

Specifications

Pressure: Vacuum to 120 psi, 8.3 bar

Temperature:
-40°F to 180°(-40°C to 82°C)

Materials:

Main components and valves: Acetal

Thumb latch: Stainless steel

Valve spring: 316 stainless steel

External springs and pin: Stainless steel

O-rings: Buna-N

Color: Natural white, others available

Tubing Sizes:

1/4" to 3/8" ID, 6.4mm to 9.5mm ID

JG® Tubing Specifications:

Tube tolerances: 1/4" OD, +0.001/-0.004 | 3/8" OD, +0.001/-0.004

Tube Types: Plastic tube: Polyethylene, nylon, polyurethane. For soft or thin wall tubing with JG® terminations, tube supports are recommended.

Metal tube: Brass, copper and mild steel



The 1/4" flow PLC Series is proven worldwide in thousands of applications and offers the widest selection of sizes and configurations. PLC couplings are injection molded from acetal thermoplastic and are resistant to most mild chemical solutions. One-hand connection/disconnection, plus integral terminations make the PLC Series the choice for ease of use and manufacture.

Features

Colder thumb latch
Integral terminations

Clicks when connected
Compatible

Benefits

One-hand connection and disconnection
Fewer leak points, shorter assemblies, faster installations

Assurance of a reliable connection
Mates with LC Series couplings



Liquid Flow Rates

Liquid Flow Rate Information for Couplings

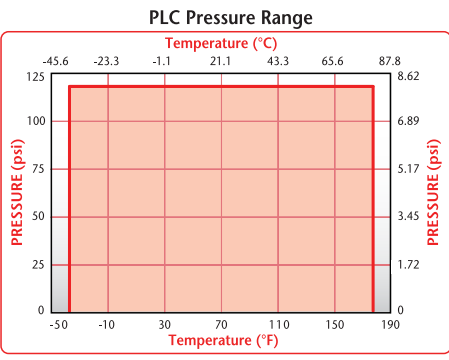
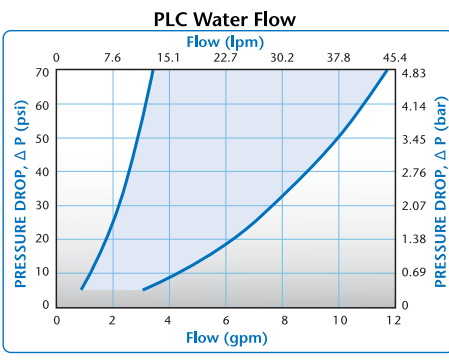
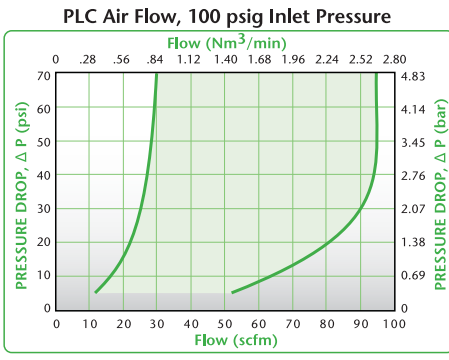
The chart below shows the flow rate for Colder couplings. Each coupling was tested with water at 70°F (21°C). To determine flow rates for specific coupling configurations use the formula to the right.

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

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

C_v Values for 1/4" Flow PLC Couplings

BODIES	PLC 20004	PLCD 20004	PLC 20006	PLCD 20006	PLC 22004	PLCD 22004	PLC 22006	PLCD 22006	PLC 24004	PLCD 24004	PLC 24006	PLCD 24006	PLC 26004
PLC10004	.40	.36	1.05	.58	.83	.56	1.40	.82	1.40	.75	1.40	.77	.83
PLCD10004	.36	.31	.73	.48	.66	.41	.82	.50	.80	.45	.77	.45	.81
PLC10006	.40	.36	1.05	.60	.83	.56	1.40	.81	1.40	.76	1.40	.76	.83
PLCD10006	.37	.31	.81	.47	.70	.43	1.02	.51	.98	.46	.99	.48	.98
PLC12006	.38	.36	.84	.63	.74	.56	1.14	.75	1.14	.70	1.14	.72	.74
PLCD12006	.38	.33	.78	.49	.68	.44	.84	.49	.81	.43	.82	.44	.81
PLC16004	.38	.37	.87	.54	.95	.51	1.00	.70	.95	.64	1.00	.66	.95
PLCD16004	.37	.31	.61	.44	.57	.41	.78	.44	.78	.43	.75	.46	.78
PLC16006	.38	.37	1.00	.57	.95	.53	1.40	.80	1.40	.71	1.40	.73	1.40
PLCD16006	.38	.32	.71	.49	.63	.42	.89	.51	.96	.45	.92	.49	.97



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.



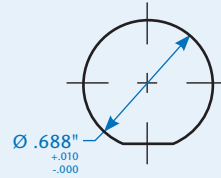
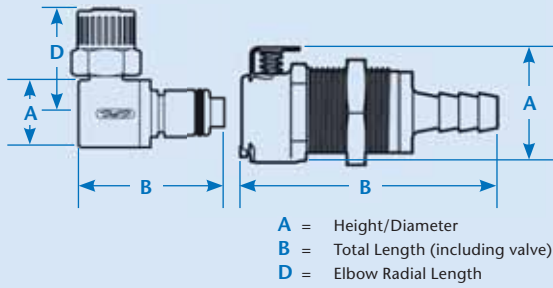
Decoding Coupling Options

Often times, it can be an overwhelming task to decipher which coupling best fits your application needs. The chart below helps to decode popular Colder couplings.

1/4" FLOW OPTIONS	PRIMARY MATERIAL	O-RING	APPLICATION BENEFITS
PLC	ACETAL	BUNA-N	GENERAL PURPOSE PLASTIC CONNECTOR WITH METAL LATCH
PLC12	POLYPROPYLENE	EPDM	EXPANDED CHEMICAL COMPATIBILITY
LC	CHROME-PLATED BRASS	BUNA-N	HIGHER OPERATING TEMPERATURE AND PRESSURE
APC	ACETAL	BUNA-N	PLASTIC THUMB LATCH
BREAKAWAY®	ACETAL	BUNA-N	BREAKAWAY LATCH
NS4	GLASS-FILLED POLYPROPYLENE	EPDM	DRYBREAK, NON-SPILL CONNECT AND DISCONNECT, EVEN UNDER PRESSURE

For further information please contact Colder Customer Service at 1-800-444-2474 or 651-645-0091.

Product Dimensions



	PANEL OPENING	MAX. PANEL THICKNESS	MIN. PANEL THICKNESS
COUPLING BODIES	see drawing	.50	.05
COUPLING INSERTS	see drawing	.30	.05



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

Coupling Bodies

ACETAL

	TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/4" NPT 1/4" BSPT 3/8" NPT 3/8" BSPT		STRAIGHT THRU PLC10004 PLC10004BSPT PLC10006 PLC10006BSPT	SHUTOFF PLCD10004 PLCD10004BSPT PLCD10006 PLCD10006BSPT	A .90 .90 .90 .90	B 1.17 1.15 1.15 1.15
	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 8.0mm OD, 6.0mm ID 9.5mm OD, 6.4mm ID 10.0mm OD, 8.0mm ID	STRAIGHT THRU PLC12004 PLC120M8 PLC12006 PLC120M10	SHUTOFF PLCD12004 PLCD120M8 PLCD12006 PLCD120M10	A .88 .88 .88 .88	B 1.87 1.95 1.95 1.95
	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 PLC16004 PLC16005 PLC16006	SHUTOFF PLCD16004 PLCD16005 PLCD16006	A .88 .88 .88	B 1.95 1.95 1.95
	TERMINATION PANEL MOUNT JG® PUSH-TO-CONNECT	TUBING SIZE 1/4" OD	METRIC EQ. 6.4mm OD	STRAIGHT THRU PLC11004	SHUTOFF PLCD11004	A .88	B 1.95
	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 8.0mm OD, 6.0mm ID 9.5mm OD, 6.4mm ID 10.0mm OD, 8.0mm ID	STRAIGHT THRU PLC13004 PLC130M8 PLC13006 PLC130M10	SHUTOFF PLCD13004 PLCD130M8 PLCD13006 PLCD130M10	A .94 .94 .94 .94	B 1.82 1.95 1.95 1.95
	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 PLC17004 PLC17005 PLC17006	SHUTOFF PLCD17004 PLCD17005 PLCD17006	A .94 .94 .94	B 1.80 /1.95 1.95 1.80 /1.95
	TERMINATION IN-LINE JG® PUSH-TO-CONNECT	TUBING SIZE 1/4" OD 3/8" OD (See page 138 for JG accessories)	METRIC EQ. 6.4mm OD 9.5mm OD	STRAIGHT THRU PLC14004 PLC14006	SHUTOFF PLCD14004 PLCD14006	A .94 .94	B 1.95 2.09

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. NOTE: JG is a registered trademark of John Guest USA, Inc.

Coupling Inserts ACETAL

TERMINATION	THREAD SIZE		STRAIGHT THRU	SHUTOFF	A	B	
IN-LINE PIPE THREAD	1/4" NPT		PLC24004	PLCD24004	.72	1.25/1.66	
	1/4" BSPT		PLC24004BSPT	PLCD24004BSPT	.72	1.53/1.66	
	3/8" NPT		PLC24006	PLCD24006	.87	1.25/1.63	
	3/8" BSPT		PLC24006BSPT	PLCD24006BSPT	.87	1.51/1.63	
TERMINATION PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	
	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	PLC40004	PLCD40004	.94	1.78/1.91	
		8.0mm OD, 6.0mm ID	PLC400M8	PLCD400M8	.94	1.91/2.03	
	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	PLC40006	PLCD40006	.94	1.91/2.05	
		10.0mm OD, 8.0mm ID	PLC400M10	PLCD400M10	.94	1.91/2.05	
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	
	1/4" ID	6.4mm ID	PLC42004	PLCD42004	.94	1.91/2.05	
	5/16" ID	7.9mm ID	PLC42005	PLCD42005	.94	1.91/2.05	
	3/8" ID	9.5mm ID	PLC42006	PLCD42006	.94	1.91/2.05	
TERMINATION PANEL MOUNT JG® PUSH-TO-CONNECT	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	
	1/4" OD	6.4mm OD	PLC41004	PLCD41004	.94	1.91/2.05	
TERMINATION IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	
	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	PLC20004	PLCD20004	.72	1.25/1.88	
		8.0mm OD, 6.0mm ID	PLC200M8	PLCD200M8	.72	1.38/1.82	
	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	PLC20006	PLCD20006	.72	1.38/1.82	
		10.0mm OD, 8.0mm ID	PLC200M10	PLCD200M10	.72	1.38/1.82	
TERMINATION IN-LINE HOSE BARB	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	
	1/4" ID	6.4mm ID	PLC22004	PLCD22004	.62	1.35/1.99	
	5/16" ID	7.9mm ID	PLC22005	PLCD22005	.62	1.35/1.99	
	3/8" ID	9.5mm ID	PLC22006	PLCD22006	.62	1.36/1.81	
TERMINATION IN-LINE JG® PUSH-TO-CONNECT	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	
	1/4" OD	6.4mm OD	PLC29004	PLCD29004	.63	1.35/1.95	
	3/8" OD	9.5mm OD	PLC29006	PLCD29006	.78	1.51/2.11	
TERMINATION ELBOW FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	D
	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	PLC21006	PLCD21006	.61/.62	1.22/1.35	.85/.96
TERMINATION ELBOW HOSE BARB	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	D
	1/4" ID	6.4mm ID	PLC23004	PLCD23004	.67/.63	1.10/1.28	.85/.96
	3/8" ID	9.5mm ID	PLC23006	PLCD23006	.67/.63	1.25/1.28	.90/.96



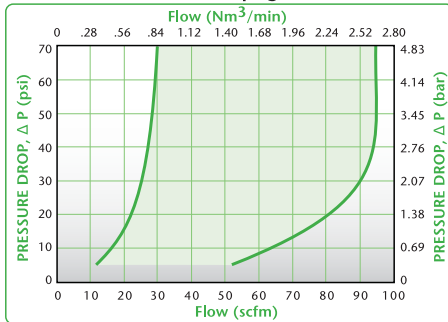
DID YOU KNOW ...

Colder couplings are available in **CUSTOM** colors. Acetal products can be dyed or molded in various colors and polypropylene can be molded in the color of your choice. Minimum quantities do apply; please contact Customer Service at 1-800-444-2474 or 651-645-0091 for more information.

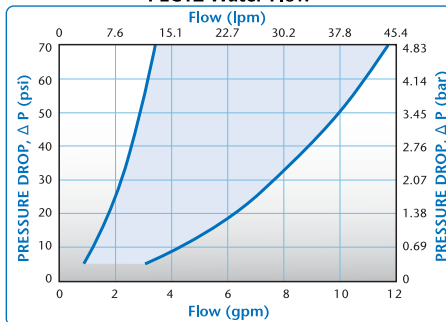
All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. Couplings are pictured with valves unless otherwise noted. †NOTE: Colder's Ferruleless Polytube Fitting terminations do not require ferrules to achieve a secure connection, which makes them easier to use and reuse. PTF fittings are designed for semi-rigid tubing, i.e., polyethylene, nylon, polyurethane, etc. NOTE: JG is a registered trademark of John Guest USA, Inc.

COLDER SAFER SMARTER
PLC SERIES

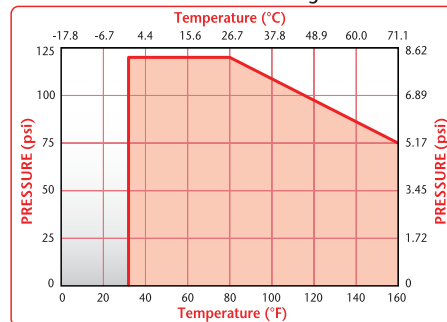
PLC12 Air Flow, 100 psig Inlet Pressure



PLC12 Water Flow



PLC12 Pressure Range



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SMART COUPLINGS WITH RFID



The **IdentiQuik® Series** of smart couplings are RFID enabled couplings used on equipment and in processes. RFID is an automatic identification method that relies on remotely writing and reading data. Smart coupling applications include: inventory level meters, medical equipment calibration, product protection, and many more.

IdentiQuik PLC Series

- (((**Identify misconnections:** eliminate out-of-sequence connections or misconnections due to operator error
- (((**Protect your brand:** prevent out-of-date, incorrect or misapplied products from being used
- (((**Prolong equipment life:** prevent the accidental or unintentional use of harmful media
- (((**Save time:** automatic documentation of package and media lot numbers, date codes and more

RFID Specifications

RF Communication Range:

Approximately 0.50"

Operating Voltage:

8-24V

Power Consumption:

1.2W Maximum

Communication:

ASCII RS-232 (DB-9),
USB

RFID Tags:

13.56 MHz
ISO 15693 - 112 bytes
programmable

NOTE: RFID tags not approved for e-beam or gamma sterilization.

Operating Temperature:
32°F to 150°F (0°C to 65°C)

Materials are listed on page 42. Customized parts (materials, voltage, termination, cable length, etc.) available. Call for more information.

Patented

Coupling Readers



TERMINATION	TUBING SIZE	METRIC EQ.
<i>IN-LINE</i>	1/4" ID	6.4mm ID
<i>HOSE BARB</i>	3/8" ID	9.5mm ID

Product Dimensions
(See drawing on page 44)

SHUTOFF	A	B
iPLCDR1700400	1.39	2.78
iPLCDR1700600	1.39	2.78

Coupling Inserts



TERMINATION	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B
<i>IN-LINE</i>	1/4" ID	6.4mm ID	iPLCT2200400	iPLCDT2200400	1.00	1.38/2.05
<i>HOSE BARB</i>	3/8" ID	9.5mm ID	iPLCT2200600	iPLCDT2200600	1.05	1.74/1.87



TERMINATION	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B
<i>ELBOW</i>	1/4" ID	6.4mm ID	iPLCT2300400	iPLCDT2300400	1.48	1.27/1.40
<i>HOSE BARB</i>	3/8" ID	9.5mm ID	iPLCT2300600	iPLCDT2300600	1.48	1.33/1.46

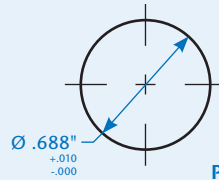
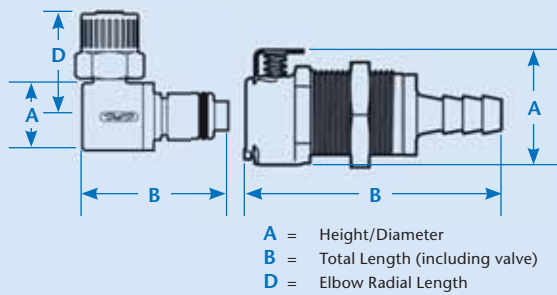
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Call toll free 1-800-444-2474 or visit us at www.colder.com

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Product Dimensions



	PANEL OPENING	MAX. PANEL THICKNESS	MIN. PANEL THICKNESS
COUPLING BODIES	see drawing	.30	.02
COUPLING INSERTS	see drawing	.30	.02



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

Coupling Bodies

POLYPROPYLENE

	TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/4" NPT 1/4" BSPT 3/8" NPT 3/8" BSPT		STRAIGHT THRU PLC1000412 PLC1000412BSPT PLC1000612 PLC1000612BSPT	SHUTOFF PLCD1000412 PLCD1000412BSPT PLCD1000612 PLCD1000612BSPT	A 1.00	B 1.15
	TERMINATION PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 3/8" OD, 1/4" ID	METRIC EQ. 9.5mm OD, 6.4mm ID	STRAIGHT THRU PLC1200612	SHUTOFF PLCD1200612	A 1.00	B 1.95
	TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	STRAIGHT THRU PLC1600412 PLC1600612	SHUTOFF PLCD1600412 PLCD1600612	A 1.00	B 1.95
	TERMINATION IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 3/8" OD, 1/4" ID	METRIC EQ. 9.5mm OD, 6.4mm ID	STRAIGHT THRU PLC1300612	SHUTOFF PLCD1300612	A 1.02	B 1.96
	TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	STRAIGHT THRU PLC1700412 PLC1700612	SHUTOFF PLCD1700412 PLCD1700612	A 1.02	B 1.96
	TERMINATION IN-LINE SOFTUBE™ FITTING	TUBING SIZE 3/8" OD, 1/4" ID 1/2" OD, 3/8" ID	METRIC EQ. 9.5mm OD, 6.4mm ID 12.7mm OD, 9.5mm ID		SHUTOFF PLCD17040612 PLCD17060812	A 1.02	B 2.20 2.36

PLC12 Couplings are gamma sterilizable; see page 139 for more information on sterilization and disinfection.

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.

POLYPROPYLENE

TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/4" NPT		STRAIGHT THRU PLC2400412	SHUTOFF PLCD2400412	A .72	B 1.26/1.67		
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/4" ID	METRIC EQ. 6.4mm ID	STRAIGHT THRU PLC4200412	SHUTOFF PLCD4200412	A .94	B 1.91/2.05		
	TUBING SIZE 3/8" ID	METRIC EQ. 9.5mm ID	STRAIGHT THRU PLC4200612	SHUTOFF PLCD4200612	A .94	B 1.91/2.05		
TERMINATION IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 3/8" OD, 1/4" ID	METRIC EQ. 9.5mm OD, 6.4mm ID	STRAIGHT THRU PLC2000612	SHUTOFF PLCD2000612	A .72	B 1.68/1.82		
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/4" ID	METRIC EQ. 6.4mm ID	STRAIGHT THRU PLC2200412	SHUTOFF PLCD2200412	A .63	B 1.35/2.00		
	TUBING SIZE 3/8" ID	METRIC EQ. 9.5mm ID	STRAIGHT THRU PLC2200612	SHUTOFF PLCD2200612	A .63	B 1.35/1.82		
TERMINATION IN-LINE SOFTUBE™ FITTING	TUBING SIZE 3/8" OD, 1/4" ID	METRIC EQ. 9.5mm OD, 6.4mm ID		SHUTOFF PLCD22040612	A .72	B 2.23		
	TUBING SIZE 1/2" OD, 3/8" ID	METRIC EQ. 12.7mm OD, 9.5mm ID		SHUTOFF PLCD22060812	A .72	B 2.18		
TERMINATION ELBOW FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 3/8" OD, 1/4" ID	METRIC EQ. 9.5mm OD, 6.4mm ID	STRAIGHT THRU PLC2100612	SHUTOFF PLCD2100612	A .61/.62	B 1.29/1.36	D .95	
	TUBING SIZE 3/8" ID	METRIC EQ. 9.5mm ID	STRAIGHT THRU PLC2300412	SHUTOFF PLCD2300412	A .63	B 1.22/1.36	D .96	
TERMINATION HOSE BARB	TUBING SIZE 3/8" ID	METRIC EQ. 9.5mm ID	STRAIGHT THRU PLC2300612	SHUTOFF PLCD2300612	A .63	B 1.28/1.42	D .96	



DID YOU KNOW ...

Many of Colder's general purpose couplings and fittings can be used across a wide variety of markets and applications?

Quick Tip: Use the Chemical Compatibility Table at www.colder.com to help determine what material is best for your fluid handling application.

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.

