

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.

The PLC Series is also available with optional RFID (Radio Frequency Identification) capability.

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

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



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.

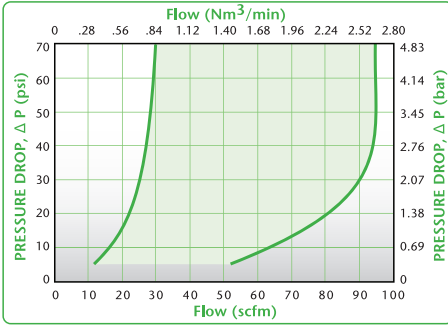
$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

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

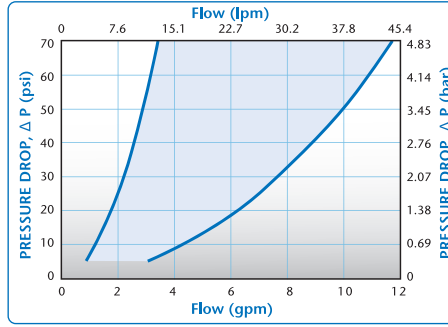
C_v Values for 1/4" Flow PLC Couplings

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

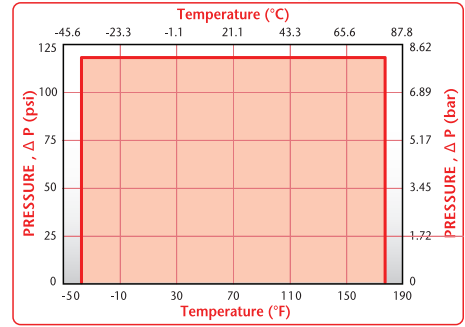
PLC Air Flow, 100 psig Inlet Pressure



PLC Water Flow



PLC Pressure Range



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.

SMART COUPLINGS WITH RFID



The **IdentiQuik® Series** of smart couplings are RFID enabled couplings used on equipment and in processes. RFID is an identification method that relies on remotely writing and reading data. Smart coupling applications include: inventory level meters, surgical tool identification, 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 1"

Operating Voltage:
8-25V standard, 5V only available

Power Consumption:
350mW maximum

Communication:
ASCII RS-232 (DB-9)

I-Code 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 30. Customized parts (materials, voltage, termination, cable length, etc.) available. Call for more information.

Coupling Readers



TERMINATION	TUBING SIZE	METRIC EQ.
<i>IN-LINE</i>	1/4" ID	6.4mm ID
<i>HOSE BARB</i>	5/16" ID	7.9mm ID
	3/8" ID	9.5mm ID

Product Dimensions (See drawing on page 32)

SHUTOFF	A	B
iPLCD4HP24A00	1.39	2.77
iPLCD5HP24A00	1.39	2.76
iPLCD6HP24A00	1.39	2.76

Coupling Inserts



TERMINATION	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	C
<i>IN-LINE</i>	1/4" ID	6.4mm ID	iPLC4HPI	iPLCD4HPI	1.00	1.38/2.05	5/8
<i>HOSE BARB</i>	5/16" ID	7.9mm ID	iPLC5HPI	iPLCD5HPI	1.05	1.92/2.05	5/8
	3/8" ID	9.5mm ID	iPLC6HPI	iPLCD6HPI	1.05	1.73/1.86	5/8
<i>ELBOW</i>	1/4" ID	6.4mm ID	iPLC4HEPI	iPLCD4HEPI	1.48	1.27/1.40	
<i>HOSE BARB</i>	3/8" ID	9.5mm ID	iPLC6HEPI	iPLCD6HEPI	1.48	1.33/1.46	

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. NOTE: I-Code SL1 tags are available for existing applications, contact the factory for assistance.

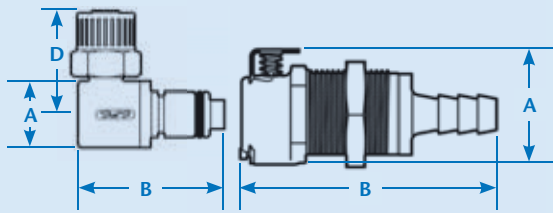
Don't forget: you can always visit www.colder.com for more product information.



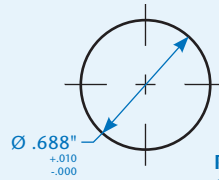
Call toll free 1-800-444-2474 or visit us at www.colder.com

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Product Dimensions



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



COUPLING BODIES

PANEL
OPENING

MAX. PANEL
THICKNESS

MIN. PANEL
THICKNESS

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	B
.90	1.17
.90	1.15
.90	1.15
.90	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	B
.88	1.87
.88	1.95
.88	1.95
.88	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	B
.88	1.95
.88	1.95
.88	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	B
.88	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	B
.94	1.82
.94	1.95
.94	1.95
.94	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	B
.94	1.80
.94	1.95
.94	1.80



TERMINATION
IN-LINE
JG® PUSH-TO-
CONNECT

TUBING SIZE
1/4" OD
3/8" OD
(See page 75 for JG accessories)

METRIC EQ.
6.4mm OD
9.5mm OD










STRAIGHT THRU
PLC14004
PLC14006

SHUTOFF
PLCD14004
PLCD14006

A	B
.94	1.95
.94	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		
PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	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		
PANEL MOUNT HOSE BARB	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		
PANEL MOUNT JG® PUSH-TO-CONNECT	1/4" OD	6.4mm OD	PLC41004	PLCD41004	.94	1.91/2.05		
IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	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		
IN-LINE HOSE BARB	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		
IN-LINE JG® PUSH-TO-CONNECT	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		
ELBOW FERRULELESS POLYTUBE FITTING, PTF†	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	PLC21006	PLCD21006	.61/.62	1.22/1.35	.85/.96	
ELBOW HOSE BARB	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.



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