

# **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-ring: 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

Note: thigh 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 when higher temperature or pressure is present, the LC Series features a onehand 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**

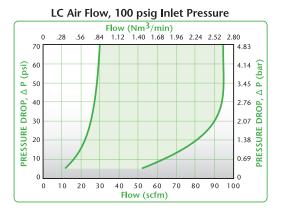
**Brass material** 

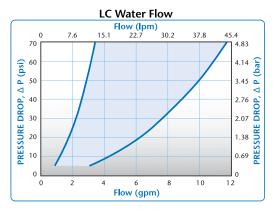
Chrome plating High temperature capability Colder thumb latch Compatible

### **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





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

=Average coefficient across various flow rates (see chart)  $\Delta P = Pressure drop across coupling (psi)$ 

S=Specific gravity of liquid

#### C, 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 when determining which connector will perform best in your specific application. It's important that you understand 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:

Buna-N is the most common o-ring seal due to its solvent, oil and water resistance. Temperature range of -30°to 250°F.

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

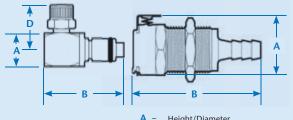
**EPDM** has excellent resistance to polar solvents. This o-ring is not compatible with petroleum. The temperature range is -70° to 300°F.

Food-grade material is used when food is being transferred through the connector.

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

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

### **Product Dimensions**



A = Height/Diameter

Total Length (including valve)

D = Elbow Radial Length



**COUPLING BODIES** 

**PANEL OPENING**  MAX. PANEL **THICKNESS** 

MIN. PANEL **THICKNESS** 

.05



**PANEL NUT HEX** 13/16

see drawing

**PANEL NUT THREAD** 11/16-24 UNS

.50

# **Coupling Bodies**

# **CHROME-PLATED BRASS**





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**

TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/4" NPT 1/4" NPT Female 1/4" BSPT 1/4" BSPP Female 3/8" NPT 3/8" BSPT		STRAIGHT THRU LC24004 LC26004 LC24004BSPT LC26004BSPP LC24006 LC24006BSPT	SHUTOFF LCD24004 LCD26004 LCD24004BSPT LCD26004BSPP LCD24006 LCD24006BSPT	.72 .87	B 1.25/1.68 1.25/1.90 1.25/1.68 1.25/1.75 1.25/1.55 1.25/1.55	
TERMINATION PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17" ID 3/8" OD, .25" ID	METRIC EQ. 6.4mm OD, 4.3mm ID 9.5mm OD, 6.4mm ID	STRAIGHT THRU LC40004 LC40006	SHUTOFF LCD40004 LCD40006	<b>A</b> .94 .94	B 1.83/1.98 1.96/2.11	
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/4" ID 5/16" ID 3/8" ID	METRIC EQ. 6.4mm ID 7.9mm ID 9.5mm ID	STRAIGHT THRU LC42004 LC42005 LC42006	SHUTOFF LCD42004 LCD42005 LCD42006	A .94 .94 .94	B 1.96/2.11 1.96/2.11 1.96/2.11	
TERMINATION IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17" ID 3/8" OD, .25" ID	METRIC EQ. 6.4mm OD, 4.3mm ID 9.5mm OD, 6.4mm ID	STRAIGHT THRU LC20004 LC20006	SHUTOFF LCD20004 LCD20006	A .72 .72	B 1.25/1.87 1.38/1.83	O TOP
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/4" ID 5/16" ID 3/8" ID	METRIC EQ. 6.4mm ID 7.9mm ID 9.5mm ID	STRAIGHT THRU LC22004 LC22005 LC22006	SHUTOFF LCD22004 LCD22005 LCD22006	A .63 .63 .63	B 1.35/2.00 1.35/1.85 1.35/1.83	
TERMINATION ELBOW FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17" ID 3/8" OD, .25" ID	METRIC EQ. 6.4mm OD, 4.3mm ID 9.5mm OD, 6.4mm ID	STRAIGHT THRU LC21004 LC21006	SHUTOFF LCD21004 LCD21006	A .63 .63	B D 1.28/1.43 .96 1.28/1.43 .83	
TERMINATION ELBOW HOSE BARB	<b>TUBING SIZE</b> 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	STRAIGHT THRU LC23004 LC23006	SHUTOFF LCD23004 LCD23006		B D 1.28/1.43 1.28 1.28/1.43 1.28	



LC Series couplings can mate with PLC and PLC12 plastic couplings? See pages 30-37 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.

