



Actual size

## 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 Colder's products in their own application conditions.

*Note: High temperature versions available with ratings to 400°F. Call Customer Service for more information.*

**Colder'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

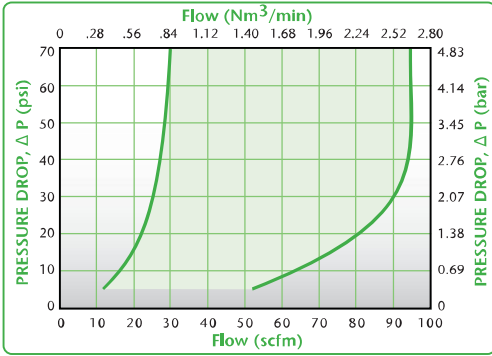
- Brass material
- Chrome plating
- High temperature capability
- Colder thumb latch
- Compatible

### Benefits

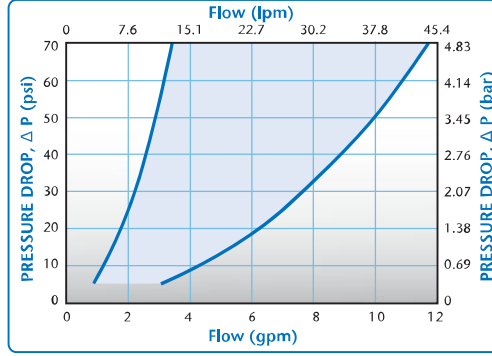
- Durable construction withstands higher pressure and temperature
- Attractive appearance
- Versions rated to 400°F (204°C)
- One-hand connection and disconnection
- LC mates with PLC Series couplings



LC Air Flow, 100 psig Inlet Pressure



LC 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<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	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



### 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 -30°F to 250°F.

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

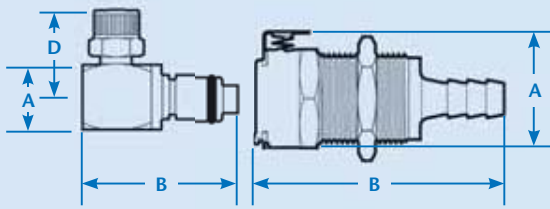
**EPDM** has excellent resistance to polar solvents. This o-ring is not compatible with petroleum. The temperature range is -70°F to 300°F.

**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.

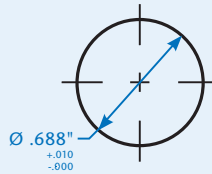
For further information about which o-ring is best suited for your application, please contact Colder Customer Service at 1-800-444-2474 or 651-645-0091.



## Product Dimensions



A = Height/Diameter  
 B = Total Length (including valve)  
 D = Elbow Radial Length



COUPLING BODIES  
 COUPLING INSERTS

PANEL OPENING	MAX. PANEL THICKNESS	MIN. PANEL THICKNESS
see drawing	.50	.05
see drawing	.090	.300



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

## Coupling Bodies

### CHROME-PLATED BRASS

	<b>TERMINATION</b> IN-LINE PIPE THREAD	<b>THREAD SIZE</b> 1/4" NPT 1/4" BSPT 3/8" NPT 3/8" BSPT		<b>STRAIGHT THRU</b> LC10004 LC10004BSPT LC10006 LC10006BSPT	<b>SHUTOFF</b> LCD10004 LCD10004BSPT LCD10006 LCD10006BSPT	<b>A</b> .88 .88 .88 .88	<b>B</b> 1.15 1.15 1.15 1.15
	<b>TERMINATION</b> PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	<b>TUBING SIZE</b> 1/4" OD, .17" ID 3/8" OD, .25" ID	<b>METRIC EQ.</b> 6.4mm OD, 4.3mm ID 9.5mm OD, 6.4mm ID	<b>STRAIGHT THRU</b> LC12004 LC12006	<b>SHUTOFF</b> LCD12004 LCD12006	<b>A</b> .88 .88	<b>B</b> 1.87 2.00
	<b>TERMINATION</b> PANEL MOUNT HOSE BARB	<b>TUBING SIZE</b> 1/4" ID 5/16" ID 3/8" ID	<b>METRIC EQ.</b> 6.4mm ID 7.9mm ID 9.5mm ID	<b>STRAIGHT THRU</b> LC16004 LC16005 LC16006	<b>SHUTOFF</b> LCD16004 LCD16005 LCD16006	<b>A</b> .88 .88 .88	<b>B</b> 2.00 2.00 2.00
	<b>TERMINATION</b> PANEL MOUNT MALE THREAD	<b>THREAD SIZE</b> 1/4" NPT		<b>STRAIGHT THRU</b> LC15004	<b>SHUTOFF</b> LCD15004	<b>A</b> .88	<b>B</b> 1.50
	<b>TERMINATION</b> IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	<b>TUBING SIZE</b> 1/4" OD, .17" ID 3/8" OD, .25" ID	<b>METRIC EQ.</b> 6.4mm OD, 4.3mm ID 9.5mm OD, 6.4mm ID	<b>STRAIGHT THRU</b> LC13004 LC13006	<b>SHUTOFF</b> LCD13004 LCD13006	<b>A</b> .88 .88	<b>B</b> 1.87 2.00
	<b>TERMINATION</b> IN-LINE HOSE BARB	<b>TUBING SIZE</b> 1/4" ID 5/16" ID 3/8" ID	<b>METRIC EQ.</b> 6.4mm ID 7.9mm ID 9.5mm ID	<b>STRAIGHT THRU</b> LC17004 LC17005 LC17006	<b>SHUTOFF</b> LCD17004 LCD17005 LCD17006	<b>A</b> .88 .88 .88	<b>B</b> 2.00 2.00 2.00

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



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****CHROME-PLATED BRASS**

<b>TERMINATION</b> <i>IN-LINE</i> <i>PIPE THREAD</i>	<b>THREAD SIZE</b>		<b>STRAIGHT THRU</b>	<b>SHUTOFF</b>	<b>A</b>	<b>B</b>		
	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			
<b>TERMINATION</b> <i>IN-LINE</i> <i>PIPE THREAD</i> <i>(FEMALE)</i>	<b>THREAD SIZE</b>		<b>STRAIGHT THRU</b>	<b>SHUTOFF</b>	<b>A</b>	<b>B</b>		
	1/4" NPT Female		LC26004	LCD26004	.72	1.25/1.90		
1/4" BSPP Female		LC26004BSPP	LCD26004BSPP	.72	1.25/1.75			
<b>TERMINATION</b> <i>PANEL MOUNT</i> <i>FERRULELESS</i> <i>POLYTUBE FITTING,</i> <i>PTF†</i>	<b>TUBING SIZE</b>	<b>METRIC EQ.</b>	<b>STRAIGHT THRU</b>	<b>SHUTOFF</b>	<b>A</b>	<b>B</b>		
	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			
<b>TERMINATION</b> <i>PANEL MOUNT</i> <i>HOSE BARB</i>	<b>TUBING SIZE</b>	<b>METRIC EQ.</b>	<b>STRAIGHT THRU</b>	<b>SHUTOFF</b>	<b>A</b>	<b>B</b>		
	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			
<b>TERMINATION</b> <i>IN-LINE</i> <i>FERRULELESS</i> <i>POLYTUBE FITTING,</i> <i>PTF†</i>	<b>TUBING SIZE</b>	<b>METRIC EQ.</b>	<b>STRAIGHT THRU</b>	<b>SHUTOFF</b>	<b>A</b>	<b>B</b>		
	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			
<b>TERMINATION</b> <i>IN-LINE</i> <i>HOSE BARB</i>	<b>TUBING SIZE</b>	<b>METRIC EQ.</b>	<b>STRAIGHT THRU</b>	<b>SHUTOFF</b>	<b>A</b>	<b>B</b>		
	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			
<b>TERMINATION</b> <i>ELBOW</i> <i>FERRULELESS</i> <i>POLYTUBE FITTING,</i> <i>PTF†</i>	<b>TUBING SIZE</b>	<b>METRIC EQ.</b>	<b>STRAIGHT THRU</b>	<b>SHUTOFF</b>	<b>A</b>	<b>B</b>	<b>D</b>	
	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		
<b>TERMINATION</b> <i>ELBOW</i> <i>HOSE BARB</i>	<b>TUBING SIZE</b>	<b>METRIC EQ.</b>	<b>STRAIGHT THRU</b>	<b>SHUTOFF</b>	<b>A</b>	<b>B</b>	<b>D</b>	
	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		

**DID YOU KNOW ...**

LC Series couplings can mate with PLC and PLC12 plastic couplings? See pages 38-45 for more information.



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.

