC23004	LCD23004	.63/.62	1.28/1.43	1.28
3/8" ID	9.5mm ID	LC23006	LCD23006	.63/.62	1.28/1.43	1.28

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: 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.