

Couplings and Fittings For Plastic Tubing

Colder Products Company has been designing and manufacturing quick disconnect couplings, fittings and connectors since 1978. Our broad range of products can be found in thousands of applications across many markets including industrial, life sciences and chemical handling. Used in a wide range of machinery, devices and processes, innovative coupling and connection technologies from Colder allow flexible tubing to be quickly and safely connected and disconnected.

To meet the needs of such a diverse range of markets and applications, Colder offers more than 7,000 standard and custom-designed products. The robust and easy-to-use design of Colder's quick disconnect couplings provides reliable, secure and leak-free connections for fluid and air management.

Where To Buy

Find your local distributor by visiting www.colder.com or call Colder's Customer Service at 1-800-444-2474 or 651-645-0091. You can also send an e-mail to info@colder.com.

Quality

Quality is a key component of Colder's success. We are an ISO9000-2000 certified company and our cleanroom is certified to ISO Class 7 certification standards.

New Products

Exciting additions to Colder's product offering include:

 BreakAway[™] couplings 	Page 48
• SRC connector	Page 77
 DrumQuik® PUR chemical dispense system 	Page 96



Our Markets

Colder's proprietary, engineered solutions improve the overall functionality and design of the equipment and processes in which they are used. Special product features include built-in shutoff valves to prevent product spills and an easy-to-use, push-button thumb latch for quick connecting and disconnecting. In addition, IdentiQuik Smart Couplings™ integrate RFID (Radio Frequency Identification) to automatically exchange product data at the exact time and location of connection. For users of Colder's advanced coupling technologies the result is cleaner, faster, safer and smarter fluid management. Specific applications for Colder couplings include:

Industrial

 Colder's broad offering of coupling options is found in many industrial markets. Applications include analytical instrumentation, printing and ink management, engine systems, biohazard detection equipment, electronic cooling and portable hydration systems.

Life Sciences

- Colder products for the Life Sciences market are assembled in our cleanroom and satisfy the most stringent acceptance requirements. They are also compatible with popular sterilization techniques. Applications include reusable and disposable connection devices in surgical and dialysis equipment, blood pressure monitoring and patient therapy devices.
- Colder offers single-use connections for media transfer in feeding, harvesting and sampling applications. Innovative solutions provide biopharmaceutical manufacturers the ideal transition from stainless processing equipment to disposable bag systems, manifolds and tube sets. In addition, Colder's single-use aseptic connection and disconnection technologies offer biopharmaceutical manufacturers the security needed to ensure sterility is maintained throughout the process cycle. These solutions feature the ease-of-use and robustness that manufacturers expect from Colder.

Chemical Management

- Colder's wide range of chemically resistant quick disconnect couplings and chemical dispensing systems provide non-spill operation and improve the safety of chemical management environments. Applications include semiconductor and pharmaceutical manufacturing as well as pump, filter and de-ionized water connections.
- Closed-loop dispensing systems enable fast, easy and economic chemical extraction from drums, IBCs and jerry cans. These systems increase workplace safety and protect workers and the environment from hazardous leaks and spills.
- Colder's fitments, closures and couplings for bag-in-box and rigid containers are found in many industrial applications such as cleaning, soap and detergent dispensing and bulk ink management.



Engineered Solutions Worldwide

Colder's success is grounded in its expertise in research & development and application engineering. Many of Colder's standard couplings and fittings began as custom engineered solutions that found broader use in applicable markets. To date, Colder has produced over 7,000 custom and standard products to meet the fluid handling challenges of various industries worldwide. With our extensive test lab, prototype equipment and modeling capabilities we are able to provide our customers with world class product design and development support. Our worldwide distribution network enables global manufacturers to consolidate vendors without losing the advantage of local delivery. Colder's connectivity solutions are the preferred choice of engineers worldwide.



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TABLE OF CONTENTS

All couplings are shown connected and in actual size unless otherwise noted. For additional terminations and configurations, see individual



General Purpose Couplings

PAGE | DESCRIPTION





12 SMC & SMF1: Twist-to-connect design provides reliable and secure alternative to luer-type connections. Material: Acetal, polypropylene, ABS, chrome-plated brass Tubing ID Sizes: 1/16" to 1/8" (1.6mm to 3.2mm)





16 PMC: Features one-hand connection and disconnection and integral terminations; easier to use than ball-and-sleeve designs. Material: Acetal

Tubing ID Sizes: 1/16" to 1/4" (1.6mm to 6.4mm)





20 PMC12: Offered with a variety of configurations and chemical resistance for demanding applications; gamma sterilizable. Material: Polypropylene

Tubing ID Sizes: Microbore to 1/4" (Microbore to 6.4mm)





24 MC: Durable and able to withstand higher pressure and temperature; easy one-hand connection and disconnection. Material: Chrome-plated brass

Tubing ID Sizes: 1/8" to 1/4" (3.2mm to 6.4mm)





28 NS2: Twist-to-connect design features non-spill valves designed to provide fast, safe and virtually leak-free fluid line connections.

Material: Glass-filled polypropylene

Tubing ID Sizes: 1/8" to 1/4" (3.2mm to 6.4mm)





30 PLC: Widest selection of sizes and configurations offered; resistant to most mild chemical solutions.

Material: Acetal

Tubing ID Sizes: 1/4" to 3/8" (6.4mm to 9.5mm)

$$\rightarrow \leftarrow \rightarrow \leftarrow \rightarrow \leftarrow$$



34 PLC12: Materials of construction offer broad chemical resistance for demanding applications; gamma sterilizable. Material: Polypropylene

Tubing ID Sizes: 1/4" to 3/8" (6.4mm to 9.5mm)





38 LC: Durable and able to withstand higher pressure and temperature; easy one-hand connection and disconnection. Material: Chrome-plated brass

Tubing ID Sizes: 1/4" to 3/8" (6.4mm to 9.5mm)





42 ZLC: Durable and economic solution for meeting price expectations in high volume; interchangeable with many existing Colder coupling series.

Material: Die-cast zinc

Tubing ID Sizes: 1/4" to 3/8" (6.4mm to 9.5mm)

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44 APC: Features plastic thumb latch, fewer moving parts and a smooth contoured design to deliver ease-of-use and excellent flow. Material: Acetal

Tubing ID Sizes: 1/4" to 3/8" (6.4mm to 9.5mm)

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48 BreakAwayTM: Provides safe and easy fluid transfer with protection from costly product loss and equipment damage. Material: Acetal

Tubing ID Sizes: 1/4" and 3/8" (6.4mm and 9.5mm)

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50 EFC12: High efficiency valve design provides high flow capability; bulkhead panel mount option facilitates tight seals against tank walls and drums.

Material: Polypropylene

Tubing ID Sizes: 1/4" and 3/8" (6.4mm and 9.5mm)

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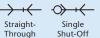
52 NS4: Non-spill coupling that virtually eliminates spills, minimizes downtime and enhances operator safety. Material: Glass-filled polypropylene, ABS Tubing ID Sizes: 1/8" to 3/8" (3.2mm to 9.5mm)

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54 NS6: Durable, yet lightweight construction that features non-spill valves and is compatible with many chemicals. Material: Glass-filled polypropylene Tubing ID Sizes: 3/8" to 1/2" (9.5mm to 12.7mm)









General Purpose Couplings

PAGE | DESCRIPTION

56 NSH: Pressure-balanced non-spill design with 100% metal-free, spring-free flow path. Material: Glass-filled polypropylene





58 HFC12: Efficient valve design leads to high flow and exceptionally low spillage; shrouded thumb latch is easy to grip and simple to operate.

Material: Polypropylene

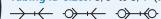
Tubing ID Sizes: 3/8" to 3/4" (9.5mm to 19.0mm)





62 HFC35 & 57: Withstand harsh environments and offered with or without UV-resistant materials to withstand harmful rays without affecting performance.

Material: Polysulfone (white), UV-resistant polysulfone (black) Tubing ID Sizes: 3/8" to 3/4" (9.5mm to 19.0mm)



66 FFC35: Features non-valved and unobstructed flow path to increase flow and minimize turbulence. Material: Polysulfone Tubing ID Sizes: 3/4" (19.0mm)



68 Tentube™: Allows connection and disconnection of up to ten lines with one slide latch; tubing orientation ensured by physical keying.

Material: Nylon, Acetal, polypropylene

Tubing ID Sizes: 1/16" to 1/8" (1.6mm to 3.2mm)





70 Sixtube™: Snap-in panel mount design and flexibility to connect and disconnect six separate lines with or without

Material: Acetal, polypropylene Tubing ID Sizes: 1/16" to 1/8" (1.6mm to 3.2mm)

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Twin Tube™: One easy-to-use quick disconnect for two separate non-valved flow paths.

Material: Acetal, ABS

Tubing ID Sizes: 1/16" to 1/8" (1.6mm to 3.2mm)



72 Multi-Mount: Connects three to five lines at once; keyed to prevent mismatched connections. Material: Acetal, chrome-plated brass Tubing ID Sizes: 1/8" to 3/8" (3.2mm to 9.5mm)



74 Fittings & Accessories: Offering includes a variety of ancillary components from fittings and luers to PTF nuts and dust caps.



Life Sciences - Medical & Bioprocessing PAGE | DESCRIPTION **76** SMC: Twist-to-connect design manufactured and packaged Material: Medical-grade polycarbonate Tubing ID Sizes: 1/16" to 1/8" (1.6mm to 3.2mm) 77 SRC: A unique small bore connector that eliminates the potential for misconnections with luer fittings. Material: Medical-grade polypropylene Tubing ID Sizes: Sizes: 1/8" to 3/16" (3.2mm to 4.8mm) $\rightarrow \leftarrow$ 78 MPC: Easy-to-use and secure connection for critical fluid applications; includes pressure sealing caps and plugs and optional locking sleeves. Material: Medical-grade ABS, polycarbonate, polysulfone Tubing ID Sizes: 1/4" and 3/8" (6.4mm and 9.5mm) **80** MPX: Easy-to-use and secure connection for critical fluid applications; includes pressure sealing caps and plugs and optional locking sleeves. Higher flow rate than the MPC. Material: Medical-grade polycarbonate, polysulfone Tubing ID Sizes: 3/8" and 1/2" (9.5mm and 12.7mm) **82** SaniQuikTM: Integral sanitary termination attaches to hard-plumbed systems with tri-clover clamps; permits quick and easy connection to single-use bag systems, manifolds or tube sets with MPC or MPX bodies. Material: 316L stainless steel Termination Sizes: 3/4" and 1-1/2" sanitary $\rightarrow +\leftarrow$ 83 Sanitary: Attaches directly to popular 3/4" mini and 1" maxi size sanitary connections, eliminating the need for cumbersome adapters or tubing assemblies. Material: Medical-grade polysulfone Termination Sizes: 3/4" and 1" sanitary

 $\rightarrow + \leftarrow$



Life Sciences - Medical & Bioprocessing

84 HFC39: Provide aseptic disconnect functionality. Automatic shutoff valves close off the flow path at disconnection, protecting valuable media while also eliminating the need for pinch clamps and tube welders. Material: Medical-grade polysulfone Tubing ID Sizes: 1/4", 3/8" and 1/2" (6.4mm, 9.5mm and

12.7mm)

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85 MPU: Twist-to-connect design features easy-to-use locking mechanism that guards against accidental disconnects. Material: Medical-grade polysulfone **Tubing ID Sizes: 3/4" (19.0mm)**





86 Steam-Thru® Connections: Allow quick and easy sterile connection between biopharmaceutical processing equipment and disposable bag and tube assemblies. Material: Medical-grade polysulfone **Tubing ID Sizes:** 3/8" and 1/2" (9.5mm and 12.7mm)

High Purity Couplings

PAGE | DESCRIPTION

90 ChemQuik® CQH06/CQV06: All plastic design for ultra-pure media and high chemical resistance. Material: Natural, virgin polypropylene Tubing Sizes: 3/8" to 3/4" flare; 3/8" to 3/4" NPT





High Purity Couplings

PAGE | DESCRIPTION



92 ChemQuik® CQGO6: Spring-free and metal-free flow path for high flow capacity and non-spill, high purity connections. Material: Natural, virgin polypropylene
Tubing Sizes: 3/8" to 3/4" flare; 3/8" to 3/4" NPT **→**



93 ChemQuik Dual Containment System: Flare nuts and panel mount fittings that facilitate double containment of critical chemical lines. Material: Natural, virgin polypropylene

Dispensing Connectors

PAGE | DESCRIPTION



94 DrumQuik® PRO & DrumQuik PUR: Closed chemical dispensing system with a reusable coupler and a recyclable dip-tube assembly for chemical extraction from drums, jerry cans and IBCs.

Material: Food grade, virgin polypropylene and polyethylene Thread Sizes: 2" American buttress, BCS 56x4 and 2" NPS

98 DrumQuik Adaptors and Accessories



100 DrumQuik Modular: Two-port modular design for closed system dispensing; used with a variety of quick disconnect couplings.

Material: Natural, virgin PTFE, or polypropylene

Thread Sizes: Thread Sizes: 2" Buttress, 2" NPS and BCS 56x4

Dispensing Connectors

PAGE | DESCRIPTION



102 DrumQuik® Universal Drum and Bottle Adaptor Kits: Used with 3/4" male NPT coupling terminations to adapt dip-tubes to standard drum closures for closed system dispensing.

Material: Natural, virgin polypropylene Thread Sizes: UDA: none, UDA 2-Port: 3/4" male NPT; BottleQuik®: SP400-38mm

103 DrumQuik Accessories: Colder offers an array of accessories intended for use with DrumQuik dispensing systems. Accessories include bushings, valves, caps and plugs.



104 UDC: Provides closed connection to bag-in-box packaging with 38mm threaded necks.

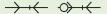
Material: Polypropylene (coupling) and acetal (cap) Tubing ID Sizes: 1/4" to 3/8" (6.4mm to 9.5mm)





106 Puncture Seal: Provides closed connection to Hedwin Cubitainer® bag-in-box container systems.

Material: Polypropylene (coupling) and polyethylene (cap)
Tubing ID Sizes: 1/4" and 3/8" (6.4mm and 9.5mm)



Technical Information



108 Custom Capabilities: Colder works directly with our customer's design engineering team to solve the most difficult fluid and air management problems.



110 Sterilization and Disinfectant Methods

111 Coupling Material Descriptions



The SMC & SMF1 are Colder's smallest couplings. These twist-to-connect couplings provide a reliable and more secure alternative to luer-type connections. They also allow for the tubing to rotate freely when connected. This important feature prevents both kinked tubing and accidental disconnection during use.

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

Features

Twist to connect Free coupling rotation Quarter turn latch clicks when connected

Benefits

Prevents accidental disconnects Eliminates kinked tubing Prevents damage due to over torquing



Pressure: Vacuum to 100 psi, 6.9 bar

Temperature:

Acetal, Chrome-Plated Brass: -40°F to 180°F (-40°C to 82°C)

Polypropylene:

32°F to 180°F (0°C to 82°C)

ABS:

-40°F to 160°F (-40°C to 71°C)

Materials:

Main components: ABS, acetal, polypropylene,

chrome-plated brass **Locking sleeves**: Acetal

Valves: Acetal

Valve spring: 316 stainless steel

O-rings: Buna-N with acetal or chrome-plated

brass, EPDM with polypropylene

Color:

Main components: Natural white (acetal and ABS), almond (polypropylene), chrome and black (chrome-plated brass)

Tubing Sizes:

1/16" to 1/8" ID, 1.6mm to 3.2mm

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 products in their own application conditions.

Note: BS EN 1060-3 Note: BS EN 1060-3 Note: BS EN 1060-3 Note: BS EN 1060-3 Inscriber in prevents medical applications medical applications medical applications wedical applications cuffs

Liquid Flow Rates Liquid Flow Rate Information for Couplings

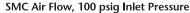
The chart below shows the flow rate for Colder couplings. Each coupling was tested with water at 70°F (21°C). To determine flow rates for specific coupling configurations use the formula below.

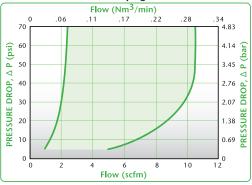


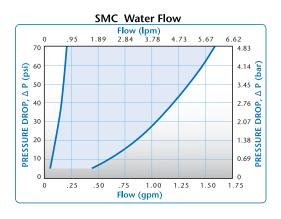
Q=Flow rate in gallons per minute C_v =Average coefficient across various flow rates (see chart) ΔP =Pressure drop across coupling (psi) S=Specific gravity of liquid

C_v Values for Subminiature Couplings

BODIES	SMM01	SMM02	BODIES SMM0	1 SMM02
SMF01	.03	.03	SMFD02 .03	.08
SMFD01	.03	.03	SMPT02 .03	.19
SME02	03	19	SMPTD02 03	08







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.



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.

SMART COUPLINGS WITH RFID

IdentiQuik SMC 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)

RFID Tag:

13.56 MHz ISO15693 - 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 12. Customized parts (materials, voltage, termination,

cable length, etc.) available. Call for more information.

Coupling Bodies



IN-I INF

HOSE BARB

1/16" ID 1/8" ID

1.6mm ID iSMF1HPI 3.2mm ID iSMF2HPI 3mm ID

iSMFM3HPI

ISMED1HPI .76 iSMFD2HPI .76 iSMFDM3HPI .76

Product Dimensions (See drawing on page 14)

IN-LINE **HOSE BARB** 1/16" ID 1/8" ID

1.6mm ID 3.2mm ID

iSMF121HPI iSMF122HPI

.76 .76 .76 .91

.76/.91

.91/.91

1.01/1.00

Coupling Inserts



IN-LINE **HOSE BARB**

1/16" ID 1/8" ID

1.6mm ID 3.2mm ID

iSMM1HPI iSMM2HPI

.76 .76 .76



IN-LINE **HOSE BARB**

1/16" ID 1/8" ID

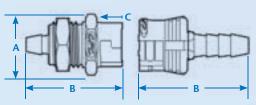
1.6mm ID 3.2mm ID 3mm ID

iSMM121HPI iSMM122HPI iSMMM3HPI

.76 .76 .91 .76 .81 .76

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

Product Dimensions



Height/Diameter **Total Length** (including valve) Hex Size on Main

Component

PANEL OPENING COUPLING BODIES 7/16 .21 AND INSERTS

MAX. PANEL **THICKNESS**

MIN. PANEL **THICKNESS**

.03



PANEL NUT HEX 1/2

PANEL NUT THREAD 7/16-24UNS

Coupling Bodies





THREAD SIZE
1/8" NPT
1/8" NPT

THREAD SIZE 1/8" NPT 1/8" NPT	
TUBING SIZE	

IC P	rodu	iod i	n
nufa	ctur	eu. anro	00
der's	cle	uu. Iabl	e.
also	ava	1000 =	16.
Set	e pa	45	
	nuta der's	nufaction der's cle	of products nufactured in der's cleanro also available See page

Polycarbonate SMC products

STRAIGHT THRU	
SMPT02	
SMPT02BLK	

SHUTOFF SMPTD02 SMPTD02BLK
SHUTOFF



В

.75/.90

.75/.90

1.00

1.00

Α

C 7/16 7/16



TERMINATION IN-I INF HOSE BARB

1/16" ID	
1/8" ID 1/8" ID	

1/16" ID

1.6mm ID 1.6mm ID 3.0mm ID 3.0mm ID 3.2mm ID 3.2mm ID

METRIC EQ.

SMF01MBLK SMFM3 SMFM3MBLK SMF02 SMF02MBLK

STRAIGHT THRU

SMF01

SMFD01 .48 SMFD01MBLK .48 SMFDM3 .48 SMFDM3MBLK .48 SMFD02 .48 SMFD02MBLK .48

.90 .90



TERMINATION PANEL MOUNT HOSE BARB

ORING SISE	IN.
/16" ID	1
/16" ID	1
	3
	3
/8" ID	3

METRIC EQ. .6mm ID .6mm ID .0mm ID .0mm ID .2mm ID 3.2mm ID

STRAIGHT THRU SMFPM01 SMFPM01BLK SMFPMM3 SMFPMM3BLK SMFPM02 SMFPM02BLK

SHUTOFF SMFPMD01 SMFPMD01BLK SMFPMDM3 SMFPMDM3BLK SMFPMD02 SMFPMD02BLK

.58 .75/.90 1/2 .58 .75/.90 1/2 .58 1.00 1/2 .58 1.00 1/2 .58 .90 1/2

.90

.58

POLYPROPYLENE

1

1

1

1/8" ID

TERMINATION
IN-LINE
PIPE THREAD
TERMINATION

1/8" NPT
TUBING SIZE

1/16" ID

1/8" ID

THREAD SIZE





В Α .51 .86

C 7/16

1/2



IN-LINE **HOSE BARB** (ACETAL LOCKING SLEEVE)



1.6mm ID 3.2mm ID

STRAIGHT THRU SMF0112 SMF0212

.75/.90 .48 .90 .48



TERMINATION PANEL MOUNT **HOSE BARB** (ACETAL LOCKING SLEEVE)

TUBING SIZE 1/16" ID 1/8" ID

METRIC EQ. 1.6mm ID 3.2mm ID

STRAIGHT THRU **SMFPM0112** SMFPM0212

.58 .75/.90 1/2 .58 .90 1/2

SMF1 Disposable **Bodies**



TERMINATION IN-LINE HOSE BARB

TUBING SIZE 1/8" ID 1/8" ID

METRIC EQ. 3.2mm ID 3.2mm ID 5mm ID

5mm ID

STRAIGHT THRU SMF10297 SMF10297MBLK SMF1M597

SMF1M597MBLK

A В .38 .82 .42 .82 .42 .69 .42 .69

DID YOU KNOW ... For applications that do not require a disconnection from equipment or parts at any point during use, Colder offers polypropylene and nylon fittings that are well suited for 1/16" and 3/8" ID tubing. These fittings feature Colder's quality hose barbs and are available in straight, tee and elbow configurations. See page 74 for more information.

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. MBLK = molded black material. BLK = dyed black material.

Colder Products and CPC are registered trademarks with the US Patent & Trademark Office.

Coupling Inserts (All SMC inserts are shown non-valved)

ACETAL

TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/16" ID 1/16" ID 1/8" ID 1/8" ID 1/8" ID 1/8" D	METRIC EQ. 1.6mm ID 1.6mm ID 3.0mm ID 3.0mm ID 3.2mm ID 3.2mm ID 5.0mm ID	STRAIGHT THRU SMM01 SMM01MBLK SMMM3 SMMM3MBLK SMM02 SMM02MBLK SMM05	A .48 .48 .48 .48 .48 .48	B .75 .75 .80 .80 .90 .90
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/16" ID 1/16" ID 1/8" ID 1/8" ID	METRIC EQ. 1.6mm ID 1.6mm ID 3.0mm ID 3.0mm ID 3.2mm ID 3.2mm ID	STRAIGHT THRU SMMPM01 SMMPM01BLK SMMPMM3 SMMPMM3 SMMPMM3BLK SMMPM02 SMMPM02BLK	A .50 .50 .50 .50 .50	B .75 .75 .80 .80 .90





CHROME-PLATED BRASS

TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/8" ID	METRIC EQ. 3.2mm ID	STRAIGHT THRU SMM02CBMBLK	A .48	B .90
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/8" ID	METRIC EQ. 3.2mm ID	STRAIGHT THRU SMMPM02CBBLK	A .50	B .90





POLYPROPYLENE

TERMINATION IN-LINE HOSE BARB (ACETAL LOCKING SLEEVE)	TUBING SIZE 1/16" ID 1/8" ID	METRIC EQ. 1.6mm ID 3.2mm ID	STRAIGHT THRU SMM0112 SMM0212	A .48 .48	B .75 .90
TERMINATION PANEL MOUNT HOSE BARB (ACETAL LOCKING SLEEVE)	TUBING SIZE 1/16" ID 1/8" ID	METRIC EQ. 1.6mm ID 3.2mm ID	STRAIGHT THRU SMMPM0112 SMMPM0212	.50 .50	B .75 .90





ACETAL

TERMINATION	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	В
IN-LINE	1/16" ID	1.6mm ID	SMC01	SMCD01	1.32/1.46
HOSE BARB	1/16" ID	1.6mm ID	SMC01MBLK	SMCD01MBLK	1.32/1.46
		3.0mm ID	SMCM3	SMCDM3	1.62
		3.0mm ID	SMCM3MBLK	SMCDM3MBLK	1.62
	1/8" ID	3.2mm ID	SMC02	SMCD02	1.61
	1/8" ID	3.2mm ID	SMC02MBLK	SMCD02MBLK	1.61





POLYPROPYLENE

TERMINATION	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	В
IN-LINE	1/16" ID	1.6mm ID	SMC0112	1.32
HOSE BARB	1/8" ID	3.2mm ID	SMC0212	1.61



All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. MBLK = molded black material. BLK = dyed black material.





Specifications

Pressure:

Vacuum to 120 psi, 8.3 bar

Temperature:

-40°F to 180°F (-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:

1/16" to 1/4" ID, 1.6mm to 6.4mm ID

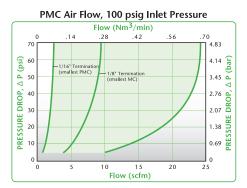
WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of Colder products in their own application conditions.

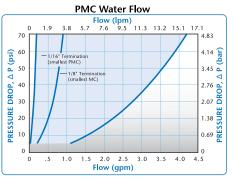
Don't forget: you can always visit www.colder.com for more product information.

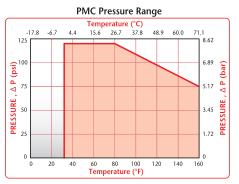
The 1/8" flow PMC coupling covers a wide variety of general-purpose applications. Featuring the Colder thumb latch, the PMC is easier to use than ball-and-sleeve designs. One-hand connection/disconnection and integral terminations make the PMC the choice for ease of use and manufacture.

This coupling is NuSeal compatible. See page 25 for details.

Features	Benefits
Hose barb shroud	Extra protection for the 1/16" hose barb
Integral terminations	Fewer leak points, shorter assemblies, faster installations
Compatible	Mates with PMC12 and MC Series couplings (see pages 20 and 24)
Clicks when connected	Assurance of a reliable connection







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.

$$Q = C_V \sqrt{\frac{\Delta F}{S}}$$

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

S=Specific gravity of liquid

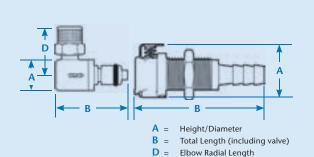
C_v Values for 1/8" Flow PMC Couplings

	PMC	PMCD	PMC	PMC	PMC	PMCD	PMC	PMCD	PMC	PMCD										
BODIES	2004	2004	2006	2006	2202	2202	2204	2204	2402	2402	2404	2404	2602	2304	2104	2304	2203	2203	2201	2201
PMC1002	.40	.18	.50	.19	.25	.16	.50	.19	.50	.20	.51	.19	.50	.50	.38	.24	.30	.17	.03	.03
PMCD1002	.27	.18	.31	.18	.24	.16	.28	.20	.26	.20	.29	.18	.26	.26	.27	.24	.25	.17	.03	.03
PMC1004	.40	.21	.50	.24	.26	.18	.50	.24	.50	.20	.51	.24	.50	.50	.38	.26	.30	.19	.03	.03
PMCD1004	.29	.19	.32	.23	.25	.17	.30	.23	.27	.21	.28	.23	.27	.28	.29	.24	.25	.18	.03	.03
PMC1204	.40	.18	.50	.18	.25	.16	.40	.18	.40	.16	.36	.18	.40	.40	.38	.21	.30	.17	.03	.03
PMCD1204	.21	.17	.22	.17	.20	.16	.22	.17	.21	.17	.20	.17	.21	.22	.21	.18	.21	.16	.03	.03
PMC1602	.23	.15	.28	.18	.19	.14	.27	.15	.27	.15	.28	.18	.27	.27	.23	.16	.20	.14	.03	.03
PMCD1602	.19	.15	.19	.15	.17	.14	.19	.15	.18	.15	.18	.15	.18	.19	.19	.15	.18	.14	.03	.03
PMC1604	.33	.23	.44	.24	.24	.18	.44	.23	.44	.20	.38	.24	.38	.44	.33	.26	.26	.19	.03	.03
PMCD1604	.23	.17	.26	.21	.22	.16	.26	.21	.26	.19	.25	.21	.21	.26	.23	.24	.22	.16	.03	.03
PMC1703	.25	.20	.30	.20	.20	.17	.30	.20	.30	.19	.28	.20	.28	.30	.25	.18	.21	.17	.03	.03
PMCD1703	.20	.17	.20	.17	.19	.15	.21	.17	.19	.17	.20	.17	.19	.20	.20	.16	.19	.16	.03	.03
PMC1701	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02
PMCD1701	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02



DID YOU KNOW ...

CAD models are available for all Colder couplings. These files are available in many formats including STEP, IGES and native file formats. You can see them online at www.colder.com.



Greenlee® punch number 60077 Ø .500" **PANEL** MAX. PANEL MIN. PANEL **OPENING THICKNESS THICKNESS** see drawing **COUPLING BODIES** .05 .50 **COUPLING INSERTS** .30 .05 1/2 **PANEL PANEL**



NUT HEX NUT THREAD 5/8 1/2-24UNS

Coupling Bodies

ACETAL						
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/8" NPT 1/8" BSPT 1/4" NPT 1/4" BSPT		STRAIGHT THRU PMC1002 PMC1002BSPT PMC1004 PMC1004BSPT	SHUTOFF PMCD1002 PMCD1002BSPT PMCD1004 PMCD1004BSPT	A .79 .79 .79 .79	B 1.00 1.00 1.10 1.10
TERMINATION PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 5/32" OD, .10" ID 1/4" OD, .17" ID	METRIC EQ. 4.0mm OD, 2.0mm ID 4.0mm OD, 2.5mm ID 6.4mm OD, 4.3mm ID	STRAIGHT THRU PMC12M42 PMC12025 PMC1204	SHUTOFF PMCD12M42 PMCD12025 PMCD1204	A .77 .77 .77	B 1.65 1.70 1.72
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/16" ID 1/8" ID 3/16" ID 1/4" ID	METRIC EQ. 1.6mm ID 3.2mm ID 4.8mm ID 6.4mm ID	STRAIGHT THRU PMC1601 PMC1602 PMC1603 PMC1604	SHUTOFF PMCD1601 PMCD1602 PMCD1603 PMCD1604	A .77 .77 .77 .77	B 1.40 1.65 1.85 1.85
TERMINATION PANEL MOUNT FEMALE THREAD	THREAD SIZE 10-32 UNF		STRAIGHT THRU PMC181032	SHUTOFF PMCD181032	A .77	B 1.25
TERMINATION IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 5/32" OD, .10" ID 1/4" OD, .17" ID	METRIC EQ. 4.0mm OD, 2.0mm ID 4.0mm OD, 2.5mm ID 5.0mm OD, 3.0mm ID 6.4mm OD, 4.3mm ID	STRAIGHT THRU PMC13M42 PMC13025 PMC13M5 PMC1304	SHUTOFF PMCD13M42 PMCD13025 PMCD13M5 PMCD1304	A .81 .81 .81	B 1.65 1.65 1.72 1.75
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/16" ID 1/8" ID 3/16" ID 1/4" ID	METRIC EQ. 1.6mm ID 3.2mm ID 4.8mm ID 6.4mm ID	STRAIGHT THRU PMC1701 PMC1702 PMC1703 PMC1704	SHUTOFF PMCD1701 PMCD1702 PMCD1703 PMCD1704	A .81 .81 .81	B 1.41 1.45 1.65 1.65
TERMINATION IN-LINE FEMALE THREAD	THREAD SIZE 10-32 UNF		STRAIGHT THRU PMC191032	SHUTOFF PMCD191032	A .81	B 1.25

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. †NOTE: Colder's Ferruleless PTF (polytube fitting) terminations do not require ferrules to achieve a secure connection and are therefore easier to use and reuse. PTF fittings are designed for semi-rigid tubing, i.e., polyethylene, nylon, polyurethane, etc.

Coupling Inserts

A	C	EI	[/	1	

TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/8" NPT 1/8" BSPT 1/4" NPT 1/4" BSPT		STRAIGHT THRU PMC2402 PMC2402BSPT PMC2404 PMC2404BSPT	SHUTOFF PMCD2402 PMCD2402BSPT PMCD2404 PMCD2404BSPT	A .58 .58 .65 .65	B 1.03/1.45 1.03/1.44 1.13/1.42 1.13/1.42		
TERMINATION PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17" ID	METRIC EQ. 6.4mm OD, 4.3mm ID	STRAIGHT THRU PMC4004	SHUTOFF PMCD4004	A .72	B 1.70/1.82		non-valved strongs
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/16" ID 1/8" ID 3/16" ID 1/4" ID	METRIC EQ. 1.6mm ID 3.2mm ID 4.8mm ID 6.4mm ID	STRAIGHT THRU PMC4201 PMC4202 PMC4203 PMC4204	SHUTOFF PMCD4201 PMCD4202 PMCD4203 PMCD4204	.72 .72	B 1.38/1.50 1.63/1.75 1.83/1.95 1.83/1.95		
TERMINATION IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 5/32" OD, .10" ID 1/4" OD, .17" ID 3/8" OD, .25" ID	METRIC EQ. 4.0mm OD, 2.0mm ID 4.0mm OD, 2.5mm ID 6.4mm OD, 4.3mm ID 9.5mm OD, 6.4mm ID	STRAIGHT THRU PMC20M42 PMC20025 PMC2004 PMC2006	SHUTOFF PMCD20M42 PMCD20025 PMCD2004 PMCD2006	.58	B 1.08/1.60 1.13/1.65 1.15/1.57 1.40/1.52		
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/16" ID 1/8" ID 3/16" ID 1/4" ID	METRIC EQ. 1.6mm ID 3.2mm ID 4.8mm ID 6.4mm ID	STRAIGHT THRU PMC2201 PMC2202 PMC2203 PMC2204	SHUTOFF PMCD2201 PMCD2202 PMCD2203 PMCD2204		B .80/1.47 1.05/1.67 1.20/1.88 1.22/1.70		non-valued to
TERMINATION IN-LINE FEMALE THREAD	THREAD SIZE 10-32 UNF		STRAIGHT THRU PMC281032	SHUTOFF PMCD281032	A .58	B .63/1.31		
TERMINATION ELBOW FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 5/32" OD, .10" ID 1/4" OD, .17" ID	METRIC EQ. 4.0mm OD, 2.5mm ID 6.4mm OD, 4.3mm ID	STRAIGHT THRU PMC21025 PMC2104	SHUTOFF PMCD2104	A .50 .50	B 1.17 1.17/1.21	D .75 .77	
TERMINATION ELBOW HOSE BARB	TUBING SIZE 1/8" ID 1/4" ID	METRIC EQ. 3.2mm ID 6.4mm ID	STRAIGHT THRU PMC2302 PMC2304	SHUTOFF PMCD2302 PMCD2304	A .50 .50	B .85/1.21 1.00/1.21	D .75/.69 .95/.90	
								2012 Valved show



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 PTF (polytube fitting) terminations do not require ferrules to achieve a secure connection and are therefore easier to use and reuse. PTF fittings are designed for semirigid tubing, i.e., polyethylene, nylon, polyurethane, etc.





Specifications

Pressure: Vacuum to 120 psi, 8.3 bar

Temperature:

32°F to 160°F (0°C to 71°C)

Materials:

Main components and valves: Polypropylene

Thumb latch: Stainless steel Valve spring: 316 stainless steel

External spring and pin: Stainless steel

O-rings: EPDM

Sterilization:

Gamma: Up to 50 kGy irradiation

Color: Almond

Tubing Sizes:

Microbore to 1/4" ID, Microbore to 6.4mm 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 products in their own application conditions. Use the graph to the right as a guide.

The 1/8" flow polypropylene PMC12 offers many of the same configuration options as the PMC. The polypropylene material adds greater chemical resistance and is gamma sterilizable. The PMC12 also mates to small diameter rigid tubing. Available with a 1/4-28 flat bottom port and 1/4-28 UNF threads, these couplings eliminate the need to thread and re-thread common compression nuts each time a tubing connection is made.

Features

Polypropylene material

EPDM o-ring Colder thumb latch

Integral terminations

Benefits

Chemically resistant and gammasterilizable

Greater chemical resistance

One-hand connection and disconnection

Fewer leak points, shorter assemblies, faster installations

Liquid Flow Rates Liquid Flow Rate Information for Couplings

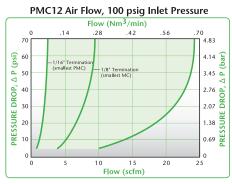
The chart below shows the flow rate for Colder couplings. Each coupling was tested with water at 70°F (21°C). To determine flow rates for specific coupling configurations use the formula below.

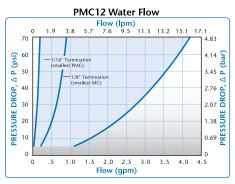
$$Q = C_{V} \sqrt{\frac{\Delta P}{S}}$$

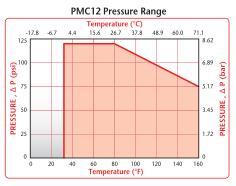
Q=Flow rate in gallons per minute C_v =Average coefficient across various flow rates (see chart) ΔP =Pressure drop across coupling (psi) S=Specific gravity of liquid

C_v Values for 1/8" Flow PMC12 Couplings

	PMC12	PMCD12	PMC12	PMCD12	PMC12	PMCD12	PMC12	PMCD12	PMC12	PMCD12	PMC12	PMCD12	PMC12	PMC12	PMC12	PMCD12	PMC12	PMCD12	PMC12	PMCD12
BODIES	2004	2004	2006	2006	2202	2202	2204	2204	2402	2402	2404	2404	2602	2304	2104	2304	2203	2203	2201	2201
PMC10021	2 .40	.18	.50	.19	.25	.16	.50	.19	.50	.20	.51	.19	.50	.50	.38	.24	.30	.17	.03	.03
PMCD1002	12 .27	.18	.31	.18	.24	.16	.28	.20	.26	.20	.29	.18	.26	.26	.27	.24	.25	.17	.03	.03
PMC10041	2 .40	.21	.50	.24	.26	.18	.50	.24	.50	.20	.51	.24	.50	.50	.38	.26	.30	.19	.03	.03
PMCD1004	12 .29	.19	.32	.23	.25	.17	.30	.23	.27	.21	.28	.23	.27	.28	.29	.24	.25	.18	.03	.03
PMC12041.	2 .40	.18	.50	.18	.25	.16	.40	.18	.40	.16	.36	.18	.40	.40	.38	.21	.30	.17	.03	.03
PMCD1204	12 .21	.17	.22	.17	.20	.16	.22	.17	.21	.17	.20	.17	.21	.22	.21	.18	.21	.16	.03	.03
PMC16021.	2 .23	.15	.28	.18	.19	.14	.27	.15	.27	.15	.28	.18	.27	.27	.23	.16	.20	.14	.03	.03
PMCD1602	12 .19	.15	.19	.15	.17	.14	.19	.15	.18	.15	.18	.15	.18	.19	.19	.15	.18	.14	.03	.03
PMC16041.	2 .33	.23	.44	.24	.24	.18	.44	.23	.44	.20	.38	.24	.38	.44	.33	.26	.26	.19	.03	.03
PMCD1604	12 .23	.17	.26	.21	.22	.16	.26	.21	.26	.19	.25	.21	.21	.26	.23	.24	.22	.16	.03	.03
PMC170312	2 .25	.20	.30	.20	.20	.17	.30	.20	.30	.19	.28	.20	.28	.30	.25	.18	.21	.17	.03	.03
PMCD1703	12 .20	.17	.20	.17	.19	.15	.21	.17	.19	.17	.20	.17	.19	.20	.20	.16	.19	.16	.03	.03
PMC170112	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.02
DMCD1701	12 03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	02	02







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.



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.

SMART COUPLINGS WITH RFID

IdentiQuik PMC 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:

8-25 V standard, 5V only available

Power Consumption:

350mW maximum

Communications:

ASCII RS-232 (DB-9)

RFID Tag:

13.56 MHz ISO15693 - 112 bytes programmable

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

Operating Temperature:

32°F to 150°F (0°C to 65°C)

Materials are listed on page 20. Customized parts (materials, voltage, termination, cable length, etc.) available. Call for more information.

Coupling Reader



1/4" ID

HOSE BARB

(See drawing on page 22)

iPMC12D4HPI

iPMC12D4HP24A00 1.32 2.75

Product Dimensions

1.63

1.73

.75

1/2

1/2

Coupling Inserts



IN-I INF 1/4" ID 6.4mm ID iPMC124HPI

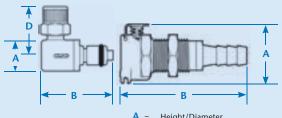
6.4mm ID

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 <u>www.colder.com</u> for more product information.

Product Dimensions



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



COUPLING BODIES

PANEL OPENING see drawing MAX. PANEL **THICKNESS** .50

MIN. PANEL **THICKNESS** .05



PANEL NUT HEX **PANEL NUT THREAD** 1/2-24UNS

Coupling Bodies

POLYPROPYLENE



TERMINATION IN-LINE PIPE THREAD

THREAD SIZE 1/8" NPT 1/8" BSPT 1/4" NPT 1/4" BSPT

METRIC EQ.

STRAIGHT THRU PMC100212 PMC100212BSPT PMC100412 PMC100412BSPT

PMCD100212BSPT PMCD100412 PMCD100412BSPT

PMCD100212

SHUTOFF

.88 1.00 .88 1.10 .88 1.10

1.00

.88

TERMINATION PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†

TUBING SIZE 1/4" OD, .17" ID

6.4mm OD, 4.3mm ID

STRAIGHT THRU PMC120412

SHUTOFF PMCD120412

В .79 1.72



TERMINATION PANEL MOUNT HOSE BARB

TUBING SIZE 1/16" ID 1/8" ID 1/4" ID

1.6mm ID 3.2mm ID 6.4mm ID

METRIC EQ.

PMC160412

PMC160112

PMC160212

PMCD160112 PMCD160212 PMCD160412

1.40 .88 .88 1.65 .88 1.85



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

TUBING SIZE 1/4" OD, .17" ID METRIC EQ. 6.4mm OD, 4.3mm ID **STRAIGHT THRU** PMC130412

STRAIGHT THRU

SHUTOFF PMCD130412

SHUTOFF

В 1.74 .89



TERMINATION IN-LINE **HOSE BARB**

TUBING SIZE 1/16" ID 1/8" ID

1/4" ID

METRIC EQ. 1.6mm ID 3.2mm ID 6.4mm ID

STRAIGHT THRU PMC170112 PMC170212

PMC170412

SHUTOFF PMCD170112 PMCD170212

PMCD170412

.89 1.42 .89 1.67 1.87

PMC12 1/4-28 Coupling Bodies

POLYPROPYLENE



TERMINATION PANEL MOUNT WITH A 1/4-28 FLAT **BOTTOM PORT**



TERMINATION IN-LINE WITH A 1/4-28 FLAT **BOTTOM PORT**

SHUTOFF 1.57 PMCD18042812 0.88

SHUTOFF В PMCD19042812 0.89 1.57

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. †NOTE: Colder's Ferruleless PTF (polytube fitting) terminations do not require ferrules to achieve a secure connection and are therefore easier to use and reuse. PTF fittings are designed for semi-rigid tubing, i.e., polyethylene, nylon, polyurethane, etc.

Coupling Inserts

POLYPROPYLENE

TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/8" NPT		STRAIGHT THRU PMC240212	SHUTOFF PMCD240212	A .58	B 1.03/1.45		0)
TERMINATION IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17" ID	METRIC EQ. 6.4mm OD, 4.3mm ID	STRAIGHT THRU PMC200412	SHUTOFF PMCD200412	A .58	B 1.15/1.58		
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/16" ID 1/8" ID 1/4" ID	METRIC EQ. 1.6mm ID 3.2mm ID 6.4mm ID	STRAIGHT THRU PMC220112 PMC220212 PMC220412	SHUTOFF PMCD220112 PMCD220212 PMCD220412	A .50 .50 .50	B .80/1.47 1.05/1.67 1.20/1.71		
TERMINATION ELBOW FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 5/32" OD, .10" ID 1/4" OD, .17" ID	METRIC EQ. 4.0mm OD, 2.5mm ID 6.4mm OD, 4.3mm ID	STRAIGHT THRU PMC2102512 PMC210412	SHUTOFF PMCD2102512 PMCD210412	A .50 .50	B 1.09/1.21 1.17/1.21	D .77 .77	
TERMINATION ELBOW HOSE BARB	TUBING SIZE 1/8" ID 1/4" ID	METRIC EQ. 3.2mm ID 6.4mm ID	STRAIGHT THRU PMC230212 PMC230412	SHUTOFF PMCD230212 PMCD230412	A .50 .50	B 1.09/1.21 1.09/1.21	D .69 .90	









PMC12 1/4-28 Coupling Inserts

POLYPROPYLENE

TERMINATION	STRAIGHT THRU SHU		В
IN-LINE WITH 1/4-28 UNF THREADS	PMC24042812 PMC	D24042812 .50	1.48
TERMINATION PANEL MOUNT WITH A 1/4-28 FLAT BOTTOM PORT			B 1.55



TUBING SIZE 1/16" and 1.8mm 1/8" and 3mm 1/16" and 1.8mm 1/8" and 3mm	DESCRIPTION 1/4-28 Polypropylene Nut (natural) 1/4-28 Polypropylene Nut (natural) 1/4-28 Acetal Nut (black) 1/4-28 Acetal Nut (black)	PART NUMBER 2418900 2419000 2419199 2419299



Ferrules

TUBING SIZE 1/16" 1/8" 1.8mm	DESCRIPTION Ferrule, ETFE (blue) Ferrule, ETFE (green)	PART NUMB 2419300 2419400 2419500
1.8mm	Ferrule, ETFE (gellow)	2419400
3.0mm	Ferrule, ETFE (orange)	2419600



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 PTF (polytube fitting) terminations do not require ferrules to achieve a secure connection and are therefore easier to use and reuse. PTF fittings are designed for semirigid tubing, i.e., polyethylene, nylon, polyurethane, etc.



BER



Colder's MC 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 MC Series features a one-hand operation for swift and easy connects and disconnects. These couplings offer the flexibility of multiple configurations and terminations and mate with both PMC acetal and PMC12 polypropylene couplings.

Features

Brass material

High temperature capability Colder thumb latch Compatible

Benefits

Durable and able to withstand higher pressure and temperature Versions rated to 400°F (204°C) One-hand connection and disconnection MC mates with PMC and PMC12 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 spring: 316 stainless steel

External springs and pin: Stainless steel

O-ring: Buna-N

Finish: Chrome **Tubing Sizes:**

1/8" to 1/4" ID, 3.2mm to 6.4mm 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

> temperature versions available with ratings to 400° f Call Customer Service for more 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.

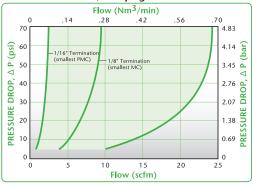
Q=Flow rate in gallons per minute C_v =Average coefficient across various flow rates (see chart) Δ P=Pressure drop across coupling (psi)

S=Specific gravity of liquid

C_v Values for 1/8" Flow MC Couplings

DODIEC	MC12	MCD12	MC12	MC12	MC12	MCD12	MC12	MCD12										
BODIES	2004	2004	2006	2006	2202	2202	2204	2204	2402	2402	2404	2404	2602	2304	2104	2304	2203	2203
MC100212	.40	.18	.50	.19	.25	.16	.50	.19	.50	.20	.51	.19	.50	.50	.38	.24	.30	.17
MCD100212	.27	.18	.31	.18	.24	.16	.28	.20	.26	.20	.29	.18	.26	.26	.27	.24	.25	.17
MC100412	.40	.21	.50	.24	.26	.18	.50	.24	.50	.20	.51	.24	.50	.50	.38	.26	.30	.19
MCD100412	.29	.19	.32	.23	.25	.17	.30	.23	.27	.21	.28	.23	.27	.28	.29	.24	.25	.183
MC120412	.40	.18	.50	.18	.25	.16	.40	.18	.40	.16	.36	.18	.40	.40	.38	.21	.30	.173
MCD120412	.21	.17	.22	.17	.20	.16	.22	.17	.21	.17	.20	.17	.21	.22	.21	.18	.21	.16
MC160212	.23	.15	.28	.18	.19	.14	.27	.15	.27	.15	.28	.18	.27	.27	.23	.16	.20	.14
MCD160212	.19	.15	.19	.15	.17	.14	.19	.15	.18	.15	.18	.15	.18	.19	.19	.15	.18	.14
MC160412	.33	.23	.44	.24	.24	.18	.44	.23	.44	.20	.38	.24	.38	.44	.33	.26	.26	.19
MCD160412	.23	.17	.26	.21	.22	.16	.26	.21	.26	.19	.25	.21	.21	.26	.23	.24	.22	.16
MC170312	.25	.20	.30	.20	.20	.17	.30	.20	.30	.19	.28	.20	.28	.30	.25	.18	.21	.17
MCD170312	.20	.17	.20	.17	.19	.15	.21	.17	.19	.17	.20	.17	.19	.20	.20	.16	.19	.16

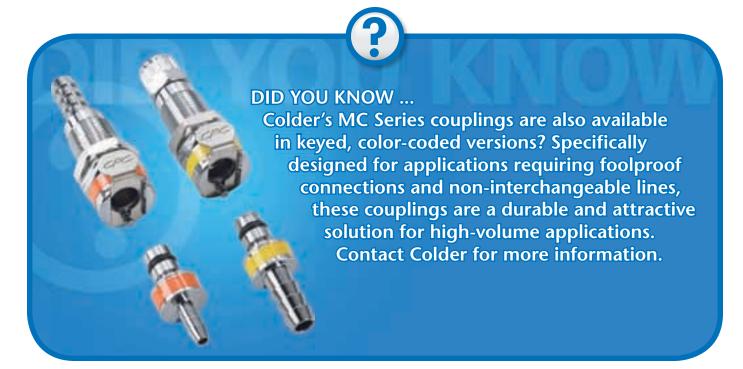
MC Air Flow, 100 psig Inlet Pressure



MC Water Flow Flow (lpm) 7.6 9.5 11.3 13.2 15.1 17.1 70 **60** 4.14 **Q** 50 3.45 2.76 O 2.07 O DROP, 40 30 PRESSURE I **PRESSURE** 20 10 1.0 2.0 2.5 3.5

Flow (gpm)

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.





Pressure:

Vacuum to 20 psi, 1.4 bar

Materials:

Main components:

Low density polyethylene

Color:

Translucent

Tubing Size:

1/8" ID, 3.2mm ID

Nu-Seal™ quick disconnect coupling

inserts feature a patented integral seal and are USP Class VI compliant. These economic inserts are ideal for applications that require limited connect/disconnect cycles.



Features

Patented integral seal

Low density polyethylene Chemically resistant

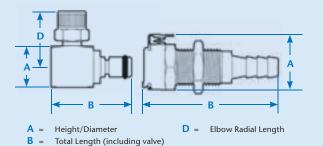
Compatible

Benefits

Economical, allows for disposability and provides leak-free connections Sterilizable by Et0, E-beam & gamma Works in many critical USP Class VI material applications

Mates with MC, PMC, PMC12 couplings

Product Dimensions



COUPLING BODIES
(except male thread)
MALE THREAD
COUPLING INSERTS

PANEL	MAX. PANEL	MIN. PANEL
OPENING	THICKNESS	THICKNESS
see drawing	.50	.05
see drawing	.21	.05
see drawing	.30	.05



PANEL	PANEL
NUT HEX	NUT THREAD
5/8	1/2-24UNS

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 PTF (polytube fitting) terminations do not require ferrules to achieve a secure connection and are therefore easier to use and reuse. PTF fittings are designed for semi-rigid tubing, i.e., polyethylene, nylon, polyurethane, etc. NOTE: Elbow configurations are available. Contact Colder for more information.

Coupling Inserts

CHROME-PLATED BRASS

			<u> </u>				
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/8" NPT 1/8" NPT Female 1/8" BSPT 1/4" NPT 1/4" NPT Female 1/4" BSPP Female		STRAIGHT THRU MC2402 MC2602 MC2402BSPT MC2404 MC2604 MC2604BSPP	SHUTOFF MCD2402 MCD2602 MCD2402BSPT MCD2404 MCD2604 MCD2604BSPP	A .58 .58 .58/.72 .65 .72 .72	B 1.03/1.43 .95/1.65 1.03/1.43 1.08/1.43 1.15/1.82 1.23/1.91	non-valved and a
TERMINATION PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17" ID	METRIC EQ. 6.4mm OD, 4.3mm ID	STRAIGHT THRU MC4004	SHUTOFF MCD4004	A .72	B 1.75/1.85	o Mari
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/8" ID 3/16" ID 1/4" ID	METRIC EQ. 3.2mm ID 4.8mm ID 6.4mm ID	STRAIGHT THRU MC4202 MC4203 MC4204	SHUTOFF MCD4202 MCD4203 MCD4204	A .72 .72 .72	B 1.65/1.75 1.87/1.97 1.87/1.97	
TERMINATION IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 5/32" OD, .10" ID 1/4" OD, .17" ID 3/8" OD, .25" ID	METRIC EQ. 4.0mm OD, 2.5mm ID 6.4mm OD, 4.3mm ID 9.5mm OD, 6.4mm ID	STRAIGHT THRU MC20025 MC2004 MC2006	SHUTOFF MCD20025 MCD2004 MCD2006	A .58 .58 .58	B 1.13/1.53 1.15/1.55 1.30/1.50	of the
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/8" ID 3/16" ID 1/4" ID	METRIC EQ. 3.2mm ID 4.8mm ID 6.4mm ID	STRAIGHT THRU MC2202 MC2203 MC2204	SHUTOFF MCD2202 MCD2203 MCD2204	A .58 .58 .58	B 1.05/1.65 1.25/1.85 1.25/1.67	
TERMINATION IN-LINE FEMALE THREAD	THREAD SIZE 10-32 UNF		STRAIGHT THRU MC281032	SHUTOFF MCD281032	A .58	B .63/1.30	O TO
TERMINATION ELBOW FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 5/32" OD, .10" ID 1/4" OD, .17" ID	METRIC EQ. 4.0mm OD, 2.5mm ID 6.4mm OD, 4.3mm ID	STRAIGHT THRU MC21025 MC2104	SHUTOFF MCD21025 MCD2104	A .63 .63	B D 1.18/1.28 .81 1.18/1.28 .83	**
TERMINATION ELBOW HOSE BARB	TUBING SIZE 1/8" ID 1/4" ID	METRIC EQ. 3.2mm ID 6.4mm ID	STRAIGHT THRU MC2302 MC2304	SHUTOFF MCD2302 MCD2304	A .62 .63	B D 1.18/1.28 .76 1.18/1.28 .76	

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

Coupling bodies must have integral terminations to be compatible.

POLYETHYLENE

TERMINATION TUBING SIZE METRIC EQ. PART NO. D IN-LINE 1/8" ID 3.2 mm ID DSM2202 .50 .98 **HOSE BARB**



Nu-Seal™ Disposable **Coupling Inserts**

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 PTF (polytube fitting) terminations do not require ferrules to achieve a secure connection and are therefore easier to use and reuse. PTF fittings are designed for semi-rigid tubing, i.e., polyethylene, nylon, polyurethane, etc. NOTE: Elbow configurations are available. Contact Colder for more information.





The NS2 Series couplings were built on the company's proven platform of non-spill valves designed to provide fast, safe and virtually leak-free fluid line connections. The NS2 offers an easy, twist-to-connect coupling with an integrated locking mechanism and double-sided non-spill shutoff valves. The NS2 is also chemically resistant making it ideal for a diverse range of applications.

Specifications

Pressure: Vacuum to 45 psi, 3.1 bar

Temperature: 32°F to 120°F (0°C to 49°C)

Materials:

Main components and valves: Glass-filled polypropylene

Valve spring: 316 stainless steel

Seal material: TPV*

Color: Gray with dark gray accent standard

Tubing Sizes:

1/8" to 1/4" ID, 3.2mm to 6.4mm ID

Spillage: <0.025 cc/disconnect

Inclusion: 0.009 cc/connect

*The overmold material is known as TPV (thermoplastic vulcanizate). This TPV is an alloy of polypropylene thermoplastic and fully vulcanized EPDM rubber. The material is typically resistant to water, acids and bases.

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.

Features

Efficient, non-spill design Twist-to-connect locking

High flow in a compact design

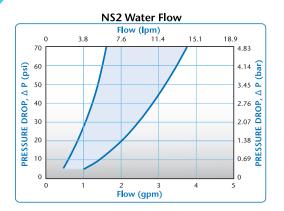
Ultra low air inclusion

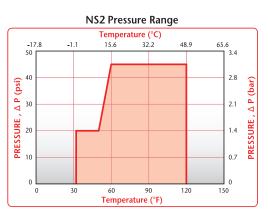
Benefits

Disconnect under pressure with no spills Easy, non-spill connections in tight spaces

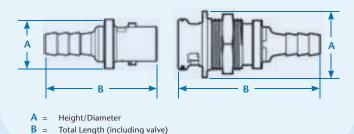
Small coupling replaces a larger connector

Minimizes contaminants, reduces the need to purge lines





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.



Ø .688"

Product Dimensions

MAX. PANEL **PANEL OPENING THICKNESS**

MIN. PANEL **THICKNESS**

COUPLING BODIES

see drawing

Coupling Bodies

POLYPROPY



Coupling Inserts

DOI VDDODVI ENIE

			PULIPRUPI			
TERMINATION IN-LINE PIPE THREAD	THREAD 1/8" NPT		SHUTOFF NS2D2402	A .64	B 1.20	
TERMINATION IN-LINE FERRULESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17 ID	METRIC EQ. 6.4mm OD, 4.3mm ID	SHUTOFF NS2D2004	A .64	B 1.32	OF DE
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/8" ID 1/4" ID	METRIC EQ. 3.2mm ID 6.4mm ID	SHUTOFF NS2D2202 NS2D2204	A .64 .64	B 1.25 1.45	





PANEL MOUNT	
GASKET	For sealing panel mount bodies listed above
REPLACEMENT	

MATERIAL Buna-N

PART NO. 1830300

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. PTF fittings are designed for semi-rigid tubing, i.e., polyethylene, nylon, polyurethane, etc. †NOTE: Colder's Ferruleless PTF (polytube fitting) terminations do not require ferrules to achieve a secure connection and are therefore easier to use and reuse.





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.

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

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.

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

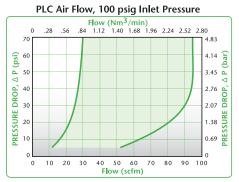
Q=Flow rate in gallons per minute

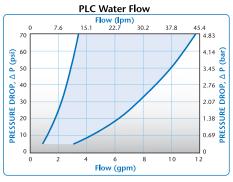
 C_y =Average coefficient across various flow rates (see chart) ΔP =Pressure drop across coupling (psi)

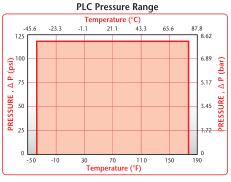
S=Specific gravity of liquid

C, Values for 1/4" Flow PLC Couplings

	PLC	PLCD	PLC										
BODIES	20004	20004	20006	20006	22004	22004	22006	22006	24004	24004	24006	24006	26004
PLC10004	.40	.36	1.05	.58	.83	.56	1.40	.82	1.40	.75	1.40	.77	.83
PLCD1000	4 .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
PLCD1000	6 .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
PLCD1200	6 .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
PLCD1600	4 .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
PLCD1600	6 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.



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.

SMART COUPLINGS WITH RFID

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

ISO15693 - 112 bytes programmable

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

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



Product Dimensions (See drawing on page 32)

TERMINATION	TUBING SIZE	METRIC EQ.	SHUTOFF		
IN-LINE	1/4" ID	6.4mm ID	iPLCD4HP24A00	1.39	2.77
HOSE BARB	5/16" ID	7.9mm ID	iPLCD5HP24A00	1.39	2.76
	3/8" ID	9.5mm ID	iPLCD6HP24A00	1.39	2.76

Coupling Inserts



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 iPLC4HPI iPLC5HPI iPLC6HPI	SHUTOFF iPLCD4HPI iPLCD5HPI iPLCD6HPI	1.00 1.05	1.38/2.05 1.92/2.05 1.73/1.86	5/8 5/8

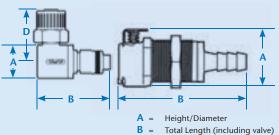


All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters NOTE: I-Code SL1 tags are available for existing applications, contact the factory for assistance.



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

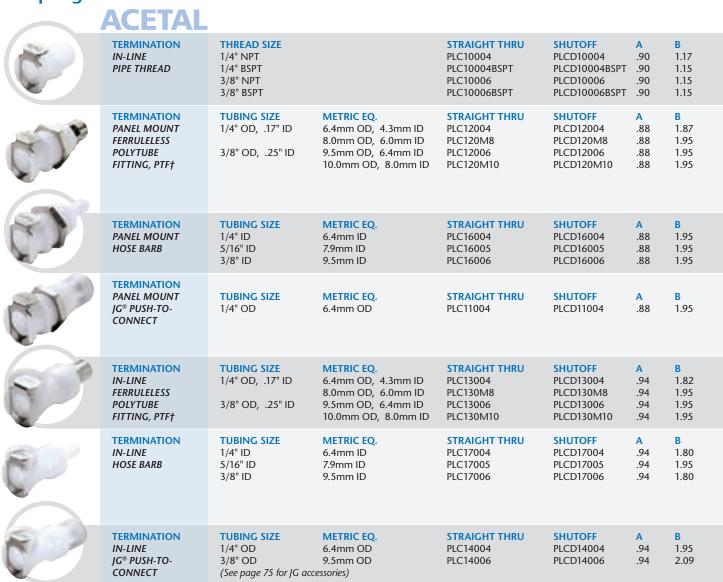
Product Dimensions



Ø .688' MIN. PANEL **PANEL** MAX. PANEL **OPENING THICKNESS** THICKNESS **COUPLING BODIES** see drawing **PANEL PANEL NUT HEX NUT THREAD** 13/16 11/16-24UNEF

Elbow Radial Length

Coupling Bodies



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

ACETAL TUBING SIZE METRIC EQ. STRAIGHT THRU SHUTOFF A B PLC24004 PLC24006 PLC24						A	CEI	AL	
PANEL MOUNT FRENULEISS POLYTUBE 3/8" OD, 25" ID 9.5mm OD, 6.4mm ID PLC4000MB PLCD4000MB 94 1.781/91 1.791/2.05 1.	IN-LINE	1/4" NPT 1/4" BSPT 3/8" NPT		PLC24004 PLC24004BSPT PLC24006	PLCD24004 PLCD24004BSPT PLCD24006	.72 .72 .87	1.25/1.66 1.53/1.66 1.25/1.63		
PANEL MOUNT	PANEL MOUNT FERRULELESS POLYTUBE	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID 8.0mm OD, 6.0mm ID 9.5mm OD, 6.4mm ID	PLC40004 PLC400M8 PLC40006	PLCD40004 PLCD400M8 PLCD40006	.94 .94 .94	1.78/1.91 1.91/2.03 1.91/2.05		
PANEL MOUNT JG* PUSH*TO- CONNECT	PANEL MOUNT	1/4" ID 5/16" ID	6.4mm ID 7.9mm ID	PLC42004 PLC42005	PLCD42004 PLCD42005	.94 .94	1.91/2.05 1.91/2.05		
N-LINE 1/4" OD, .17" ID 6.4mm OD, 4.3mm ID PLC20004 PLCD20004 7.72 1.25/1.88 8.0mm OD, 6.0mm ID PLC20008 PLCD200M8 7.72 1.38/1.82 PLCD20M8 PLCD200M8 7.72 1.38/1.82 PLCD20M8 PLCD200M8 7.72 1.38/1.82 PLCD20M8 PLCD200M6 7.72 1.38/1.82 PLCD20M6 7.72 1.38/1.82 PLCD200M6 PLCD200M6 7.72 1.38/1.82 PLCD20M6	PANEL MOUNT JG® PUSH-TO-								
IN-LINE	IN-LINE FERRULELESS POLYTUBE	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID 8.0mm OD, 6.0mm ID 9.5mm OD, 6.4mm ID	PLC20004 PLC200M8 PLC20006	PLCD20004 PLCD200M8 PLCD20006	.72 .72 .72	1.25/1.88 1.38/1.82 1.38/1.82		non-valved do de
IN-LINE 1/4" OD 6.4mm OD PLC29004 PLCD29004 .63 1.35/1.95 1.51/2.11	IN-LINE	1/4" ID 5/16" ID	6.4mm ID 7.9mm ID	PLC22004 PLC22005	PLCD22004 PLCD22005	.62 .62	1.35/1.99 1.35/1.99		
## ACETAL TUBING SIZE METRIC EQ. STRAIGHT THRU SHUTOFF A B D	IN-LINE JG® PUSH-TO-	1/4" OD	6.4mm OD	PLC29004	PLCD29004	.63	1.35/1.95		
ELBOW 1/4" ID 6.4mm ID PLC23004 PLCD23004 .67/.63 1.10/1.28 .85/.96	ELBOW FERRULELESS POLYTUBE FITTING,								
	ELBOW	1/4" ID	6.4mm ID	PLC23004	PLCD23004	.67/.63	1.10/1.28	.85/.96	70 _{m-valved shouth}

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.





The 1/4" flow polypropylene PLC12

offers many of the same configuration options as the PLC. The polypropylene material adds greater chemical resistance for more demanding applications. PLC12 couplings are also gamma sterilizable.

The PLC12 Series is also available with optional RFID (Radio Frequency Identification) capability.

Features

Polypropylene material **EPDM o-rings** Colder thumb latch Integral terminations

Benefits

installations

Chemically resistant and gamma sterilizable Greater chemical resistance One-hand connection and disconnection Fewer leak points, shorter assemblies, faster

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 PLC12 Couplings

PLC BODIES 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
PLC1000412 .40	.36	1.05	.58	.83	.56	1.40	.82	1.40	.75	1.40	.77	.83
PLCD1000412 .36	.31	.73	.48	.66	.41	.82	.50	.80	.45	.77	.45	.81
PLC1000612 .40	.36	1.05	.60	.83	.56	1.40	.81	1.40	.76	1.40	.76	.83
PLCD1000612 .37	.31	.81	.47	.70	.43	1.02	.51	.98	.46	.99	.48	.98
PLC1200612 .38	.36	.84	.63	.74	.56	1.14	.75	1.14	.70	1.14	.72	.74
PLCD1200612 .38	.33	.78	.49	.68	.44	.84	.49	.81	.43	.82	.44	.81
PLC1600412 .38	.37	.87	.54	.95	.51	1.00	.70	.95	.64	1.00	.66	.95
PLCD1600412 .37	.31	.61	.44	.57	.41	.78	.44	.78	.43	.75	.46	.78
PLC1600612 .38	.37	1.00	.57	.95	.53	1.40	.80	1.40	.71	1.40	.73	1.40
PLCD1600612 .38	.32	.71	.49	.63	.42	.89	.51	.96	.45	.92	.49	.97

Specifications

Pressure:

Vacuum to 120 psi, 8.3 bar

Temperature:

32°F to 160°F (0°C to 71°C)

Materials:

Main components and valves:

Polypropylene

Thumb latch: Stainless steel Valve spring: 316 stainless steel

External springs and pin: Stainless steel

O-rings: EPDM

Sterilization:

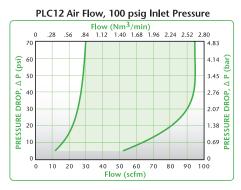
Gamma: Up to 50 kGy irradiation

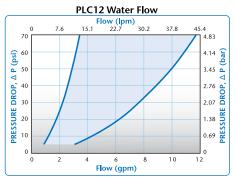
Color: Almond

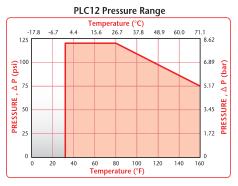
Tubing Sizes:

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. Use the graph at the right as a guide.







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.



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

SMART COUPLINGS WITH RFID

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 ISO15693 - 112 bytes programmable

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

Coupling Readers



HOSE BARB

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

Product Dimensions (See drawing on page 36)

iPLC12D4HP24A00 1.39 2.78 iPLC12D6HP24A00 1.39

Coupling Inserts



IN-LINE HOSE BARB	1/4" ID 3/8" ID	6.4mm ID	iPLC124HPI iPLC126HPI	iPLC12D4HPI iPLC12D6HPI	1.00	1.38/2.05 1.74/1.87	5/8
ELBOW	1/4" ID	6.4mm ID	STRAIGHT THRU iPLC124HEPI	iPLC12D4HEPI	1.48	1.27/1.40	
HOSE RARR	3/8" ID	9.5mm ID	IDI C126HEDI	IDI C12D6HEDI	1 48	1 33/1 46	



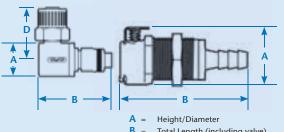
All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. NOTE: I-Code SL1 tags are available for existing applications, contact the factory for assistance.

Operating Temperature:

32°F to 150°F (0°C to 65°C)

Materials are listed on page 34. Customized parts (materials, voltage, termination, cable length, etc.) available. Call for more information.

Product Dimensions



Total Length (including valve)

Elbow Radial Length



COUPLING BODIES COUPLING INSERTS

MAX. PANEL OPENING **THICKNESS** see drawing .50 see drawing .30

MIN. PANEL **THICKNESS**

.02 .02

PANEL NUT HEX 13/16

PANEL NUT THREAD 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

PLC1000412BSPT PLC1000612 PLC1000612BSPT **SHUTOFF** PLCD1000412 1.00 1.15 PLCD1000412BSPT 1.00 1.15 PLCD1000612 1.00 1.15 PLCD1000612BSPT 1.00 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

STRAIGHT THRU

PLC1000412

SHUTOFF PLCD1200612 1.00 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 1.00 1.95 PLCD1600612 1.00 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

1.02 1.96



TERMINATION IN-LINE HOSE BARB

1/4" ID 3/8" ID

TUBING SIZE

METRIC EQ. 6.4mm ID 9.5mm ID

STRAIGHT THRU PLC1700412 PLC1700612

SHUTOFF PLCD1700412 1.02 1.96 PLCD1700612

SHUTOFF

PLCD17040612

PLCD17060812

1.02 1.96 1.02 2.20 1.02 2.36



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

> PLC12 couplings are gamma sterilizable; see page 110 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.

Coupling Inserts

D	VD	RO	DV	LE	ME

				JLIPN	UF			
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/4" NPT		STRAIGHT THRU PLC2400412	SHUTOFF PLCD2400412	A .72	B 1.26/1.67		· Maria
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	STRAIGHT THRU PLC4200412 PLC4200612	SHUTOFF PLCD4200412 PLCD4200612	A .94 .94	B 1.91/2.05 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		O TOTAL O
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	STRAIGHT THRU PLC2200412 PLC2200612	SHUTOFF PLCD2200412 PLCD2200612	A .63 .63	B 1.35/2.00 1.35/1.82		non-valved stocks
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 PLCD22040612 PLCD22060812	A .72 .72	B 2.23 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	
TERMINATION ELBOW	TUBING SIZE 1/4" ID	METRIC EQ. 6.4mm ID	STRAIGHT THRU PLC2300412	SHUTOFF PLCD2300412	A .63	B 1.22/1.36	D .96	Jan.



PLC2300612

PLCD2300612

DID YOU KNOW ...

3/8" ID

9.5mm ID

HOSE BARB

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 which product 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.



1.28/1.42



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

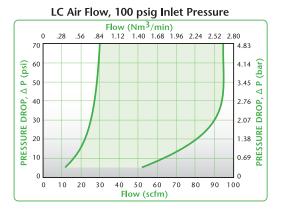
Brass material

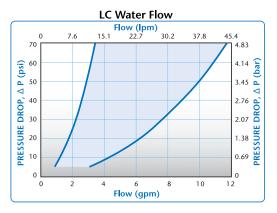
Chrome plating High temperature capability Colder thumb latch Compatible

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.

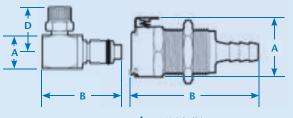
EPDM has excellent resistance to polar solvents. This o-ring is not compatible with petroleum. The temperature range is -70° to 300°F.

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



Height/Diameter

Total Length (including valve)

D = Elbow Radial Length



MAX. PANEL **OPENING THICKNESS** see drawing .50

MIN. PANEL **THICKNESS**

.05



PANEL PANEL NUT HEX 13/16

NUT THREAD 11/16-24 UNS

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

CHROM BRASS IN-LINE PIPE THR		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	OFF P
CHROM BRASS PANEL M FERRULE POLYTUE FITTING,	ELESS BE	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	A .94 .94	B 1.83/1.98 1.96/2.11	O DEPO
CHROM BRASS PANEL M HOSE BA		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	B.
CHROM BRASS IN-LINE FERRULE POLYTUL FITTING,	ELESS BE	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	OFICE
CHROM BRASS IN-LINE HOSE BA		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	
CHROM BRASS ELBOW FERRULE POLYTUL FITTING,	BE	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 I 1.28/1.43 . 1.28/1.43 .	
CHROM BRASS ELBOW HOSE BA	IE-PLATED	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	STRAIGHT THRU LC23004 LC23006	SHUTOFF LCD23004 LCD23006		B I 1.28/1.43 1 1.28/1.43 1	



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.





Pressure: Vacuum to 250 psi, 17.3 bar

Temperature:

-10°F to 150°F (-23°C to 66°C) (High temperature versions available)

Materials:

Main components: Die-cast zinc Thumb latch: Stainless steel

Valves: Acetal

Valve springs: 316 stainless steel

External springs and pin: Stainless steel

O-ring: Buna-N, others available

Finish: Bright nickel

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.

Features

Die-cast zinc material

High temperature capability Colder thumb latch Integral terminations

Benefits

Durable, lightweight construction withstands higher pressure and temperature

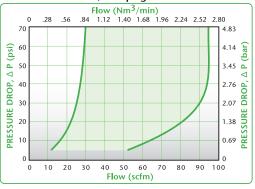
Versions rated to 400°F (204°C)

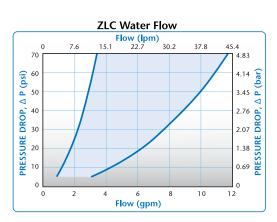
One-hand connection and disconnection

Eliminate additional components and assembly; reduce coupling size

For tips on o-ring selection, please see page 39.

ZLC Air Flow, 100 psig Inlet Pressure





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.



COUPLING BODIES

PANEL **OPENING** see drawing

PANEL

13/16

MAX. PANEL **THICKNESS**

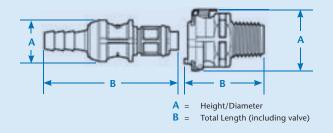
MIN. PANEL **THICKNESS**

05

.50

PANFI **NUT HEX NUT THREAD** 11/16-24 UNS

Product Dimensions



Coupling Bodies

DIE-CAST ZIN





DIE-CAST ZINC

TERMINATION TUBING IN-LINE 1/4" ID HOSE BARB** 5/16" ID 3/8" ID	6 SIZE METRIC EQ. 6.4mm ID 7.9mm ID 9.5mm ID	SHUTOFF ZLCD22004 ZLCD22005 ZLCD22006	A 0.63 0.63 0.63	B 2.01 2.01 2.01
---	---	---------------------------------------	-------------------------	---------------------------



Accessories

PANEL MOUNT **GASKET** REPLACEMENT

For sealing panel mount bodies listed above

MATERIAL Buna-N

PART NO. 1830300





ZLC couplings are intended for high volume applications (500 piece minimum). ZLC samples are available for testing. For lower volume applications, please consider Colder's LC, PLC or PLC12 Series couplings.

*As with all tapered pipe threads, it is typical to use a thread sealant (tape or paste). **Due to the manufacturing process, the hose barbs on ZLC couplings have less "bite" on the tubing than typical Colder hose barbs. To ensure tubing retention, Colder recommends the use of a hose clamp. † X-body is the lowest cost body option. Works only with straight thru inserts—will not activate shutoff inserts.





Pressure:

Vacuum to 120 psi, 8.3 bar

Temperature:

-40°F to 180°F (-40°C to 82°C)

Materials:

Main components and valves: Acetal

Thumb latch: Acetal

Valve spring: 316 stainless steel External spring: 302 stainless steel

O-rings: Buna-N

Color:

Natural white with light gray latch

Tubing Sizes:

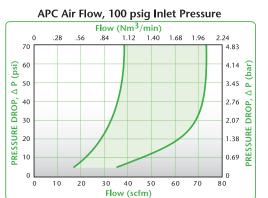
1/4" to 3/8" ID, 6.4mm to 9.5mm ID

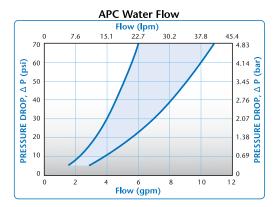
WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of Colder products in their own application conditions.

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

The 1/4" flow APC Series couplings feature a plastic thumb latch, fewer moving parts and a smooth contoured design to deliver ease-of-use and excellent flow in a compact size. The patented APC Series has been expanded to include couplings with valves and thumb latch shrouds. A more rugged design on some models adds durability to increase the APC's application range.

FeaturesBenefitsPlastic thumb latchNo exposed metal partsShrouded thumb latchProtects against accidental disconnectsIntegral terminationsFewer leak points, shorter assemblies, faster installationsCompatibilityMates with most EFC 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 C,=Average coefficient across various flow rates (see chart) ΔP =Pressure drop across coupling (psi)

S=Specific gravity of liquid

C, Values for APC Couplings

BODIES	APC 20004	APCD 20004	APC 20006	APCD 20006	APC 22004	APCD 22004	APC 22006	APCD 22006	APC 24004	APCD 24004	APC 24006	APCD 24006
APC10004	0.4	0.4	1.2	0.9	1.0	0.9	2.0	0.9	1.9	0.8	1.7	0.8
APCD10004	0.4	0.4	1.0	0.7	1.0	0.7	0.8	0.7	1.2	0.6	0.8	0.6
APC10006	0.4	0.4	1.2	0.9	1.2	0.7	1.8	0.9	2.0	0.9	1.7	0.8
APCD10006	0.4	0.4	1.3	0.8	0.6	0.5	1.1	0.7	1.3	0.7	1.0	0.7
APC13004SH	0.6	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.4
APCD13004SH	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
APC13006SH	0.4	0.4	1.0	0.7	0.9	0.6	1.1	0.7	1.1	0.7	1.0	0.7
APCD13006SH	0.4	0.4	0.8	0.6	0.7	0.5	0.8	0.6	0.9	0.6	0.8	0.6
APC17004SH	0.4	0.4	0.8	0.6	1.0	0.7	0.9	0.7	0.8	0.6	0.7	0.6
APCD17004SH	0.4	0.4	0.7	0.5	0.8	0.6	0.7	0.6	0.7	0.5	0.6	0.5
APC17006SH	0.4	0.4	1.2	0.9	4.0	0.9	2.4	0.9	2.0	0.9	1.9	0.8
APCD17006SH	0.4	0.4	1.2	0.8	1.3	0.8	1.2	0.7	1.2	0.7	1.1	0.7



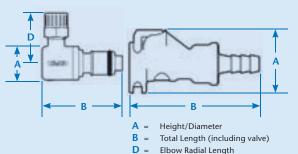
DID YOU KNOW...

The shelf life of a connector is dependent upon the connector materials and the storage conditions. Colder manufactures quick disconnect couplings and connections made from a variety of metal, plastic and elastomeric raw materials. In general, it is best to store any Colder product in an environment shielded from light at a temperature between 50 °F and 90 °F.

The shelf life of Colder couplings and connections is estimated to be 3 years minimum if the storage conditions comply with those shown above.

NOTE: For product containing lubricated o-rings, the lubricant will dry out over time. Prior to use, it may be advisable to re-lubricate external o-rings. For product containing silicone o-rings, if lube is allowable, use of a synthetic lube is recommended.

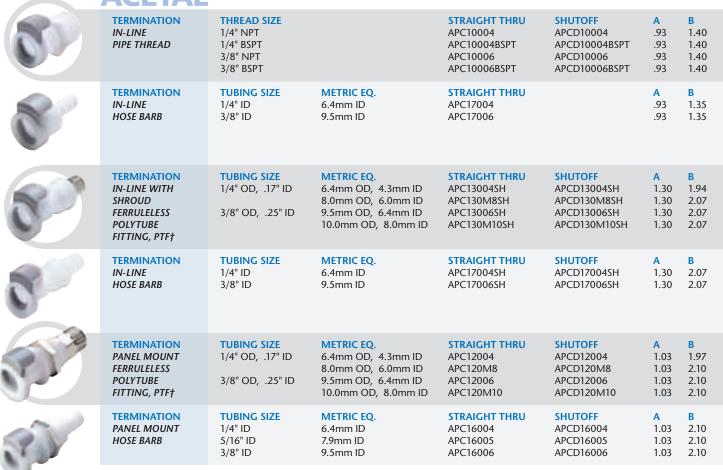
Product Dimensions



Ø .688" **PANEL** MAX. PANEL MIN. PANEL **THICKNESS THICKNESS OPENING COUPLING BODIES** see drawing **PANEL PANEL NUT HEX NUT THREAD** 13/16 11/16-24 UNS

Coupling Bodies

ACETAL



Accessories



PANEL MOUNT GASKET REPLACEMENT

For sealing panel mount bodies listed above

MATERIAL Buna-N

PART NO. 1830300

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

ACETAI

					A	CEL	AL	
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/4" NPT 1/4" BSPT 3/8" NPT 3/8" BSPT		STRAIGHT THRU APC24004 APC24004BSPT APC24006 APC24006BSPT	SHUTOFF APCD24004 APCD24004BSPT APCD24006 APCD24006BSPT	A .72 .72 .72 .72	B 1.43/1.77 1.63/1.77 1.50/1.64 1.51/1.65		nonvakedsta
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 APC20004 APC200M8 APC20006 APC200M10	SHUTOFF APCD20004 APCD200M8 APCD20006 APCD200M10	A .72 .72 .72 .72 .72 .72	B 1.86/1.99 1.79/1.93 1.78/1.91 1.79/1.93		
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	STRAIGHT THRU APC22004 APC22006	SHUTOFF APCD22004 APCD22006		B 1.40/2.10 1.40/1.92		non-valved store
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 APC21004 APC21006	SHUTOFF APCD21004 APCD21006	A 1.22 1.27	B 1.32/1.45 1.33/1.46	D .91 .96	
TERMINATION ELBOW HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	STRAIGHT THRU APC23004 APC23006	SHUTOFF APCD23004 APCD23006	A .63 .63	B 1.20/1.45 1.20/1.50	D .96 .96	non-valved shows



DID YOU KNOW...

One of the most versatile coupling series, the APC can be found in such diverse applications as hospital beds and support surfaces, sports hydration equipment, cold and compression therapy and many more! This product platform is also frequently used to develop custom designs. Contact Customer Service at 1-800-444-2474 or 651-645-0091 to learn how we can adapt the APC coupling to your specific requirements.

Quick Tip: These cost-effective, high-value connectors are also available in NSF listed versions for food and beverage dispensing. Visit www.colder.com for equivalent NSF part numbers.

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.





Pressure: 0 to 20 psi, 1.4 bar

Temperature: 0° F to 150° F (-18° C to 66° C)

Materials:

Main components and valves: Acetal Valve springs: 316 stainless steel

O-rings: Buna-N Retention ring: PPS

Color: White or black

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.

Colder's new BreakAwayTM series couplings provide safe and easy fluid transfer with protection from costly product

provide safe and easy fluid transfer with protection from costly product loss and equipment damage. These high quality, leak-free connectors are designed to disconnect when pull force is applied without depressing a latching mechanism, allowing users to make a clean, fast and easy break at critical moments.

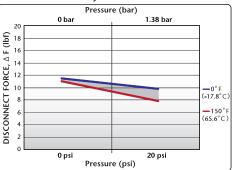
Features

Reliable break away design Automatic dual shutoff valves Streamlined, flush finish

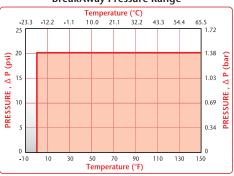
Benefits

Rapid, automatic disconnection
Safe and clean fluid handling
Easy-to-use for maximum productivity

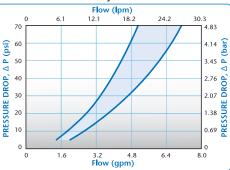
BreakAway Disconnect Force



BreakAway Pressure Range

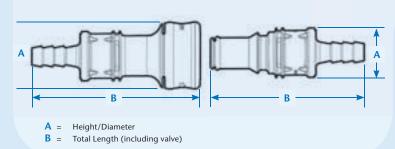


BreakAway Water Flow



These graphs are intended to give you a general idea of the performance capabilities of each product line. The shaded area of the graphs represent 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.

Force to disconnect is approximately 11 pounds pull force at 0 psi line pressure and 8 pounds pull force at 20 psi. In some applications and with certain types of tubing, a hose clamp may be required.





COUPLING BODIES

Product Dimensions

MAX. PANEL **PANEL** MIN. PANEL **OPENING THICKNESS THICKNESS** see drawing

Coupling Bodies

WHITE ACETAL

TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	 .29 .29
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	 .29 .29



BLACK ACETAL

TERMINATION	TUBING SIZE	METRIC EQ.	SHUTOFF	A	B
IN-LINE	1/4" ID	6.4mm ID	BACD17004MBLK	0.92	2.29
HOSE BARB	3/8" ID	9.5mm ID	BACD17006MBLK	0.92	2.29
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	SHUTOFF BACD16004MBLK BACD16006MBLK	A 0.92 0.92	B 2.29 2.29



Coupling Inserts

WHITE ACETAL

TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	STRAIGHT THRU BAC22004	SHUTOFF BACD22004 BACD22006	A 0.58/0.69 0.69	B 1.58/2.10 2.10	
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BLACK ACETAI

TERMINATION	LORING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	Α	В
IN-LINE	1/4" ID	6.4mm ID	BAC22004MBLK	BACD22004MBLK	0.58/0.69	1.58/2.10
HOSE BARB	3/8" ID	9.5mm ID		BACD22006MBLK	0.69	2.10

MBLK = molded black material.



DID YOU KNOW ...

BreakAway™ couplings can prevent costly equipment damage? Rapid disconnection from personal cooling systems, medical therapy devices and other equipment prevents breakage and messy spills.

Visit us at www.colder.com or call 651-645-0091 to get a free catalog CD or to find your local distributor.





Features

High efficiency valve Plastic thumb latch Polypropylene material Compatible

Benefits

More flow in a compact size Fewer moving parts Chemically resistant and gamma sterilizable Mates with most APC couplings

Specifications

Pressure:

Vacuum to 105 psi, 7.2 bar

Temperature:

32°F to 160°F (0°C to 71°C)

Materials:

Main components and valves: Polypropylene

Thumb latch: Polypropylene Valve spring: 316 stainless steel Panel mount gasket: EPDM

External springs: 302 stainless steel

O-rings: EPDM

Color:

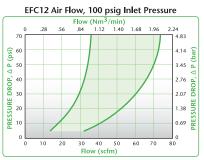
Gray with dark gray latch

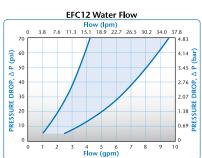
Tubing Sizes:

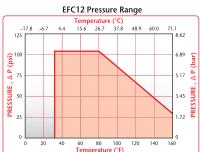
1/4" to 3/8" ID, 6.4mm to 9.5mm ID

Also available in NSF listed versions, please visit our web site 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.







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 below.

C_v Values for EFC12 Couplings

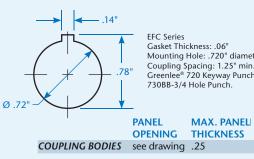
	EFC	EFCD	EFC	EFCD	EFC	EFCD	EFC	EFCD	EFCD	EFCD
BODIES	22412	22412	22612	22612	23412	23412	23612	23612	24412	24612
EFCD10412	0.51	0.51	0.51	0.51	0.50	0.45	0.50	0.50	0.51	0.51
EFCD10612	0.61	0.51	1.13	0.72	0.50	0.45	0.81	0.69	0.51	0.72
EFCD16412	0.51	0.51	0.51	0.51	0.50	0.45	0.50	0.50	0.51	0.51
EFCD16612	0.61	0.51	1.13	0.72	0.50	0.45	0.81	0.69	0.51	0.72
EFCD17412	0.51	0.51	0.51	0.51	0.50	0.45	0.50	0.50	0.51	0.51
EFCD17612	0.61	0.51	1.13	0.72	0.50	0.45	0.81	0.69	0.51	0.72

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

Q = Flow rate in gallons per minute

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

Specific gravity of liquid



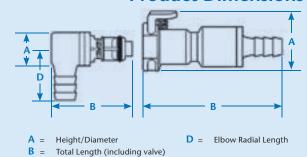
Gasket Thickness: .06" Mounting Hole: .720" diameter Coupling Spacing: 1.25" min. Greenlee® 720 Keyway Punch and 730BB-3/4 Hole Punch.

> MIN. PANEL **THICKNESS**

PANEL NUT HEX 13/16

PANEL NUT THREAD 11/16-24 UNS

Product Dimensions



Coupling Bodies

POLYPROPYLENE

						4000
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/4" NPT 3/8" NPT		SHUTOFF EFCD10412 EFCD10612	A .93 .93	B 2.29 2.29	0
TERMINATION BULKHEAD PANEL MOUNT HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	SHUTOFF EFCD16412 EFCD16612	A .93 .93	B 2.23 2.23	
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	SHUTOFF EFCD17412 EFCD17612	A .93 .93	B 2.23 2.23	O



POLYPROPYLENE

								And the second
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/4" NPT 3/8" NPT			SHUTOFF EFCD24412 EFCD24612	A .72 .72	B 1.77 1.77		
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	STRAIGHT THRU EFC22412 EFC22612	SHUTOFF EFCD22412 EFCD22612	A .60/.72 .60/.72	B 1.33/2.08 1.33/1.90		
TERMINATION ELBOW HOSE BARB	TUBING SIZE 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	STRAIGHT THRU EFC23412 EFC23612	SHUTOFF EFCD23412 EFCD23612	A .63 .63	B 1.32/1.45 1.32/1.45	D .96 .96	0

Accessories

PANEL MOUNT GASKET REPLACEMENT	For sealing panel mount bodies listed above	MATERIAL EPDM	PART NO. 668400	T

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. Straight thru dimension is listed first when two measurements are provided.





NS4 Series couplings feature non-spill valves in a compact size, at a great price. Use the NS4 when even a few drops pose problems regarding safety, media cost or environmental regulations. These innovative couplings are lightweight, chemically resistant and easy to use. The non-spill design effectively eliminates spills, minimizes downtime and enhances operator safety.

Features

Non-spill design Color coding Glass-filled polypropylene

Medical-grade ABS

Benefits

Disconnect under pressure with no spills Instant visual differentiation of media lines Durable and compatible with many chemicals

Gamma sterilizable

Specifications

Pressure:

Vacuum to 120 psi, 8.3 bar

Temperature:

32 F°to 160°F (0°C to 71°C)

Materials:

Main components and valves:

Glass-filled polypropylene with TPV* overmold,

ABS with TPE* soft-touch overmold

Thumb latch: Glass-filled polypropylene, ABS

Valve spring: 316 stainless steel External spring: 316 stainless steel

O-rings: EPDM

Color:

Polypropylene: Gray with dark gray overmold standard; gray with red

or blue overmold available† **ABS:** White with teal overmold

Tubing Sizes:

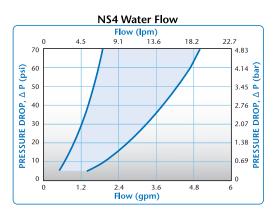
1/8" to 3/8" ID, 3.2mm to 9.5mm ID

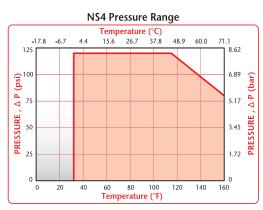
Lubricants: Krytox® PFPE (inert)

Spillage: <0.10 cc/disconnect

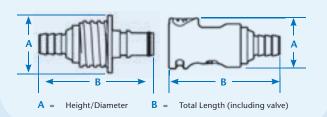
*The overmold material TPV (themoplastic vulcanizate) is used with the NS4 polypropylene couplings. TPV is an alloy of polypropylene thermoplastic and fully vulcanized EPDM rubber. TPV is typically resistant to water, acids and bases. The overmold material TPE (thermoplastic elastomer) is used with the NS4 ABS couplings. TPE is a blend of additives and copolymers in a special formulation that forms extremely durable bonds to the ABS substrate, while offering the traditional properties of soft-touch overmold.

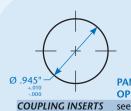
†NOTE: Standard product is gray; color options require a set-up charge and minimum quantities. Please contact Colder for details.





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.





DOLVDDODVI ENE / ADC

Product Dimensions

PANEL MAX. PANEL **OPENING THICKNESS** see drawing

MIN. PANEL **THICKNESS**

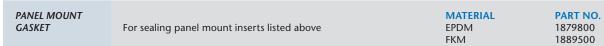
Coupling Bodies DOLVDDODVI ENE / ADC

			PULTPRU	JP Y LEN	1C / <i>F</i>	4D 3	
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/4" NPT 1/4" BSPT		POLYPROPYLENE SHUTOFF NS4D10004 ‡ NS4D10004BSPT	ABS SHUTOFF NS4D1000406 NS4D10004BSPT06	A 1.05 1.05	B 2.31 2.29	0
TERMINATION IN-LINE FERRULESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17" ID 3/8" OD, 1/4" ID	METRIC EQ. 6.4mm OD, 4.3mm ID 9.5mm OD, 6.4mm ID	POLYPROPYLENE SHUTOFF NS4D13004 NS4D13006	ABS SHUTOFF NS4D1300606	A 1.05 1.05	B 2.32 2.45	
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/8" ID* 1/4" ID 3/8" ID	METRIC EQ. 3.2mm ID* 6.4mm ID 9.5mm ID	POLYPROPYLENE SHUTOFF NS4D17002 NS4D17004 NS4D17006	ABS SHUTOFF NS4D1700206 NS4D1700406 NS4D1700606	A 1.05 1.05 1.05	B 2.09 2.34 2.34	9

Coupling Inserts

			POLYPKO	JPYLEN	JE / <i>F</i>	4R2	
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/4" NPT 1/4" BSPT		POLYPROPYLENE SHUTOFF NS4D24004 ‡ NS4D24004BSPT	ABS SHUTOFF NS4D2400406 NS4D24004BSPT06	A .96 .96	B 1.95 1.95	
TERMINATION IN-LINE FERRULESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17" ID 3/8" OD, 1/4" ID	METRIC EQ. 6.4mm OD, 4.3mm ID 9.5mm OD, 6.4mm ID	POLYPROPYLENE SHUTOFF NS4D20004 NS4D20006	ABS SHUTOFF NS4D2000606	A .96 .96	B 1.95 2.09	
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/8" ID* 1/4" ID 3/8" ID	METRIC EQ. 3.2mm ID* 6.4mm ID 9.5mm ID	POLYPROPYLENE SHUTOFF NS4D22002 NS4D22004 NS4D22006	ABS SHUTOFF NS4D2200206 NS4D2200406 NS4D2200606	A .96 .96	B 1.73 1.98 1.98	
TERMINATION PANEL MOUNT FERRULESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17" ID 3/8" OD, 1/4" ID	METRIC EQ. 6.4mm OD, 4.3mm ID 9.5mm OD, 6.4mm ID	POLYPROPYLENE SHUTOFF NS4D40004 NS4D40006	ABS SHUTOFF NS4D4000606	A 1.17 1.17	B 2.30 2.43	
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/8" ID* 1/4" ID 3/8" ID	METRIC EQ. 3.2mm ID* 6.4mm ID 9.5mm ID	POLYPROPYLENE SHUTOFF NS4D42002 NS4D42004 NS4D42006	ABS SHUTOFF NS4D4200206 NS4D4200406 NS4D4200606	A 1.17 1.17 1.17	B 2.07 2.32 2.32	

Accessories





All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. PTF fittings are designed for semi-rigid tubing, i.e., polyethylene, nylon, polyurethane, etc. †NOTE: Colder's Ferruleless PTF (polytube fitting) terminations do not require ferrules to achieve a secure connection and are therefore easier to use and reuse. ‡Indicates coupling that can be used with DrumQuik®. *NOTE: Patented 1/8" ID (3.2mm) hose barb connection has a support shroud allowing a maximum tube OD of 1/4" (6.4mm).





NS6 Series couplings feature non-spill valves at a great price. Use the NS6 when even a few drops of spillage pose problems regarding safety, media cost or environmental regulations. These innovative couplings are lightweight, chemically resistant and easy to use. The non-spill design virtually eliminates spills, minimizes downtime and enhances operator safety. Soft touch overmold makes them comfortable in the hand and very attractive.

Features

Non-spill design Color coding Glass-filled polypropylene

Colder thumb latch

Benefits

Disconnect under pressure with no spills Instant visual differentiation of media lines Durable and compatible with many chemicals

One-hand connection and disconnection

Specifications

Pressure:

Vacuum to 120 psi, 8.3 bar (see graph)

Temperature:

32°F to 160°F (0°C to 71°C) (see graph)

Materials:

Main components:

Glass-filled polypropylene with TPV* soft touch

overmold

Thumb latch: Glass-filled polypropylene Valve spring (wetted): 316 stainless steel

External spring: 316 stainless steel

O-rings: EPDM

Color:

Gray with dark gray overmold standard; gray with red or blue overmold available†

Tubing Sizes:

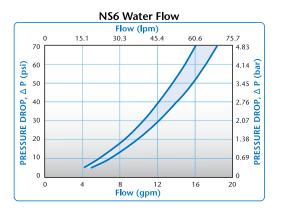
3/8" to 1/2" ID, 9.5mm to 12.7mm ID

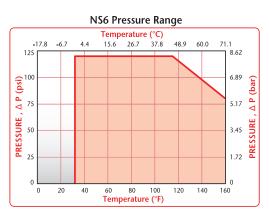
Lubricants: Krytox® PFPE (inert)

Spillage: ~0.03 cc/disconnect @ 0 psi, ~0.30 cc/disconnect @ 120 psi

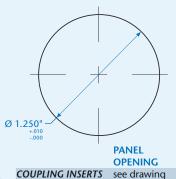
*The overmold material is known as TPV. (thermoplastic vulcanizate) This TPV is an alloy of polypropylene thermoplastic and fully vulcanized EPDM rubber. The material is typically resistant to water, acids and bases.

†NOTE: Standard product is gray; color options require a set-up charge and minimum quantities. Please contact Colder for details.





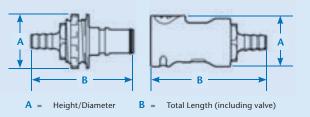
These graphs are intended to give you a general idea of the performance capabilities of each product line. The shaded area of each graph represents the operating range of the product family, i.e., upper and lower values are shown. Therefore, depending on the exact coupling configurations selected, you can reasonably expect values to fall within the shaded area.



MAX. PANEL **THICKNESS** see drawing .25

MIN. PANEL **THICKNESS** .03

Product Dimensions



Coupling Bodies

POLYPROPYLENE A

TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/2" NPT 1/2" BSPT		SHUTOFF NS6D10008 NS6D10008BSPT	A 1.31 1.31	B 3.01 3.01	0
TERMINATION IN-LINE COMPRESSION	TUBING SIZE 1/2" OD	METRIC EQ. 12.7mm OD	SHUTOFF NS6D13008	A 1.31	B 3.53	
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 3/8" ID 1/2" ID	METRIC EQ. 9.5mm ID 12.7mm ID	SHUTOFF NS6D17006 NS6D17008	A 1.31 1.31	B 3.16 3.16	0

Coupling Inserts

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			PULTP	NUP 1	LEIVE	
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/2" NPT 1/2" BSPT		SHUTOFF NS6D24008 NS6D24008BSPT	A 1.31 1.31	B 2.44 2.44	
TERMINATION IN-LINE COMPRESSION	TUBING SIZE 1/2" OD	METRIC EQ. 12.7mm OD	SHUTOFF NS6D20008	A 1.31	B 3.01	
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 3/8" ID 1/2" ID	METRIC EQ. 9.5mm ID 12.7mm ID	SHUTOFF NS6D22006 NS6D22008	A 1.31 1.31	B 2.59 2.59	
TERMINATION PANEL MOUNT COMPRESSION	TUBING SIZE 1/2" OD	METRIC EQ. 12.7mm OD	SHUTOFF NS6D40008	A 1.50	B 3.32	
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 3/8" ID 1/2" ID	METRIC EQ. 9.5mm ID 12.7mm ID	SHUTOFF NS6D42006 NS6D42008	A 1.50 1.50	B 2.85 2.85	

Accessories

PANEL MOUNT GASKET	For sealing panel mount inserts listed above	MATERIAL EPDM FKM	PART NO. 1884300 1889600
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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.



The NSH Series couplings are general purpose versions of our pressure-balanced, non-spill, ChemQuik® CQG06 couplings. Molded polypropylene, EPDM seals and a 100% springless and metal-free flow path provide broad chemical resistance and exceptionally high flow capacity, allowing instant disconnects (and reconnects), even under pressure. Their non-spill design virtually eliminates spills, minimizes downtime and enhances operator safety in a very low cost package.

Specifications

Pressure:

Vacuum to 120 psi, 8.3 bar

Temperature:

32°F to 120°F (0°C to 49°C)

Materials:

Main components: Glass-filled polypropylene

Thumb latch:

Glass-filled polypropylene

O-rings: EPDM

Springs (non-wetted): 316 stainless steel **Compression nuts:** White polypropylene

Color:

Gray with dark gray accent standard;

red or blue thumb latch and insert tip available.

Tubing Sizes:

3/8" to 3/4" ID, 9.5mm to 19.0mm ID

Lubricants: Krytox® PFPE (inert)

Spillage/air inclusion:

<0.1 cc (ml)/disconnect (reconnect)

Panel Mount:

Optional adaptor kit (see page 57)

Compatible with ChemQuik® Dual Containment System; Compatible with DrumQuik® MODULAR Dispense System, Universal and Asian Drum Adaptors.

Features

Non-spill design

Pressure-balanced design

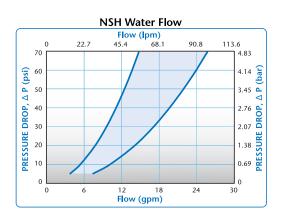
Springless flow path design Optional color coding

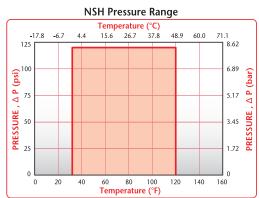
Benefits

Ultimate protection from chemicals and fumes

Failsafe disconnect, even if under pressure; easy to reconnect at high pressure

Eliminates source of metallic contaminants Helps prevent accidental misconnects **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 products in their own application conditions. Use the graphs below as a quide

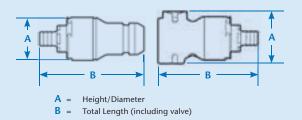




These graphs are intended to give you a general idea of the performance capabilities of each product line. The shaded area of each graph represents the operating range of the product family, i.e., upper and lower values are shown. Therefore, depending on the exact coupling configurations selected, you can reasonably expect values to fall within the shaded area.

Not to scale. Ø 2.000" MIN. PANEL **PANEL** MAX. PANEL **THICKNESS OPENING THICKNESS COUPLING BODIES** see drawing .12 OR INSERTS

Product Dimensions



Coupling Bodies

POLYPROPYLENE

TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 3/8" FEMALE NPT 3/8" BSPT 1/2" NPT 3/4" NPT		SHUTOFF NSHD19006 NSHD10006BSPT ‡ NSHD10008 NSHD10012 ‡	A 2.0 2.0 2.0 2.0	B 3.70 3.67 3.81 4.01	9
TERMINATION IN-LINE COMPRESSION	TUBING SIZE 3/8" OD 1/2" OD	METRIC EQ. 9.5mm OD 12.7mm OD	SHUTOFF NSHD13006 NSHD13008	A 2.0 2.0	B 3.97 4.10	OH WAY
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 3/8" ID 1/2" ID 5/8" ID 3/4" ID	METRIC EQ. 9.5mm ID 12.7mm ID 15.9mm ID 19.0mm ID	SHUTOFF NSHD17006 NSHD17008 NSHD17010 NSHD17012	A 2.0 2.0 2.0 2.0	B 3.73 3.73 3.88 3.88	9

Coupling Inserts

POLYPROPYLENE

TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 3/8" FEMALE NPT 3/8" BSPT 1/2" NPT 3/4" NPT		SHUTOFF NSHD26006 NSHD24006BSPT ‡ NSHD24008 NSHD24012 ‡	A 1.64 1.64 1.64	B 3.87 3.84 3.98 3.98	2
TERMINATION IN-LINE COMPRESSION	TUBING SIZE 3/8" OD 1/2" OD	METRIC EQ. 9.5mm OD 12.7mm OD	SHUTOFF NSHD20006 NSHD20008	A 1.64 1.64	B 4.14 4.27	· Die
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 3/8" ID 1/2" ID 5/8" ID 3/4" ID	METRIC EQ. 9.5mm ID 12.7mm ID 15.9mm ID 19.0mm ID	SHUTOFF NSHD22006 NSHD22008 NSHD22010 NSHD22012	A 1.64 1.64 1.64	B 3.90 3.90 4.05 4.05	

Accessories



Panel mount kit with panel seal Dust plug/cap for body or insert* PART NO.

NSHPMKIT12 1800700 (not shown)



All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. *Panel mount kit can be used with body for front mount or insert for front or rear mount. ‡Indicates coupling that can be used with DrumQuik®.



Pressure:

Vacuum to 60 psi, 4.2 bar

Temperature:

32°F to 160°F (0°C to 71°C)

Materials:

Main components and valves: Polypropylene

Thumb latch: Polypropylene Valve spring (wetted):

316 stainless steel

External springs: 316 stainless steel

O-rings: EPDM

Panel mount gasket: EPDM

Compression nut, gripper, ferrule: Polypropylene

Color:

Gray with dark gray latch

Tubing Sizes:

3/8" to 3/4" ID, 9.5mm to 19.0mm ID

For compression termination specifications: $3/8"\ \mbox{OD}$ or $1/2"\ \mbox{OD}, +0.010/-0.000$

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 products in their own application conditions. Use the graphs on the following page as a guide.

Patented HFC12 Series couplings have flow comparable to many 1/2" flow couplings in a 3/8" body size. Compact and lightweight, HFC couplings replace bulky and heavy brass ball-and-sleeve couplings in a wide range of applications. An ergonomic design and a large, shrouded thumb latch pad produce a coupling that is easy to grip and simple to operate. An efficient valve design leads to high flow and low spillage.

Features

High efficiency valve Ergonomic design Polypropylene material Compatible

Benefits

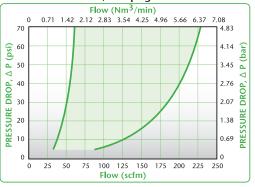
More flow in a compact size
Easy to grip, simple to operate
Chemically resistant and gamma sterilizable
Mates with HFC35 and HFC57 couplings

Note:
Optional o-ring and
spring materials are
spring materials please
available, please
contact Colder
for details.

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



HFC12 Air Flow, 100 psig Inlet Pressure

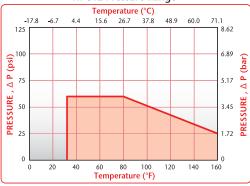


HFC12 Water Flow



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.

HFC12 Pressure Range



DID YOU KNOW ...

Colder offers over 7,000 couplings for a wide variety of applications such as low-pressure air and fluid line connections, high-purity chemical management and bioprocessing connectors. Contact us at 1-800-444-2474 or 651-645-0091 to learn how Colder can make your connections cleaner, faster, safer and smarter!



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

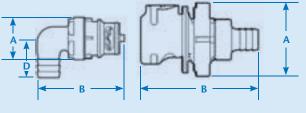
Average coefficient across various flow rates (see chart) ΔP =Pressure drop across coupling (psi)

S=Specific gravity of liquid

C_v Values for High Flow Couplings (HFC12)

202150	HFC	HFCD	HFC	HFCD										
BODIES	22612	22612	22812	22812	23612	23612	23812	23812	24612	24612	24812	24812	221212	221212
HFCD10612	1.27	1.27	1.62	1.51	1.14	1.14	1.46	1.36	1.80	1.58	1.70	1.65	-	-
HFCD10812	1.28	1.34	1.62	1.51	1.15	1.24	1.46	1.36	1.81	1.54	1.72	1.56	-	-
HFCD16612	1.07	1.00	1.17	1.14	0.96	0.90	1.05	1.03	1.33	1.26	1.30	1.24	-	-
HFCD16812	1.25	1.23	1.61	1.52	1.13	1.11	1.45	1.37	1.79	1.60	1.68	1.56	-	-
HFCD17612	1.07	1.00	1.17	1.14	0.96	0.90	1.05	1.03	1.33	1.26	1.30	1.24	-	-
HFCD17812	1.25	1.23	1.61	1.52	1.13	1.11	1.45	1.37	1.79	1.60	1.68	1.56	-	-
HFC171212	-	-	-	-	-	-	-	-	-	-	-	-	3.94	-
HFCD171212	-	-	-	-	-	-	-	-	-	-	-	-	-	2.04

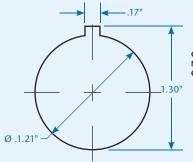
Product Dimensions



A = Height/Diameter

Total Length (including valve) =

D = **Elbow Radial Length**

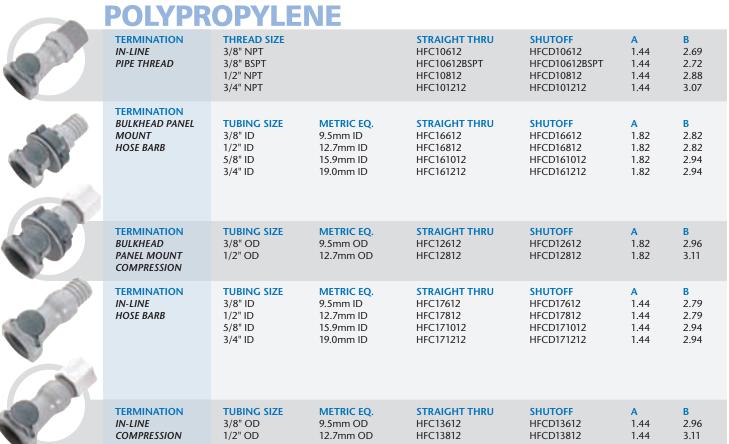


Gasket Thickness: .06" Mounting Hole: 1.21" diameter Coupling Spacing: 1.62" minimum

PANEL OPENING COUPLING BODIES see drawing MAX. PANEL **THICKNESS** .25

MIN. PANEL **THICKNESS** .03

Coupling Bodies



Accessories



PANEL MOUNT **GASKET** REPLACEMENT

For sealing panel mount bodies listed above

MATERIAL EPDM

PART NO. 621200

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters.

Coupling Inserts

POLYPROPYLENE

TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 3/8" NPT 3/8" BSPT 1/2" NPT 3/4" NPT		STRAIGHT THRU HFC24612 HFC24612BSPT HFC24812 HFC241212	SHUTOFF HFCD24612 HFCD24612BSPT HFCD24812 HFCD241212	A 1.16 1.16 1.16 1.23	B 1.77/1.89 1.80/1.92 1.95/2.07 2.14/2.26		
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 3/8" ID 1/2" ID 5/8" ID 3/4" ID	METRIC EQ. 9.5mm ID 12.7mm ID 15.9mm ID 19.0mm ID	STRAIGHT THRU HFC22612 HFC22812 HFC221012 HFC221212	SHUTOFF HFCD22612 HFCD22812 HFCD221012 HFCD221212	A 1.00 1.00 1.00 1.00	B 1.97/2.09 1.97/2.09 2.01/2.13 2.14/2.26		non-valued so
TERMINATION IN-LINE COMPRESSION	TUBING SIZE 3/8" OD 1/2" OD	METRIC EQ. 9.5mm OD 12.7mm OD	STRAIGHT THRU HFC20612 HFC20812	SHUTOFF HFCD20612 HFCD20812	A 1.00 1.00	B 2.14/2.26 2.29/2.41		non-valued so
TERMINATION ELBOW HOSE BARB	TUBING SIZE 3/8" ID 1/2" ID 3/4" ID	METRIC EQ. 9.5mm ID 12.7mm ID 19.0mm ID	STRAIGHT THRU HFC23612 HFC23812 HFC231212	SHUTOFF HFCD23612 HFCD23812 HFCD231212	A 1.00 1.00 1.00	B 1.93/2.05 1.97/2.09 1.95/2.07	D .93 .93 .93	



When selecting a valved coupling for your application, make sure to order a part number with a D just before the numeric portion of the part number. For example, HFC101212 does not have a shut-off valve; HFCD101212 would be the correct part number to order for a valved coupling.

To visually identify a part to determine whether or not it is valved, disconnect the coupling body and insert, and then look through the part. If you can see light all the way through, your part is non-valved. If there is anything obstructing the light, you probably have a valved part. Please contact Customer Service at 1-800-444-2474 or 651-645-0091 if you need further assistance.

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.



Pressure:

Vacuum to 125 psi, 8.6 bar

Temperature:

-40°F to 280°F (-40°C to 138°C)

Materials:

Main components and valves:

HFC35 - Polysulfone

HFC57 - UV-resistant polysulfone

Thumb latch:

HFC35 - Polysulfone

HFC57 - UV-resistant polysulfone Valve spring: 316 stainless steel External springs: 316 stainless steel

O-rings: EPDM

Panel mount gasket: EPDM Female GHT gasket: FDA EPDM

Colors:

HCF35 - Natural white, dark gray latch

HCF57 - Black, black latch

Tubing Sizes:

3/8" to 3/4" ID, 9.5mm to 19.0mm 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 products in their own application conditions. Use the graphs on the following page as a guide.

HFC35 Series polysulfone couplings are able to withstand demanding applications and feature physical strength, chemical resistance and autoclavability.

HFC57 Series polysulfone couplings are UV resistant and able to withstand continued exposure to harmful UV rays without affecting performance.

Both can operate in harsh environments in temperatures from -40°F to 280°F (-40°C to 138°C) and pressures from vacuum to 125 psi (8.6 bar). An ergonomic design and a large, shrouded thumb latch pad produce a coupling that is easy to grip and simple to operate. An efficient valve design leads to high flow and exceptionally low spillage. Both series also add bulkhead panel mount, garden hose thread and Hastelloy® C spring options.

Features

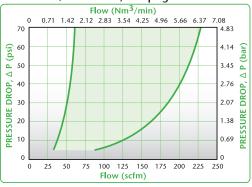
Polysulfone (HFC35) UV Polysulfone (HFC57) High efficiency valve Ergonomic design Compatible

Benefits

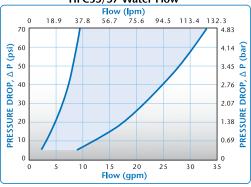
Physically strong and autoclavable Physically strong and UV resistant More flow and less spillage in a compact size Easy to grip, simple to operate Mates with HFC12 couplings

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

HFC35/57 Air Flow, 100 psig Inlet Pressure

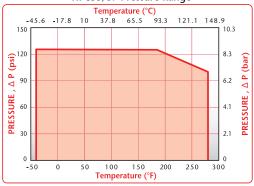






These graphs are intended to give you a general idea of the performance capabilities of each product line. The shaded area of each graph represents the operating range of the product family, i.e., upper and lower values are shown. Therefore, depending on the exact coupling configurations selected, you can reasonably expect values to fall within the shaded area.

HFC35/57 Pressure Range



DID YOU KNOW ...

When specifying products with pipe thread terminations, don't forget to consult Colder's white paper on NPT pipe threads.

Visit the TECHNICAL section of www.colder.com.





DID YOU KNOW ...

the HFC57 Series polysulfone couplings are UV-resistant and able to withstand continued exposure to harmful rays without affecting performance?

These couplings offer all the same features as our HFC12 and HFC35 Series with the added advantage of UV-resistance to protect the strength and durability of your fluid connections. Use the HFC57 couplings in outdoor applications such as watercraft, lawn irrigation systems and solar heating on roofs and decks where a connector is subjected to the harsh rays of the sun.

HFC35 Coupling Bodies

POLYSULFONE

	TERMINATION IN-LINE PIPE THREAD	3/8" NPT H 3/8" BSPT H 1/2" NPT H 1/2" BSPT H 3/4" NPT H		STRAIGHT THRU HFC10635 HFC10635BSPT HFC10835 HFC10835BSPT HFC101235 HFC101235BSPT	SHUTOFF HFCD10635 HFCD10635BSPT HFCD10835 HFCD10835BSPT HFCD101235 HFCD101235BSPT	A 1.44 1.44 1.44 1.44 1.44	B 2.73 2.73 2.88 2.88 3.12 3.12
	TERMINATION IN-LINE PIPE THREAD	3/4" GHT THREAD SIZE 3/4" GHT 3/4" BSPP		STRAIGHT THRU HFC191235GHT HFC191235BSPP	SHUTOFF HFCD191235GHT HFCD191235BSPP	1.44 A 1.44 1.44	2.94 B 2.70 2.70
	TERMINATION BULKHEAD PANEL MOUNT HOSE BARB	TUBING SIZE 3/8" ID 1/2" ID 5/8" ID 3/4" ID	METRIC EQ. 9.5mm ID 12.7mm ID 15.9mm ID 19.0mm ID	STRAIGHT THRU HFC16635 HFC16835 HFC161035 HFC161235	SHUTOFF HFCD16635 HFCD16835 HFCD161035 HFCD161235	A 1.44 1.44 1.44 1.44	B 2.82 2.82 2.94 2.94
67	TERMINATION IN-LINE HOSE BARB	TUBING SIZE 3/8" ID 1/2" ID 5/8" ID 3/4" ID	METRIC EQ. 9.5mm ID 12.7mm ID 15.9mm ID 19.0mm ID	STRAIGHT THRU HFC17635 HFC17835 HFC171035 HFC171235	SHUTOFF HFCD17635 HFCD17835 HFCD171035 HFCD171235	A 1.44 1.44 1.44	B 2.82 2.82 2.94 2.94

Accessories

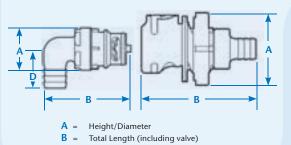
(+)	PANEL MOUNT GASKET REPLACEMENT	For sealing panel mount bodies listed above	MATERIAL EPDM	PART NO. 621200
	GHT GASKET REPLACEMENT	For sealing female threads	MATERIAL FDA EPDM	PART NO. 2339400

HFC35 Coupling Inserts

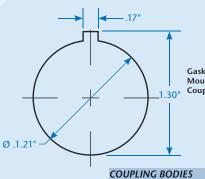
POLYSULFONE

non-valued shape	TERMINATION IN-LINE PIPE THREAD	3/8" NPT 3/8" BSPT 1/2" NPT 1/2" BSPT 3/4" NPT		STRAIGHT THRU HFC24635 HFC24635BSPT HFC24835 HFC24835BSPT HFC241235 HFC241235BSPT	SHUTOFF HFCD24635 HFCD24635BSPT HFCD24835 HFCD24835BSPT HFCD241235 HFCD241235BSPT	A 1.16 1.16 1.16 1.16 1.23 1.23	B 1.82/1.94 1.97/2.09 1.97/2.09 1.17/2.09 2.22/2.34 2.21/2.33	
nonvakedyo		3/4" GHT		HFC241235GHT	HFCD241235GHT	1.23	2.03/2.15	
	TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 3/4" GHT 3/4" BSPP		STRAIGHT THRU HFC261235GHT HFC261235BSPP	SHUTOFF HFCD261235GHT HFCD261235BSPP	A 1.37 1.37	B 1.79/1.91 1.79/1.91	
non-valved spoo	TERMINATION IN-LINE HOSE BARB	7/10 SIZE 3/8" ID 1/2" ID 5/8" ID 3/4" ID	METRIC EQ. 9.5mm ID 12.7mm ID 15.9mm ID 19.0mm ID	STRAIGHT THRU HFC22635 HFC22835 HFC221035 HFC221235	SHUTOFF HFCD22635 HFCD22835 HFCD221035 HFCD221235	A 1.00 1.00 1.00 1.00	B 1.91/2.03 1.91/2.03 2.03/2.15 2.03/2.15	
umov sahedato	TERMINATION ELBOW HOSE BARB	TUBING SIZE 3/8" ID 1/2" ID	METRIC EQ. 9.5mm ID 12.7mm ID	STRAIGHT THRU HFC23635 HFC23835	SHUTOFF HFCD23635 HFCD23835	A 1.00 1.00	B 1.92/2.04 1.96/2.08	D .93 .93

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters.



Elbow Radial Length



Product Dimensions

Gasket Thickness: .06" Mounting Hole: 1.21" diameter Coupling Spacing: 1.62" minimum

> **PANEL OPENING** see drawing

MAX. PANEL **THICKNESS** .25

MIN. PANEL **THICKNESS** .03

HFC57 Coupling Bodies UV POLYSULFONE

TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 3/8" BSPT 1/2" NPT 1/2" BSPT 3/4" BSPT 3/4" GHT		STRAIGHT THRU HFC10657BSPT HFC10857 HFC10857BSPT HFC101257BSPT HFC101257GHT	SHUTOFF HFCD10657BSPT HFCD10857 HFCD10857BSPT HFCD101257BSPT HFCD101257GHT	A 1.44 1.44 1.44 1.44	B 2.73 2.88 2.88 3.12 2.94	
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 3/4" GHT 3/4" BSPP		STRAIGHT THRU HFC191257GHT HFC191257BSPP	SHUTOFF HFCD191257GHT HFCD191257BSPP	A 1.44 1.44	B 2.70 2.70	
TERMINATION BULKHEAD PANEL MOUNT HOSE BARB	TUBING SIZE 3/8" ID 1/2" ID 5/8" ID 3/4" ID	METRIC EQ. 9.5mm ID 12.7mm ID 15.9mm ID 19.0mm ID		SHUTOFF HFCD16657 HFCD16857 HFCD161057 HFCD161257	A 1.82 1.82 1.82 1.82	B 2.82 2.82 2.94 2.94	
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 3/8" ID 1/2" ID 5/8" ID 3/4" ID	METRIC EQ. 9.5mm ID 12.7mm ID 15.9mm ID 19.0mm ID	STRAIGHT THRU HFC17657 HFC17857 HFC171057 HFC171257	SHUTOFF HFCD17657 HFCD17857 HFCD171057 HFCD171257	A 1.44 1.44 1.44 1.44	B 2.82 2.82 2.94 2.94	90

Accessories

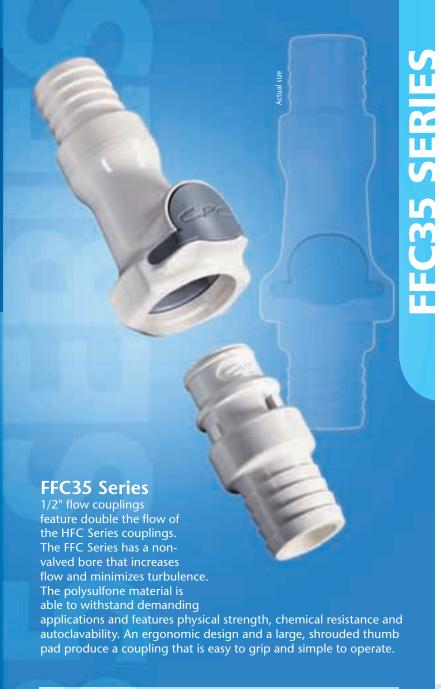
PANEL MOUNT GASKET REPLACEMENT	For sealing panel mount bodies listed above	MATERIAL EPDM	PART NO. 621200	4
GHT GASKET	For sealing female threads	MATERIAL FDA EPDM	PART NO. 2339400	

HFC57 Coupling Inserts UV POLYSULFONE

TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 3/8" BSPT 1/2" BSPT 1/2" NPT 3/4" BSPT 3/4" GHT		STRAIGHT THRU HFC24657BSPT HFC24857BSPT HFC24857 HFC241257BSPT HFC241257GHT	SHUTOFF HFCD24657BSPT HFCD24857BSPT HFCD24857 HFCD241257BSPT HFCD241257GHT	A 1.16 1.16 1.16 1.23 1.16	B 1.84/1.96 1.99/2.07 1.95/2.11 2.19/2.31 2.15/2.27	nonvalleda
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 3/4" GHT 3/4" BSPP		STRAIGHT THRU HFC261257GHT HFC261257BSPP	SHUTOFF HFCD261257GHT HFCD261257BSPP	A 1.37 1.37	B 1.79/1.91 1.79/1.91	non-valved the second
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 3/8" ID 1/2" ID 5/8" ID 3/4" ID	METRIC EQ. 9.5mm ID 12.7mm ID 15.9mm ID 19.0mm ID	STRAIGHT THRU HFC22657 HFC22857 HFC221057 HFC221257	SHUTOFF HFCD22657 HFCD22857 HFCD221057 HFCD221257	A 1.00 1.00 1.00 1.00	B 1.91/2.03 1.91/2.03 2.03/2.15 2.03/2.15	non-valved page

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.





Pressure: Vacuum to 125 psi, 8.6 bar

Temperature:

-40°F to 280°F (-40°C to 138°C)

Materials:

Main components: Polysulfone Thumb latch: Polysulfone

External spring: 316 stainless steel

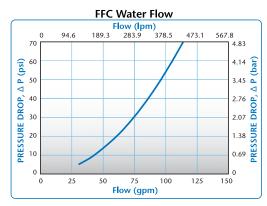
O-rings: FDA Buna-N
Panel mount gasket: EPDM
Female GHT gasket: FDA EPDM

Color:

Natural white with dark gray latch

Tubing Sizes: 3/4" ID, 19.0mm 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 products in their own application conditions. Use the graphs on the following page as a quide.



This graph is intended to give you a general idea of the performance capabilities of each product line.

Features

No valves Polysulfone material Ergonomic design

Benefits

Exceptional flow Physically strong and autoclavable Easy to grip, simple to operate

Non-Valved

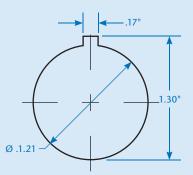
Colder's FFC35 Series couplings feature a wide open, straight-thru flow path.



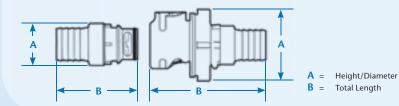
Panel Mount Dimensions

PANEL MAX. PANEL MIN. PANEL
OPENING THICKNESS THICKNESS
COUPLING BODIES see drawing .25 .03

Gasket Thickness: .06" Mounting Hole: 1.21" diameter Coupling Spacing: 1.62" minimum



Product Dimensions (cont.)



Coupling Bodies

POLYSULFONE

TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/2" NPT 1/2" BSPT 3/4" NPT 3/4" BSPT 3/4" GHT		STRAIGHT THRU FFC10835 FFC10835BSPT FFC101235 FFC101235BSPT FFC101235GHT	A 1.44 1.44 1.44 1.44	B 2.88 2.88 3.12 3.12 2.94	
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 3/4" GHT 3/4" BSPP		STRAIGHT THRU FFC191235GHT FFC191235BSPP	A 1.44 1.44	B 2.70 2.70	
TERMINATION BULKHEAD PANEL MOUNT HOSE BARB	TUBING SIZE 3/4" ID	METRIC EQ. 19.0mm ID	STRAIGHT THRU FFC161235	A 1.82	B 2.94	
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 3/4" ID	METRIC EQ. 19.0mm ID	STRAIGHT THRU FFC171235	A 1.44	B 2.94	O. Committee

Accessories

TERMINATION PANEL MOUNT GASKET REPLACEMENT	For sealing panel mount bodies listed above	MATERIAL EPDM	PART NO. 621200	+
TERMINATION GHT GASKET REPLACEMENT	For sealing female threads	MATERIAL FDA EPDM	PART NO. 2339400	

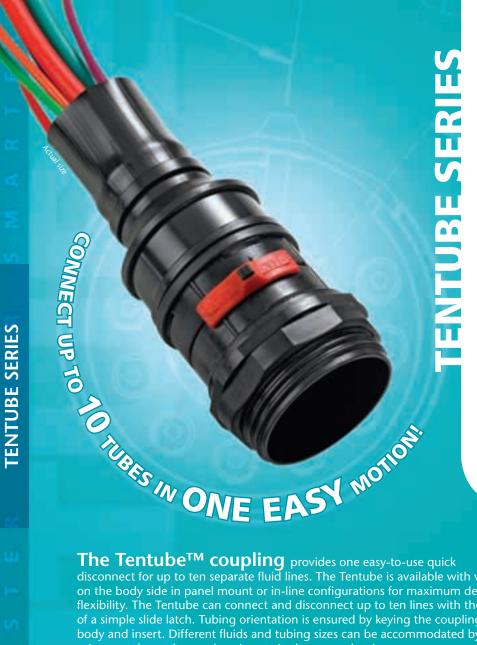
Coupling Inserts

POLYSULFONE

TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 1/2" NPT 1/2" BSPT 3/4" NPT 3/4" BSPT 3/4" GHT		STRAIGHT THRU FFC24835 FFC24835BSPT FFC241235 FFC241235BSPT FFC241235GHT	A 1.16 1.16 1.23 1.23 1.16	B 1.95 1.95 2.14 2.14 2.01	non-valued sa
TERMINATION IN-LINE PIPE THREAD	THREAD SIZE 3/4" GHT 3/4" BSPP		STRAIGHT THRU FFC261235GHT FFC261235BSPP	A 1.37 1.37	B 1.77 1.77	non-valued see
TERMINATION IN-LINE HOSE BARB	TUBING SIZE 3/4" ID	METRIC EQ. 19.0mm ID	STRAIGHT THRU FFC221235	A 1.00	B 2.02	non-valued and

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters.





Pressure:

Vacuum to 100 psi, 6.9 bar per line

Temperature:

Acetal fitting inserts:

-40°F to 180°F (-40°C to 82°C)

Polypropylene fitting inserts:

32°F to 180°F (0°C to 82°C)

Materials:

Main components: Nylon

Valves: Acetal

Valve springs: 316 stainless steel

Fitting inserts: Acetal or polypropylene

O-rings: Buna-N with acetal or EPDM with polypropylene Panel mount adapter: Acetal

Tube shroud: Acetal

Color:

Main components:

Black with red locking latch

Tube shroud: Black

Panel mount adapter: Black

Tubing Sizes:

1/16" to 1/8" ID, 1.6mm to 3.2mm ID

The TentubeTM coupling provides one easy-to-use quick disconnect for up to ten separate fluid lines. The Tentube is available with valves on the body side in panel mount or in-line configurations for maximum design flexibility. The Tentube can connect and disconnect up to ten lines with the use of a simple slide latch. Tubing orientation is ensured by keying the coupling body and insert. Different fluids and tubing sizes can be accommodated by using acetal or polypropylene inserts in three popular sizes.

Features

Ten line connection Separate flow paths Insert is keyed to body Acetal or polypropylene inserts

Benefits

Fast, efficient operation

Pressure and/or vacuum in one coupling

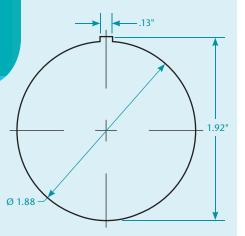
Ensures correct line orientation

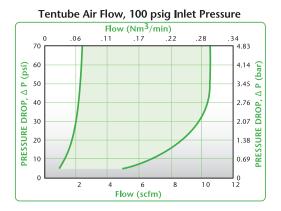
Maximize design flexibility

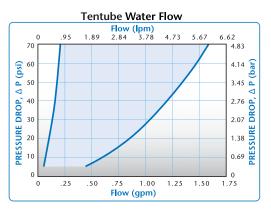
Panel Mount Dimensions

MAX. PANEL MIN. PANEL PANEL **OPENING THICKNESS THICKNESS** COUPLING BODIES see drawing

Note: Use TMF and Tff inserts and bodies for custom designed assemblies. See page 69







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.

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

Tentube™ Complete

ACETAL / POLYPROPYLENE

TERMINATIONS COMPLETE COUPLING SET	TUBING SIZE 1/16" ID 1/8" ID	METRIC EQ. 1.6mm ID 3.0mm ID 3.2mm ID	ACETAL STRAIGHT THRU TT1001 TT10M3 TT1002	ACETAL SHUTOFF TTD1001 TTD10M3 TTD1002	POLYPROPYLENE STRAIGHT THRU TT100112 TT100212	
TERMINATIONS COUPLING BODY WITH FEMALE FITTING BODIES	TUBING SIZE 1/16" ID 1/8" ID Without fitting bodies	METRIC EQ. 1.6mm ID 3.0mm ID 3.2mm ID	ACETAL STRAIGHT THRU TFB1001 TFB10M3 TFB1002 TFB10	ACETAL SHUTOFF TFBD1001 TFBD10M3 TFBD1002	POLYPROPYLENE STRAIGHT THRU TFB100112 TFB100212	
TERMINATIONS COUPLING INSERT WITH MALE FITTING INSERTS	TUBING SIZE 1/16" ID 1/8" ID Without fitting inserts	METRIC EQ. 1.6mm ID 3.0mm ID 3.2mm ID	ACETAL STRAIGHT THRU TMB1001 TMB10M3 TMB1002 TMB10		POLYPROPYLENE STRAIGHT THRU TMB100112 TMB100212	

Inserts & Bodies

ACETAL / POLYPROPYLENE

TERMINATIONS FITTING INSERTS (SEE NOTE ON PAGE 68)	TUBING SIZE 1/16" ID 1/8" ID	METRIC EQ. 1.6mm ID 3.0mm ID 3.2mm ID	ACETAL STRAIGHT THRU TMF01 TMFM3 TMF02		POLYPROPYLENE STRAIGHT THRU TMF0112 TMF0212
TERMINATIONS FITTING BODIES (SEE NOTE ON PAGE 68)	TUBING SIZE 1/16" ID 1/8" ID	METRIC EQ. 1.6mm ID 3.0mm ID 3.2mm ID	ACETAL STRAIGHT THRU TFF01 TFFM3 TFF02	ACETAL SHUTOFF TFFD01 TFFDM3 TFFD02	POLYPROPYLENE STRAIGHT THRU TFF0112 TFF0212

Note: Acetal bodies and inserts are also available in white. To order, add MWHT to the end of the part number.

Accessories

DESCRIPTION PART NO. Tube shroud - snaps into either half TS10 Panel mount adapter & nut - 7/16" max. panel thickness; TPM10 requires 1.875" diameter hole Tube jacketing - black, 40 foot coils TJ10

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.





The SixtubeTM coupling provides one easy-to-use quick disconnect for up to six separate fluid lines. The Sixtube is available with valves on either side for maximum design flexibility. Featuring the Colder thumb latch, the Sixtube can disconnect up to six lines with the push of a button. The snap-in panel mount design keeps a low profile on the front of the equipment panel.

The 3/32" flow Twin Tube™ coupling

provides one easy-to-use quick disconnect for two separate fluid lines. The non-valved Twin Tube maintains two individual flow paths in one coupling. Featuring the Colder thumb latch, the Twin Tube can disconnect two lines with the push of a button. The panel mount design keeps a low profile on the front of the equipment panel.

Features

Six/two line connection Separate flow paths

Sixtube insert is keyed to body

Free coupling rotation (Twin Tube)

Colder thumb latch

Benefits

Fast, efficient operation Pressure and/or vacuum

in one coupling

Ensures correct line orientation

Eliminates kinked tubing

One-hand connection and disconnection

Sixtube Specifications

Pressure: Vacuum to 100 psi, 6.9 bar per line

Temperature:

Acetal fitting inserts:

-40°F to 180°F (-40°C to 82°C) **Polypropylene fitting inserts:** 32°F to 180°F (0°C to 82°C)

Materials:

Main component: Acetal

Valves: Acetal

Fitting inserts: Acetal, polypropylene

Thumb latch: Acetal

Valve spring: 316 stainless steel

O-rings: Buna-N with acetal or EPDM with

polypropylene

Color: Natural white with aqua latch

Tubing Sizes:

1/16" to 1/8" ID, 1.6mm to 3.2mm ID

NOTE: Caution must be observed when ordering Sixtube assemblies. Body and insert halves which both contain female or male fittings will not couple. Contact Colder for questions and ordering assistance.

Twin Tube Specifications

Pressure: Vacuum to 120 psi, 8.3 bar per line

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

Materials:

Main components: Acetal, ABS

Thumb latch: Stainless steel

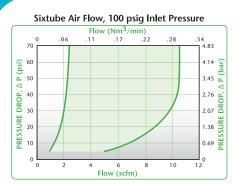
External springs and pin: Stainless steel

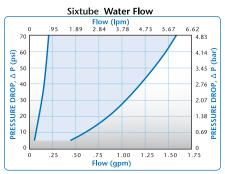
O-rings: Buna-N

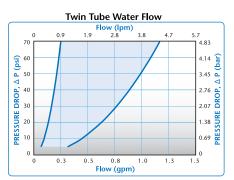
Color: Natural white (acetal), white (ABS)

Tubing Sizes:

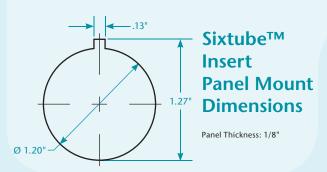
1/16" to 1/8" ID, 1.6mm to 3.2mm ID







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.



Twin Tube™ Body Panel Mount **Dimensions**

PANEL NUT HEX 13/16

PANEL NUT THREAD 11/16-24UNEF



Minimum Panel Thickness: 0.02"

Sixtube Coupling Bodies

ACETAL / POLYPROPYLENE

TERMINATION WITH MALE FITTING INSERTS	TUBING SIZE 1/16" ID 1/8" ID	METRIC EQ. 1.6mm ID 3.0mm ID 3.2mm ID	ACETAL STRAIGHT THRU SXM1701 SXM17M3 SXM1702	ACETAL SHUTOFF	POLYPROPYLENE STRAIGHT THRU SXM170112 SXM170212
WITH FEMALE FITTING BODIES	1/16" ID 1/8" ID	1.6mm ID 3.0mm ID 3.2mm ID	SXF1701 SXF17M3 SXF1702	SXFD1701 SXFD17M3 SXFD1702	SXF170112 SXF170212
TERMINATION WITHOUT FITTINGS			SX17		







Accessories



DESCRIPTION Sixtube pressure plugs (For fitting bodies or inserts, see page 69)

PART NO. **TMPMWHT**

Twin Tube Coupling Bodies

ACETAL / ABS

			ACETAL	ABS
TERMINATION	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	STRAIGHT THRU
PANEL MOUNT	1/16" ID	1.6mm ID	PTC16010	
HOSE BARB	1/8" ID	3.2mm ID	PTC16020	PTC1602096



Twin Tube Coupling Inserts

ACETAL / ABS

TERMINATION	TUBING SIZE	METRIC EQ.	ACETAL STRAIGHT THRU	ABS STRAIGHT THRU
IN-LINE	1/16" ID	1.6mm ID	PTC22010	PTC2202096
HOSE BARB	1/8" ID	3.2mm ID	PTC22020	





Multi-Mount couplings provide one easy-to-use coupling for connecting from three to five lines at once. Multi-mount couplings are available in a wide variety of materials including acetal and chrome plated brass. Multi-mounts are keyed to prevent mismatched connections and can be configured with or without valves for maximum design flexibility.

Features

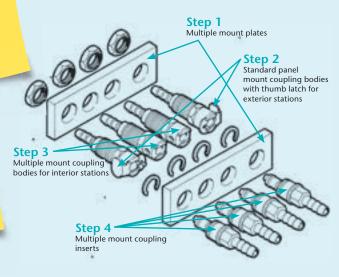
Three to five line connection Separate flow paths Insert is keyed to body Acetal or chrome-plated brass

Benefits

Fast, efficient operation
Pressure and/or vacuum in one coupling
Ensures correct line orientation
Maximize design flexibility

NOTE: To order in chrome-plated brass, eliminate the "p" at the beginning of the part number.

- Order requires flow size and terminations.
- Retaining clip is included with each insert.
- Multiple mount inserts are designed for mounting in 1/4" thick plates.



Specifications

Pressure:

Minimum: Vacuum

Maximum: Brass = 500 psi / no. of stations

or Acetal = 240 psi / no. of stations

Temperature:

-40°F to 180°F (-40°C to 82°C)

Materials:

Main components: Acetal or

chrome-plated brass

Thumb latch: Stainless steel

Mounting Plate: Black anodized aluminum

Valves: Acetal

Valve spring: 316 stainless steel

External springs and pin: Stainless steel

O-ring: Buna-N

Tubing Sizes:

1/8" to 3/8" ID, 3.2mm to 9.5mm ID

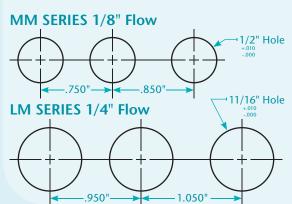
Four-Step Multi-Mount Ordering Process

Step 1: Order two "multiple mount plates" (one for the coupling bodies and one for the coupling inserts) with the appropriate number of connection stations for your specific application (available in 3, 4, or 5 connections, or construct your own). Refer to page 73.

Step 2: Order two "standard panel mount coupling bodies with thumb latches" for the exterior stations.

Step 3: Order an appropriate number of "multiple mount coupling bodies without thumb latches" to accommodate the remaining interior stations.

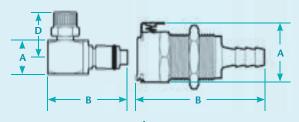
Step 4: Order an appropriate number of "multiple mount inserts" to connect with standard and multiple mount bodies.



Multiple mount plates are keyed to prevent misconnections.

Multiple mount minimum coupling spacing: Colder offsets the last hole on the mounting plates so they cannot be misconnected.

Product Dimensions



ΔCFTΔI

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

Retaining Rings

COUPLING **SERIES** (replacements) MC/PMC 101700 278100 LC/PLC

Multiple Mount Plates

NUMBER OF				
STATIONS	1/8" FLOW SIZE	LENGTH	1/4" FLOW SIZE	LENGTH
3	CP103	2.60	LCP103	3.00
4	CP104	3.35	LCP104	3.35
5	CP105	4.10	LCP105	4.90



Turquoise shading indicates 1/8" flow couplings. These are not compatible with 1/4" flow couplings in non-shaded sections.

Coupling Bodies

						161111	
TERMINATION PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	TUBING SIZE 1/4" OD, .17" ID 1/4" OD, .17" ID 3/8" OD, .25" ID	METRIC EQ. 6.4mm OD, 4.3mm ID 6.4mm OD, 4.3mm ID 9.5mm OD, 6.4mm ID	STRAIGHT THRU PMM1204 PLM12004 PLM12006	SHUTOFF PMMD1204 PLMD12004 PLMD12006	A .72 .94 .94	B 1.72 1.82 1.95	
TERMINATION PANEL MOUNT HOSE BARB	TUBING SIZE 1/8" ID 3/16" ID 1/4" ID 1/4" ID 5/16" ID 3/8" ID	METRIC EQ. 3.2mm ID 4.8mm ID 6.4mm ID 6.4mm ID 7.9mm ID 9.5mm ID	PMM1602 PMM1603 PMM1604 PLM16004 PLM16005 PLM16006	SHUTOFF PMMD1602 PMMD1603 PMMD1604 PLMD16004 PLMD16005 PLMD16006	A .72 .72 .72 .94 .94	B 1.65 1.85 1.85 1.95 1.95	
TERMINATION PANEL MOUNT FEMALE THREAD	THREAD SIZE 10-32 UNF		STRAIGHT THRU PMM181032	SHUTOFF PMMD181032	A .72	B 1.25	

Coupling Inserts

TERMINATION TUBING SIZE METRIC EQ. **STRAIGHT THRU SHUTOFF** IN-I INF 5/32" OD, .10" ID 4.0mm OD, 2.5mm ID PMM20025 PMMD20025 .58 1.86/1.96 **FERRULELESS** 1/4" OD, .17" ID 6.4mm OD, 4.3mm ID PMM2004 PMMD2004 .58 1.77/1.87 1/4" OD, .17" ID POLYTUBE FITTING, 6.4mm OD, 4.3mm ID PLM20004 PLMD20004 .72 2.10/2.23 3/8" OD, .25" ID PLM20006 PTF† 9.5mm OD, 6.4mm ID PLMD20006 .72 2.02/2.15 **TERMINATION TUBING SIZE** METRIC EQ. **STRAIGHT THRU SHUTOFF** Α В **IN-LINE** 1/8" ID 3.2mm ID PMM2202 PMMD2202 .56 1.87/1.97 **HOSE BARB** 3/16" ID 4.8mm ID PMM2203 PMMD2203 .58 2.08/2.18 1/4" ID 6.4mm ID PMM2204 PMMD2204 .58 1.83/1.93 1/4" ID 6.4mm ID PLM22004 PLMD22004 .72 2.20/2.33 PLMD22005 .72 5/16" ID 7.9mm ID PI M22005 2.20/2.33 3/8" ID 9.5mm ID PLM22006 PLMD22006 .72 2.03/2.16 **TERMINATION TUBING SIZE** METRIC EQ. STRAIGHT THRU **SHUTOFF** B D **ELBOW** 1/4" OD, .17" ID 6.4mm OD, 4.3mm ID PMM2104 PMMD2104 .53 1.41/1.51 .77 FFRRUI FI FSS POLYTUBE FITTING, PTF†

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.



Tube Fittings

ations | Prossure: 100 psi 70 bar | Temperature: 32° E to 230° E (0° C to 110° C) | Material: Polypropylene

	Specifications Pressu	ire: 100 psi, 7.0 k	par Temperature : 32° F to 230° F (0° C to 110° C) Material : Polypropylene
	TERMINATION HOSE BARB UNION Straight	PART NO. HS2 HS3 HS4	DESCRIPTION 1/16" x 1/16" Hose barb 3/32" x 3/32" Hose barb 1/8" x 1/8" Hose barb
	TERMINATION HOSE BARB UNION Tee & Elbow	TEE PART NO. HT2 HT3 HT4	TEE DESCRIPTION 1/16" x 1/16" x 1/16" Hose barb HE2 1/16" x 1/16" Hose barb 3/32" x 3/32" x 3/32" Hose barb HE3 3/32" x 3/32" Hose barb 1/8" x 1/8" Hose barb HE4 1/8" x 1/8" Hose barb
	TERMINATION HOSE BARB X 10-32 THREAD Straight	PART NO. MS2 MS3 MS4	DESCRIPTION 1/16" Hose barb x 10-32 thread 3/32" Hose barb x 10-32 thread 1/8" Hose barb x 10-32 thread
1	TERMINATION HOSE BARB X 10-32 THREAD Tee & Elbow	TEE PART NO. MT2 MT3 MT4	TEE DESCRIPTION 1/16" x 1/16" Hose barb x 10-32 thread ME2 1/16" Hose barb x 10-32 thread 3/32" x 3/32" Hose barb x 10-32 thread ME3 3/32" Hose barb x 10-32 thread 1/8" x 1/8" Hose barb x 10-32 thread ME4 1/8" Hose barb x 10-32 thread
	TERMINATION Miscellaneous	PART NO.	DESCRIPTION 10-32 Plug
			<u>~</u>



Specifications | Material: Acetal | Nut: Nickel-plated brass

N32

TERMINATION	TUBING	METRIC EQ.	PART NO.	PANEL OPENING
PANEL MOUNT	1/8" ID x 1/8" ID	3.2 x 3.2mm	BHU2202	1/2"
HOSE BARB UNION	1/4" ID x 1/4" ID	6.4 x 6.4mm	BHU2204	1/2"
Straight	3/8" ID x 3/8" ID	9.5 x 9.5mm	BHU2206	1/2"

10-32 x 10-32 Nipple

NOTE: Colder's threaded fittings require no gasket for a reliable seal and also allow the fitting to be directionally oriented without a gasket.

Luer Fittings



Luers are a common choice for limited use or disposable applications where a shutoff valve is not required. Colder's luer fittings are suitable for small flow applications, typically less than 1/4", and feature parting line-free hose barbs. They mate with luers manufactured to ISO Standards 594-1 and 594-2 and are the preferred choice when looking for high quality, precision molded fluid components.

Male Luers Female Luers **Specifications** | **Materials**: Nylon or Polypro



LM2161 LM2112 Nylon 3/32" Hose barb Polypro 3/32" Hose barb LM3161 LM3112

PART NO. **DESCRIPTION** LM4161 Nylon 1/8" Hose barb LM4112 Polypro 1/8" Hose barb

PART NO. **DESCRIPTION** LM5161 LM5112 Nylon 5/32" Hose barb Polypro 5/32" Hose barb

> PART NO. **DESCRIPTION** LM6161 Nylon 3/16" Hose barb LM6112 Polypro 3/16" Hose barb

PART NO. DESCRIPTION LF2161 LF2112 LF3161 LF3112

Nylon 1/16" Hose barb Polypro 1/16" Hose barb Nylon 3/32" Hose barb Polypro 3/32" Hose barb

PART NO. DESCRIPTION LF4161 Nylon 1/8" Hose barb LF4112 Pólypro 1/8" Hose barb



PART NO. LF5161 LF5112

DESCRIPTION Nylon 5/32" Hose barb Polypro 5/32" Hose barb



DESCRIPTION PART NO. Nylon 3/16" Hose barb Polypro 3/16" Hose barb LF6161 LF6112

NOTE: 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.

Accessories

						4	Accessories
TERMINATION FERRULELESS POLYTUBE FITTING, PTF†	PIPE THREAD 10-32* 1/8" NPT 1/8" NPT 1/8" NPT 1/4" NPT 1/4" NPT	TUBING 1/8" 1/4" 1/8" 1/4" 3/8" 1/4" 3/8"	TUBING DIME .07" ID .125 OI .17" ID .250 OI .07" ID .125 OI .17" ID .250 OI .17" ID .250 OI .25" ID .375 OI .25" ID .375 OI		PART NO. TF1002 TF1004 TF2002 TF2004 TF2006 TF4004 TF4006	LENGTH .64 .86 .98 1.10 1.24 1.20 1.34	CO
TERMINATION FERRULELESS POLYTUBE FITTING NUTS, PTF† REPLACEMENT PARTS	TUBING PART N 5/32" OD 269700 1/4" OD 100800 3/8" OD 108900)	4.0mm OD 8.0mm OD	PART NO. 269700 339500 358400			
DESCRIPTION INSERT SEALS REPLACEMENT PARTS	COUPLING SERIES MC, PMC LC, PLC, EFC, APC, Twi SMC, Twin Tube small HFC/FFC 3FL 5FL		ring (1.78mm cross	BUNA-1 730800 section) 731100 730600 731600	730804 731104 730604	730803 731103 730603 731603	00
DESCRIPTION PANEL MOUNT NUTS	COUPLING SERIES NU MC, PMC, PMC12 LC, PLC, EFC, PLC12, A HFC	100900				,	
DESCRIPTION DUST CAPS & PLUGS	COUPLING SERIES MC, PMC non-sealing LC, PLC non-sealing APC, EFC non-sealing PMC pressure-sealing PLC pressure-sealing HFC/FFC non-sealing (not shown)	BODY PLUG PMC31 PLC310 — PMC30 PLC300 HFC312 L (with le	eash)	INSERT CAP PMC32 PLC320 PLC320	Non-sealing	Sealing

Manifolds

Specifications | Material: Aluminum | Finish: Black anodized

DESCRIPTION 10-32 Ported Manifold with 1/8" NPT End Port	PART NO. 32M3 32M4 32M5	SIDE PORTS 3 4 5	END PORTS 1 1	LENGTH 2.30" 2.80" 3.30"	
DESCRIPTION 1/8" NPT Ported Manifold with 1/8" NPT End Port	PART NO. 2M3 2M4 2M5	SIDE PORTS 3 4 5	END PORTS 1 1	LENGTH 3.10" 4.00" 4.90"	
DESCRIPTION 1/4" NPT Ported Manifold with 1/4" NPT End Port	PART NO. 4M3 4M4 4M5	SIDE PORTS 3 4 5	END PORTS 2 2 2	LENGTH 3.80" 4.80" 5.80"	

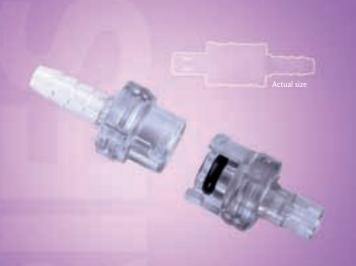
JG® Push-To-Connect Accessories

DESCRIPTION TUBING **DESCRIPTION** PART NO. PART NO. IN-LINE COLLET COVERS, 1/4" Tube OD 1011900 IN-LINE LOCKING CLIPS, RED 1/4" Tube OD 1012101 to 06 3/8" Tube OD 1012000 **COLOR CODED** 3/8" Tube OD 1012201 to 06

Colors available, shown right. Please indicate color using the following suffix codes: 01=Black, 02=Red, 03=Yellow, 04=Gray, 05=Blue, 06=Green (Example: 1012101 is the code for a 1/4" collet cover in black.) **NOTE**: See pages 32 and 33 for JG couplings.

†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: Gaskets are not included with 10-32 PTF style fittings. To prevent leakage with these fittings, we recommend using LOCTITE® Removable Threadlocker 242 or Permanent Threadlocker 262.





The SMC is a twist-to-connect coupling that provides a reliable and more secure alternative to luer-type connections. It also allows for the tubing to rotate freely when connected. This important feature prevents both kinked tubing and accidental disconnection during use.

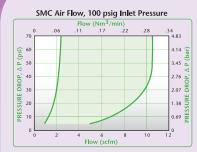
Features

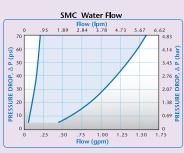
Twist to connect Free coupling rotation

Safer; prevents misconnections

Benefits

Prevents accidental disconnects Eliminates kinked tubing Does not mate to luers





This graph is intended to give you a general idea of the performance capabilities of each product line. The shaded area of the 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.

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

Q=Flow rate in gallons per minute C_v =Average coefficient across various flow rates (see chart) Δ P=Pressure drop across coupling (psi)

S=Specific gravity of liquid

Specifications

Pressure: Vacuum to 100 psi, 6.9 bar

Temperature:

-40°F to 250°F (-40°C to 121°C)

Materials:

Main components: Polycarbonate, USP Class VI, ADCF

Locking sleeves: Polycarbonate **O-rings**: Buna-N, USP Class V, ADCF

Color:

Main components: Purple tint

Sterilization:

Polycarbonate: 250°F (121°C), 30 minutes, up to 10

repetitions. Sterilize uncoupled only.

Polysulfone: Up to 270°F (132°C) for 60 minutes, up

to 25 repetitions. Sterilize uncoupled only.

Tubing Sizes:

1/16" to 1/8" ID, 1.6mm to 3.2mm

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 products in their own application conditions.

Liquid Flow Rates Liquid Flow Rate Information for

Couplings

The short below the count to flow rate for C

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.

C_v Values for Subminiature Couplings

BODIES	SMM01	SMM02	BODIES	SMM01	SMM02
SMF01	.03	.03	SMFD02	.03	.08
SMFD01	.03	.03	SMPT02	.03	.19
SMF02	.03	.19	SMPTD02	.03	.08

Coupling Body



POLYCARBONATE

Product Dimensions (See drawing on page 14)

TERMINATION IN-LINE HOSE BARB TUBING SIZE 1/16" ID 1/8" ID METRIC EQ. 1.6mm ID 3.2mm ID STRAIGHT THRU SMF0191 SMF0291

A B .48 .75/.90 .48 .90

Coupling Insert



POLYCARBONATE

TERMINATION IN-LINE HOSE BARB **TUBING SIZE** 1/16" ID 1/8" ID

1.6mm ID 3.2mm ID

METRIC EQ.

STRAIGHT THRU SMM0191 SMM0291

J A B .48 .75 .48 .90

Coupling Set



POLYCARBONATE

TERMINATION HOSE BARB TUBING SIZ 1/16" ID 1/8" ID

1.6mm ID 3.2mm ID STRAIGHT THRU SMC0191 SMC0291

.48 1.32 .48 1.61



Features

Prevents misconnections

Reliable elastomeric seals Audible "click" and positive feel

Allows tubing rotation

TEI PAI HO

Benefits

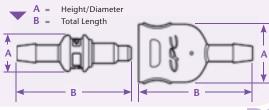
Won't connect to IV lines and other non-compatible applications

Leak-free connections

Operators know when a secure, reliable connection is made

Prevents accidental disconnect or kinked tubing

Product Dimensions



Specifications

Pressure: Vacuum to 25 psi, 1.8 bar

Temperature: 32° to 110° F (0° to 43° C) (rated for shipment uncoupled up to 160° F)

Materials:

Main components: Polypropylene with overmolded

TPE* pads, USP Class VI, ADCF

Integral seals: Overmolded TPE*, USP Class VI, ADCF

Color: White with blue pads

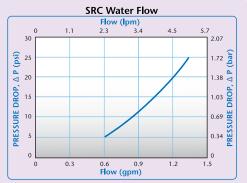
Sterilization: EtO, e-beam, or gamma

Tubing Sizes:

1/8" to 3/16" ID, 3.2mm to 4.8mm ID

*The overmold material is TPE (thermoplastic elastomer). TPE is a blend of additives and copolymers in a special formulation that forms extremely durable bonds to the polypropylene substrate.

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.



This graph is intended to give you a general idea of the performance capabilities of the product.

Coupling Bodies

TERMINATION	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	A	B
IN-LINE	1/8" ID	3.2mm ID	SRC1702	.62	1.18
HOSE BARB	3/16" ID	4.8mm ID	SRC1703	.62	1.18

Coupling Inserts POLYPROPYLENE

TERMINATION	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	Α	В
IN-LINE	1/8" ID	3.2mm ID	SRC2202	.38	1.19
HOSE BARB	3/16" ID	4.8mm ID	SRC2203	.38	1.19

CHROMF-PLATED BRASS

RMINATION INEL MOUNT OSE BARB	TUBING SIZE 1/8" ID 3/16" ID	METRIC EQ. 3.2mm ID 4.8mm ID	STRAIGHT THRU SRC4202CB SRC4203CB	A .57 .57	B 1.66 1.66	_

Accesories



DESCRIPTION Tethered cap and plug for SRC body and insert

MATERIALS White medical-grade TPE



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



MPC Series couplings add ease of use and security to your most critical fluid handling applications. Choose from a full line of connectors and configurations, including pressure sealing caps and plugs, in sizes to fit 1/4" and 3/8" tubing. MPC couplings offer optional locking sleeves to further guard against accidental disconnects. In addition, coupling halves can be rotated when connected to reduce tube kinks.

Features

Ergonomic thumb latch

USP Class VI materials

Sterilizable by autoclave, Et0, e-beam, or gamma

Parting line-free hose barb BSE/TSE free materials

Note: MPC Series

Benefits

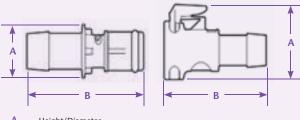
Easy to operate - even with gloved hands

Meets biocompatibility requirements

Reusable, yet economical enough to allow disposability Eliminates potential leak path Meets ADCF requirements

> Note: For validation quantities of MPC and MPX, contact Colder for 25 piece bag quantities

Product Dimensions



Height/Diameter

Total Length

Specifications

Pressure:

Vacuum to 60 psi, 4.14 bar

Temperature:

Polysulfone: -40°F to 300°F (-40°C to 149°C) Polycarbonate: -40°F to 250°F (-40°C to 121°C)

ABS: -40°F to 160°F (-40°C to 71°C)

Materials:

Main components:

Polycarbonate (purple tint), USP Class VI, ADCF Polysulfone (amber tint), USP Class VI, ADCF ABS (white), USP Class VI, ADCF

Locking sleeves:

Polysulfone (white), (not applicable for ABS), USP Class VI, ADCF

Thumb Latches:

Polycarbonate (white), polysulfone (amber tint)

O-rings: Silicone (clear), platinum-cured, USP Class VI, ADCF and Buna-N (black), USP Class V, ADCF

Sterilization:

Gamma: Up to 50 kGy irradiation

Autoclave:

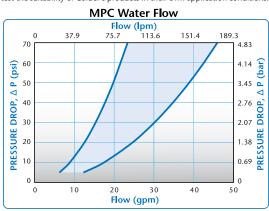
Polycarbonate: 250°F (121°C), 30 minutes, up to

10 repetitions. Sterilize uncoupled only.

Polysulfone: Up to 270°F (132°C) for 60 minutes, up to 25 repetitions. Sterilize uncoupled only.

Tubing Sizes: 1/4" and 3/8" ID, 6.4mm and 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.



This graph is intended to give you a general idea of the performance capabilities of each product line. The shaded area of the 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 below.



Q=Flow rate in gallons per minute C_v=Average coefficient across various flow rates (see chart)

 $\Delta P = Pressure drop across coupling (psi)$ S=Specific gravity of liquid

C_v Values for MPC Couplings

MPC MPC **BODIES** 22004T 22006T MPC170004T 2.8 2.8 MPC170006T 2.8

Coupling Bodies

TERMINATION	TUBING	METRIC EQ.	FLOW	STRAIGHT THRU	Α	В
IN-LINE	1/4" ID	6.4mm ID	.210"	MPC17004T	.93 (23.6)	1.30 (33.0)
HOSE BARB	3/8" ID	9.5mm ID	.290"	MPC17006T	.93 (23.6)	1.30 (33.0)



POLYCARBONATE

IN-LINE HOSE BARB	1/4" ID 3/8" ID	6.4mm ID 9.5mm ID	.210" .290"	MPC17004T03 MPC17006T03	.93 (23.6) .93 (23.6)	1.30 (33.0) 1.30 (33.0)
TERMINATION IN-LINE HOSE BARB	TUBING 1/4" ID	METRIC EQ. 6.4mm ID	FLOW .210"	STRAIGHT THRU MPCK17004T03	A .99 (25.2)	B 1.30 (33.0)
WITH LOCK	3/8" ID	9.5mm ID	.290"	MPCK17006T03	.99 (25.2)	1.30 (33.0)





TERMINATION	TUBING 1/4" ID 3/8" ID	METRIC EQ.	FLOW	STRAIGHT THRU	A	B
IN-LINE		6.4mm ID	.210"	MPC17004T39	.93 (23.6)	1.30 (33.0)
HOSE BARB		9.5mm ID	.290"	MPC17006T39	.93 (23.6)	1.30 (33.0)
TERMINATION	TUBING	METRIC EQ.	FLOW	STRAIGHT THRU	A	B
IN-LINEHOSE BARB	1/4" ID	6.4mm ID	.210"	MPCK17004T39	.99 (25.2)	1.30 (33.0)
WITH LOCK	3/8" ID	9.5mm ID	.290"	MPCK17006T39	.99 (25.2)	1.30 (33.0)





TERMINATION	TUBING	METRIC EQ.	FLOW	STRAIGHT THRU	O-RING	A	` '
IN-LINE	1/4" ID	6.4mm ID	.210"	MPC22004TM	Silicone Seal USP Class VI	.60 (15.2)	
HOSE BARB	3/8" ID	9.5mm ID	.290"	MPC22006TM	Silicone Seal USP Class VI	.60 (15.2)	
TERMINATION IN-LINE HOSE BARB	TUBING 1/4" ID 3/8" ID	METRIC EQ. 6.4mm ID 9.5mm ID	FLOW .210" .290"	STRAIGHT THRU MPC22004T MPC22006T	O-RING Buna-N Seal USP Class V Buna-N Seal USP Class V	A .60 (15.2) .60 (15.2)	` '



POLYCARBONATE







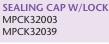
POLYSULFONE

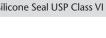
TERMINATION	TUBING	METRIC EQ.	FLOW	STRAIGHT THRU	O-RING	Α	В
IN-LINE	1/4" ID	6.4mm ID	.210"	MPC22004T39M	Silicone Seal USP Class VI	.60 (15.2)	1.30 (33.0)
HOSE BARB	3/8" ID	9.5mm ID	.290"	MPC22006T39M	Silicone Seal USP Class VI	.60 (15.2)	1.30 (33.0)



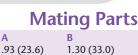
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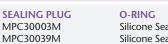


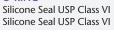
.60 (15.2)	













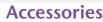
MATERIAL

Polysulfone

Polycarbonate

.75 (19.1)

.99 (25.2) 1.30 (33.0) .75 (19.1) 1.24 (31.5) 1.24 (31.5)





PART NO. MPC30L MPC32L

DESCRIPTION Leash plug for MPC body Leash cap for MPC insert **MATERIALS**

Soft, flexible, medical-grade PVC Soft, flexible, medical-grade PVC

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters.





MPX Series couplings add ease of use and security to your most critical fluid handling applications. Choose from a full line of connectors and configurations, including pressure sealing caps and plugs in sizes to fit 3/8" and 1/2" tubing. MPX couplings offer optional locking sleeves to further guard against accidental disconnects. In addition, coupling halves can be rotated when connected reducing tube kinks.

MPX Specifications

Pressure: Vacuum to 60 psi, 4.14 bar

Temperature:

Polycarbonate:

-40°F to 250°F (-40°C to 121°C)

Polysulfone:

-40°F to 300°F (-40°C to 149°C)

Materials:

Main components:

Polycarbonate (purple tint), USP Class VI, ADCF Polysulfone (amber), USP Class VI, ADCF

Locking sleeves: Polysulfone (white), USP Class VI,

ADCF

Thumb Latches:

Polycarbonate (white), Polysulfone (amber tint)

O-rings:

Silicone (clear), platinum-cured, USP Class VI, ADCF

Sterilization:

Gamma: Up to 50 kGy irradiation

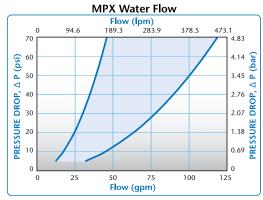
Autoclave:

Polycarbonate: Up to 250°F (121°C), 30 minutes, up to 10 repetitions. Sterilize uncoupled only. Polysulfone: Up to 270°F (132°C) for 60 minutes, up to 25 repetitions. Sterilize uncoupled only.

Tubing Sizes:

3/8" and 1/2" ID, 9.5mm and 12.7mm 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.



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.

Features

Ergonomic thumb latch USP Class VI materials Sterilizable by autoclave, Et0, e-beam, or gamma Parting line-free hose barb BSE/TSE free materials

Benefits

Easy to operate – even with gloved hands Meet biocompatibility requirements Reusable, yet economical enough to allow disposability Eliminates potential leak path Meets ADCF requirements Note: MPX Series

Note: MPX Series

mates with

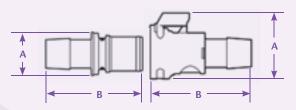
saniQuik

SaniQuik

Series

and Sanitary

(pages 92-98).



A = Height/Diameter B = Total Length

Coupling Bodies

POLYCARBONATE

TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/2" ID	METRIC EQ. 12.7mm ID	FLOW .500"	STRAIGHT THRU MPX17803	A 1.28 (32.5)	B 1.96 (49.8)
TERMINATION IN-LINE HOSE BARB WITH LOCK	TUBING SIZE	METRIC EQ.	FLOW	STRAIGHT THRU	A	B
	1/2" ID	12.7mm ID	.500"	MPXK17803	1.28 (32.5)	1.96 (49.8)



POLYSULFONE

TERMINATION IN-LINE HOSE BARB	TUBING SIZE 1/2" ID	METRIC EQ. 12.7mm ID	FLOW .500"	STRAIGHT THRU MPX17839	A 1.28 (32.5)	B 1.96 (49.8)
TERMINATION IN-LINE HOSE BARB WITH LOCK	TUBING SIZE 1/2" ID	METRIC EQ. 12.7mm ID	FLOW .500"	STRAIGHT THRU MPXK17839	A 1.28 (32.5)	B 1.96 (49.8)



Coupling Inserts

POLYCARBONATE

TERMINATION	TUBING SIZE			STRAIGHT THRU		Α	В
IN-LINE	3/8" ID	9.5mm ID	.375"	MPX22603M	Silicone Seal USP Class VI	.85 (21.6)	1.90 (48.3)
HOSE BARB	1/2" ID	12.7mm ID	.500"	MPX22803M	Silicone Seal USP Class VI	.85 (21.6)	1.90 (48.3)



POLYSULFONE

TERMINATION IN-LINE	3/8" ID	9.5mm ID	.375"	STRAIGHT THRU MPX22639M	Silicone Seal USP Class VI	` '	B 1.90 (48.3)
HOSE BARB	1/2" ID	12.7mm ID	.500"	MPX22839M	Silicone Seal USP Class VI	.85 (21.6)	1.90 (48.3)



SEALING CAP	SEALING CAP W/LOCK	A	B
MPX32003	MPXK32003	1.28 (32.5)	1.67 (42.4)
SEALING CAP	SEALING CAP W/LOCK	A	B
MPX32039	MPXK32039	1.28 (32.5)	1.67 (42.4)



	Mating	Parts
P		
	300	

MPX30003M	Silicone Seal USP Class VI	1.10 (27.9)	1.66 (42.2)
SEALING PLUG	O-RING	A	B
MPX30039M	Silicone Seal USP Class VI	1.10 (27.9)	1.66 (42.2)





All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters.





Pressure:

Vacuum to 60 psi, 4.14 bar

Temperature:

-40° F to 300° F (-40° C to 149° C)

Materials:

Main component: 316L stainless steel

O-rings: Silicone (clear), platinum-cured, USP Class VI,

ADCF

Sterilization: Autoclave

Colder's SaniQuikTM connection answers the question of how to integrate single-use components with your existing stainless processing equipment. This integral sanitary termination attaches to hard-plumbed systems with tri-clover clamps. Once attached it permits quick and easy connection to single-use bag systems, manifolds or tube sets with Colder disposable coupling bodies. SaniQuik connections reduce sanitary gasket replacement, enabling cost-effective media transfer solutions for feeding, harvesting or sampling applications.

Features

3/4" and 1-1/2" sanitary standard terminations

Compatible with MPC & MPX Series

Integral coupling adaptor

BSE/TSE free materials

Benefits

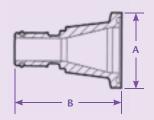
Connect to hard plumbed systems with sanitary gaskets and tri-clover clamps

Quick and easy connections to industry standard plastic couplings on single-use bag and tube sets

Disconnecting coupling reduces sanitary gasket replacement

Meets ADCF requirements

Note: Mates with MPC
polycarbonate and
polysulfone bodies and
sealing caps (page 79)
and MPX polycarbonate
and polysulfone bodies
and polysulfone caps
(page 81)



A = Height/Diameter

B = Total Length

Connections

316L STAINLESS



DESCRIPTION SILICONE SEAL USP CLASS VI

MATING **SANITARY** SANITARY PART NO. COUPLING SI7F BORE 1.39" (35.3) SQCC221212M MPC Series 3/4" 3/4" .89" (22.6) 1.98" (50.3) 1.50" (38.1) SQCC222424M MPC Series 1-1/2" 1-1/2" SOCX221212M MPX Series 3/4" 3/4" .89" (22.6) 1.54" (39.1) 1-1/2" SQCX222416M MPX Series 1.98" (50.3) 1.50" (38.1) SQCX222424M MPX Series 1.98" (50.3) 1.50" (38.1) 1-1/2" 1-1/2"

Accessories SILICONE (CLEAR)



DESCRIPTION
PLATINUM-CURED
USP CLASS VI
REPLACEMENT
SEALS

PART NO. 2260100 2260200

MATING SANIQUIK SQCC221212M, SQCC222424M

SQCX221212M, SQCX222416M, SQCX222424M

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters.



Pressure:

Vacuum to 60 psi, 4.14 bar

Temperature:

-40°F to 300°F (-40°C to 149°C)

Materials:

Main components:

Polysulfone (amber tint), USP Class VI, ADCF

O-rings (mating insert): Silicone (clear), platinum-cured, USP Class VI, ADCF

Sterilization:

Gamma: Up to 50 kGy irradiation

Autoclave: Up to 270°F (132°C) for 60 minutes, up to 25 repetitions. Sterilize uncoupled only.

Termination Size:

3/4" and 1" sanitary

Sanitary couplings attach directly to popular 3/4" mini and 1" maxi size sanitary connections, eliminating the need for cumbersome adapters or tubing assemblies. Direct attachment allows faster connection to and disconnection from installed, rigid and flexible piping systems.

Features

Ergonomic thumb latch

3/4" and 1" sanitary terminations

Compatible with MPC and MPX Series couplings

BSE/TSE free materials

Benefits

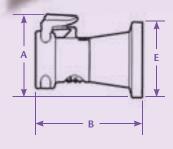
Easy to operate – even with gloved hands

Install with standard gaskets and clamps

Easy conversion to industry standard connections or single-use systems

Meets ADCF Requirements

Note: Mates with MPC polycarbonate and polysulfone bodies and sealing caps (page 79) and MPX polycarbonate and polysulfone bodies and sealing caps



Height/Diameter

Total Length (including valve)

Outside Diameter





PART NO.	SIZE	Α	В	E
MPC3301239	3/4"	.98 (24.9)	1.40 (35.6)	1.0 (25.4)
MPC3301639	1"	1.50 (38.1)	1.40 (35.6)	1.5 (38.1)
MPX3301239	3/4"	1.28 (32.5)	1.70 (43.2)	1.0 (25.4)

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. $\textbf{NOTE:} \ QD \ sanitary \ couplings \ are \ compatible \ with \ both \ stainless \ steel \ and \ plastic \ clamps. \ Clamps \ and \ gaskets \ are \ referenced \ for \ illustration$ and are not available through Colder.





Pressure:

Vacuum to 125 psi, 8.62 bar

Temperature:

-40°F to 280°F (-40°C to 138°C)

Materials:

Main components:

Polysulfone (amber tint), USP Class VI, ADCF

O-rings: Silicone (clear), platinum-cured,

USP Class VI, ADCF

Springs: 316 stainless steel

Sterilization:

Gamma: Up to 50 kGy gamma irradiation. Sterilize

coupled or uncoupled.

Autoclave: At 270°F (132°C) for 60 minutes. Up to 25 repetitions for uncoupled units and up to on

repetition for coupled units.

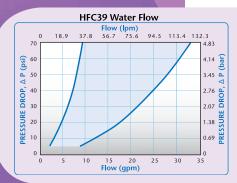
Tubing Sizes:

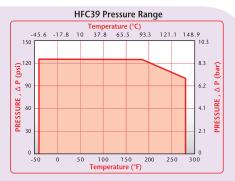
1/4", 3/8" and 1/2" ID

6.4mm, 9.5mm and 12.7mm ID

HFC39 Series couplings

provide aseptic disconnect functionality. Automatic shutoff valves close off the flow path at disconnection, protecting valuable media while also eliminating the need for pinch clamps and tube welders. An easy-to-use thumb latch design provides a secure, leak-free connection as well as enabling one-handed disconnects.





Features

Automatic shutoff valves

Audible "click"

Lightweight

BSE/TSE free materials

Benefits

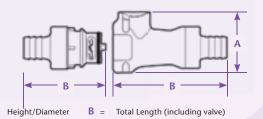
Stop flow and eliminate need for pinch clamps

Provides confidence of a secure connection

Easy integration with single-use assemblies

Meets ADCF requirements

Product Dimensions



Coupling Bodies



POLYSULFONE

TERMINATIO IN-LINE HOSE BARB
 TUBING SIZE
 METRIC EQ.
 FLOW

 1/4" ID
 6.4mm ID
 1/4"

 3/8" ID
 9.5mm ID
 3/8"

 1/2" ID
 12.5mm ID
 3/8"

 SHUTOFF
 A
 B

 HFCD17439M
 1.44 (36.6)
 2.82 (71.6)

 HFCD17639M
 1.44 (36.6)
 2.82 (71.6)

 HFCD17839M
 1.44 (36.6)
 2.82 (71.6)

Coupling Inserts



POLYSULFONE

TERMINATION	TUBING SIZE	METRIC EQ.	FLOW	STRAIGHT THRU	SHUTOFF	Α	В
IN-LINE	1/4" ID	6.4mm ID	1/4"	HFC22439M	HFCD22439M	1.00 (25.4)	2.02 (51.3)
HOSE BARB	3/8" ID	9.5mm ID	3/8"	HFC22639M	HFCD22639M	1.00 (25.4)	2.02 (51.3)
	1/2" ID	12.5mm ID	3/8"	HFC22839M	HFCD22839M	1.00 (25.4)	2.02 (51.3)



Pressure: Vacuum to 35 psi, 2.41 bar

Temperature:

-40°F to 300°F (-40°C to 149°C)

Materials:

Main components:

Polysulfone (amber tint), USP Class VI, ADCF

O-rings: Silicone (clear), platinum-cured, USP Class VI,

Sterilization:

Gamma: Up to 50 kGy irradiation

Autoclave: At 270°F (132°C) for 60 minutes, up to 25

repetitions. Sterilize uncoupled only.

Tubing Sizes: 3/4" ID, 19.0mm ID

The MPU's twist-to-connect

design features an easy-to-use locking mechanism that guards against accidental disconnects and provides a reliable, secure connection. A 3/4" hose barb provides smooth, rapid media transfer.

Features

3/4" hose barb

Locking feature

Sharp barb end

Shrouded, leak-free seal & smooth, internal flow path

Benefits

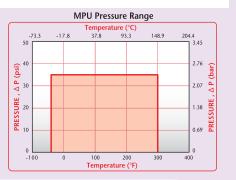
Facilitates rapid fill and empty of bioprocessing bags

Guards against accidental disconnects

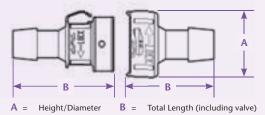
Minimizes fluid turbulence and dead space

Protect valuable fluids and eliminate potential to contaminate fluid path

MPU Water Flow Flow (lpm) 302.8 454.2 4.14 3.45 50 2.76 OBO 40 DROP, PRESSUR 10 PRESSURE 0.69 200 80 120 Flow (gpm)



Product Dimensions



Coupling Bodies



DLYSULFONE

TERMINATION IN-LINE **HOSE BARB**

3/4" ID

TUBING METRIC EQ. FLOW 19mm ID

.710"

STRAIGHT THRU MPU171239

1.75 (44.5) 2.37 (60.2)



Coupling Inserts

TERMINATION IN-LINE HOSE BARB

3/4" ID

TUBING METRIC EO. 19mm ID

FLOW .710"

STRAIGHT THRU O-RING MPU221239M

USP Class VI

Silicone Seal 1.56 (39.6) 2.88 (73.2)

Accessories



SEALING CAP MPU32039

SEALING PLUG

MPU30039M

O-RING Silicone Seal USP Class VI

MATERIAL Polysulfone

MATERIAL

Polysulfone

1.75 (44.5)

.79 (20.1)

1.56 (39.6) 1.38 (35.1)

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.





Pressure:

Steam position:

Up to 30 psi, 2.07 bar (Steam-Thru) 35 psi, 2.41 bar (Steam-Thru II)

Flow position: Vacuum to 20 psi, 1.38 bar

Temperature:

Steam position:

Up to 266°F (130°C) for 60 minutes (Steam-Thru) Up to 275°F (135°C) for 60 minutes (Steam-Thru II)

Flow position: 39°F to 104°F (4°C to 40°C)

Materials:

Connection: Polysulfone, USP Class VI, ADCF

O-rings: Silicone (clear), platinum-cured, USP Class VI,

ADCF

Tear-away sleeve: Polyethylene or polycarbonate

(Steam-Thru only), USP Class VI, ADCF

Typical Flow Rate:

 $C_v = 4.2 - 4.6$ (Steam-Thru) $C_v = 5.2 - 8.0$ (Steam-Thru II)

Sterilization:

Gamma: Up to 50 kGy gamma irradiation

Autoclave: At 265°F (129°C) for 30 minutes, up to two cycles (applies only to part numbers

STC1700500-STC1700800)

SIP process:

Up to 266°F (130°C) for 60 minutes (Steam-Thru) Up to 275°F (135°C) for 60 minutes (Steam-Thru II)

Tubing sizes:

3/8" to 1/2" ID, 9.5mm to 12.7mm

Steam-Thru® Connections allow a quick

and easy sterile connection between biopharmaceutical processing equipment and disposable bag and tube assemblies. The single-use design saves time and money by eliminating unnecessary cleaning procedures and reducing validation burden associated with reusable components.

Features

Innovative three-port design

Patented valve design

Thumb latch/ Tear-away sleeve

Industry standard terminations

BSE/TSE free materials

Benefits

Allows a true steam-through SIP process which eliminates "dead legs" and the need for laminar flow hoods

Allows sterile connection and disconnection and permits high media flow rate

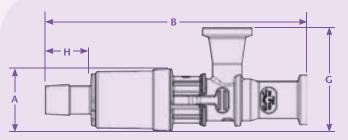
Secures valve position, provides visual indicator of process stage

Speed connect to the process equipment and connect to popular sizes of flexible tubing

Meets ADCF requirements

Steam-Thru® Configurations

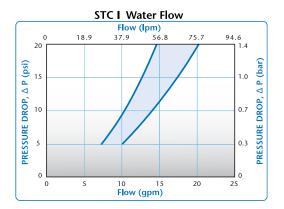
Steam-Thru® Connection's patented three-port design allows steam to pass directly through the lower ports to "steam on" to stainless equipment. After the SIP cycle is completed, the connector's valve is actuated, creating a sterile flow path to single-use systems.

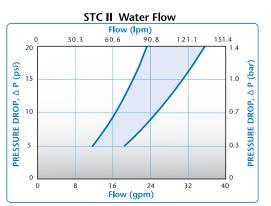


F = Actuated Length

POLYSULFONE

	DESCRIPTION WITH POLYETHYLENE SLEEVE	PART NO. STC1700000 STC1700100 STC1700200 STC1700300	TERMINATIONS 3/4" x 3/4" sanitary x 1/2" HB 3/4" x 3/4" sanitary x 3/8" HB 3/4" x 1-1/2" sanitary x 1/2" HB 3/4" x 1-1/2" sanitary x 3/8" HB	A 1.20 (30.5) 1.20 (30.5) 1.20 (30.5) 1.20 (30.5)	B 5.09 (129.3) 4.80 (121.9) 5.09 (129.3) 4.80 (121.9)	F 4.44 (112.8) 4.15 (105.4) 4.44 (112.8) 4.15 (105.4)	2.00 (50.8) 2.00 (50.8)	H 0.89 (22.6) 0.60 (15.2) 0.89 (22.6) 0.60 (15.2)
Sales Sales	DESCRIPTION WITH AUTOCLAVABLE POLYCARBONATE SLEEVE	PART NO. STC1700500 STC1700600 STC1700700 STC1700800	TERMINATIONS 3/4" x 3/4" sanitary x 1/2" HB 3/4" x 3/4" sanitary x 3/8" HB 3/4" x 1-1/2" sanitary x 1/2" HB 3/4" x 1-1/2" sanitary x 3/8" HB	A 1.20 (30.5) 1.20 (30.5) 1.20 (30.5) 1.20 (30.5)	B 5.09 (129.3) 4.80 (121.9) 5.09 (129.3) 4.80 (121.9)	F 4.44 (112.8) 4.15 (105.4) 4.44 (112.8) 4.15 (105.4)	2.00 (50.8) 2.00 (50.8)	H 0.89 (22.6) 0.60 (15.2) 0.89 (22.6) 0.60 (15.2)





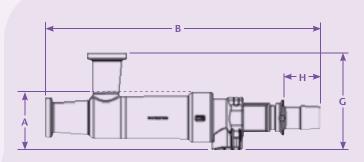
These graphs are intended to give you a general idea of the performance capabilities of each product line. The shaded area of each graph represents the operating range of the product family, i.e., upper and lower values are shown. Therefore, depending on the exact coupling configurations selected, you can reasonably expect values to fall within the shaded area.

Steam-Thru II **Configurations**

Steam-Thru II Connections offer the flexibility of "steam on" and "steam off" functionality. The innovative design allows the valve to be returned to the steam position enabling a second SIP cycle following



media transfer. The "steam off" disconnection of disposable systems minimizes cross-contamination risks associated with reusable components.



F = Actuated Length

POLYSULFONE

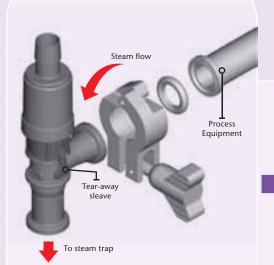
	TERMINATION	PART NO.	TERMINATIONS	Α	В	F	G	Н
		STC2020000	3/4" x 3/4" sanitary x 1/2" HB	1.42 (36.1)	6.84 (173.7)	5.93 (150.6)	2.40 (61.0)	.88 (22.4)
ь		STC2020100	3/4" x 3/4" sanitary x 3/8" HB	1.42 (36.1)	6.76 (171.7)	5.93 (150.6)	2.40 (61.0)	.80 (20.3)
		STC2020200	3/4" x 1-1/2" sanitary x 1/2" HB	1.42 (36.1)	6.84 (173.7)	5.93 (150.6)	2.40 (61.0)	.88 (22.4)
		STC2020300	3/4" x 1-1/2" sanitary x 3/8" HB	1.42 (36.1)	6.76 (171.7)	5.93 (150.6)	2.40 (61.0)	.80 (20.3)

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters.



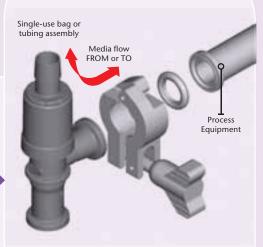
Steam-Thru Process

STEAM POSITION



Steam flows from the process equipment through the Steam-Thru to sterilize the connection. With the tear-away sleeve in place, the transfer of fluid to or from the bioreactor is prevented.

FLOW POSITION



When the tear-away sleeve is removed, the Steam-Thru is actuated, the connection to the steam trap is disabled and a sterile flow path is established between the process equipment and the disposable system.

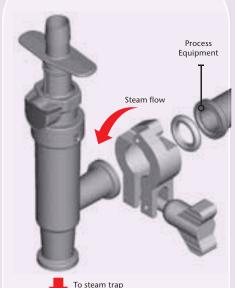
DID YOU KNOW ... there are many advantages of single-use systems?

- Increase Productivity
 - The reliability of single-use systems results in increased productivity through the reduction of system downtime associated with cleaning and cleaning validation.
- Add Flexibility Single-use systems can be easily modified for alternative media handling.
- Minimize Risk
 - The integration of single-use systems can help minimize the risk of media contamination in multi-product manufacturing.
- **Reduce Cost** Cost savings include the reduced chemical and utility expenses of cleaning and labor.

Don't forget: you can access many feature articles on Single-Use technology at www.colder.com.

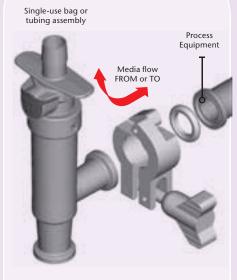
Steam-Thru II Process: An audible "click" and the visual indicator of the raised thumb latch provide assurance that the valve is locked in the flow or steam position.

STEAM ON POSITION



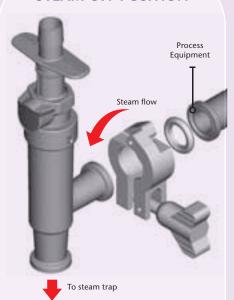
Steam flows from the process equipment through the Steam-Thru II creating a "steam on" sterile connection.

FLOW POSITION



Once the valve is locked in the flow position a sterile flow path has been created allowing media transfer.

STEAM OFF POSITION



Once the valve is locked in the steam position, complete a second SIP cycle to "steam off" the connection.

TRANSITION TO FLOW

Once the "steam on" cycle is complete and the steam trap has been closed, simply press the thumb latch to allow the valve to be moved down to the flow

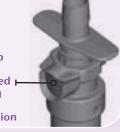
Thumb latch recessed during valve transition

position.

TRANSITION TO STEAM

Once media transfer is complete, simply press the thumb latch to allow the valve to be moved back up to the steam position.

Thumb latch recessed during valve transition





The CQH and CQV Series are designed for high-purity use and feature all plastic construction. Molded, virgin materials and lubricant-free design enable use in the most demanding applications. Broad chemical compatibility and cleanroom manufacturing make them ideal for use in critical wet processes.

Features

100% metal free

High flow valve design Disconnect under pressure Polypropylene and PVDF

Benefits

No risk of metal contaminants or corrosion

High flow in a compact package

Speeds servicing and reduces risk of injury

Broad chemical compatibility

Specifications

CQH Materials:

Main components:

Natural, virgin polypropylene

Valve o-rings: Viton® FKM (black)

External insert o-ring:

Simriz® FFKM perfluoro (black)

Valve (wetted) and thumb latch spring: PEEK®

Flare nuts: PVDF

Lubricants: None used

COV Materials:

Main components: Natural, virgin PVDF

Valve o-rings: Chemraz FFKM perfluoro (white)

External insert o-ring:

Chemraz FFKM perfluoro (white)

Valve (wetted) and thumb latch spring: PEEK

Flare nuts: PVDF

Lubricants: None used

Spillage/air inclusion:

~1.5cc (ml)/disconnect (reconnect)

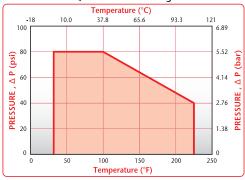
Tubing Sizes:

3/8" to 3/4" flare; 3/8" to 3/4" NPT

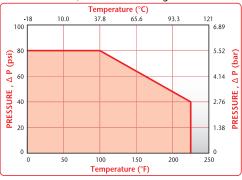
NOTE: Compatible with DrumQuik® MODULAR Dispense System, Universal and Asian Drum Adaptors.

 $\label{eq:composition} \mbox{Visit } \underline{\mbox{www.colder.com}} \mbox{ for information} \\ \mbox{about CQH and CQV modified product options.}$

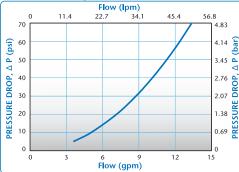
CQHD06 Pressure Range



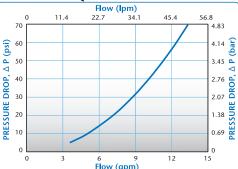
CQVD06 Pressure Range



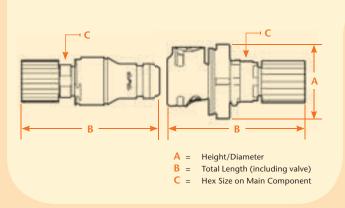
CQHD06 Water Flow

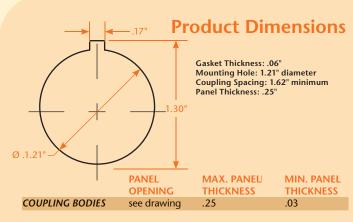


CQVD06 Water Flow



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.





CQH Coupling Bodies

TERMINATION IN-LINE	TUBING/THREAD SIZE 1/4" OD 3/8" OD 1/2" OD 3/8" Taper	TERMINATION TYPE Flare compression Flare compression Flare compression Male NPT	SHUTOFF CQHD06100104 CQHD06100106 CQHD06100108 CQHD06100206	A 1.44 1.44 1.44 1.44	B C 3.32 3.38 3.38 2.73 .995
TERMINATION PANEL MOUNT	TUBING/THREAD SIZE 1/4" OD 3/8" OD 1/2" OD 3/8" Taper	TERMINATION TYPE Flare compression Flare compression Flare compression Male NPT	SHUTOFF CQHD06110104 CQHD06110106 CQHD06110108 CQHD06110206	A 1.82 1.82 1.82 1.82	B C 3.32 3.38 3.37 2.73 .995

CQH Coupling Inserts

POLYPROPYLENE

TERMINATION	TUBING/THREAD SIZE	TERMINATION TYPE	SHUTOFF	Α	в с
IN-LINE	1/4" OD	Flare compression	CQHD06200104	1.00	2.49
	3/8" OD	Flare compression	CQHD06200106	1.00	2.55
	1/2" OD	Flare compression	CQHD06200108	1.00	2.56
	3/8" Taper	Male NPT	CQHD06200206‡	1.16	1.90 .995
	3/4" Taper	Male NPT	CQHD06200212‡	1.16	2.26 1.05

CQV Coupling Bodies

						VI
TERMINATION IN-LINE	TUBING/THREAD SIZE 1/4" OD 3/8" OD 1/2" OD 3/8" Taper	TERMINATION TYPE Flare compression Flare compression Flare compression Male NPT	SHUTOFF CQVD06100104 CQVD06100106 CQVD06100108 CQVD06100206	A 1.44 1.44 1.44 1.44	B 3.31 3.38 3.37 2.70	C 1.00
TERMINATION PANEL MOUNT	TUBING/THREAD SIZE 1/4" OD 3/8" OD	TERMINATION TYPE Flare compression Flare compression	SHUTOFF CQVD06110104 CQVD06110106	A 1.82 1.82	B 3.24 3.38	С

Flare compression

Male NPT

 \ddagger Indicates coupling that can be used with DrumQuik.

1/2" OD

3/8" Taper

‡Indicates coupling that can be used with DrumQuik®.

CQV Coupling Inserts

TERMINATION	TUBING/THREAD SIZE	TERMINATION TYPE	SHUTOFF	Α	в с	
IN-LINE	1/4" OD	Flare compression	CQVD06200104	1.00	2.41	
	3/8" OD	Flare compression	CQVD06200106	1.00	2.57	
	1/2" OD	Flare compression	CQVD06200108	1.00	2.57	
	3/8" Taper	Male NPT	CQVD06200206‡	1.16	1.89 1.00	

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters.



CQVD06110108

CQVD06110206‡

1.82

3.37

2.70 1.00



The CQG06 Series high purity couplings feature our patented pressure-balanced, non-spill design. Molded virgin polypropylene and a 100% springless flow path provide broad chemical resistance and exceptionally high flow capacity, allowing instant disconnects (and reconnects), even under pressure.

Features

Non-spill design

Pressure-balanced

Springless flow path design

Benefits

Ultimate protection from chemicals and fumes

Failsafe disconnect, even under pressure; easy to reconnect at high pressure

Eliminates source of metallic contaminants

Specifications

Materials:

Main components:

Natural, virgin polypropylene

Seals: Viton® FKM

Springs (non-wetted): Hastelloy® C

Flare nuts: PVDF

Lubricants: None used

Dual Containment Nut
and Panel Mount Fitting:
Virgin, natural polypropylene

Flare nuts and panel nuts: PVDF

Panel mount o-rings: Viton FKM

Spillage/air inclusion:

<0.1 cc (ml)/disconnect (reconnect)

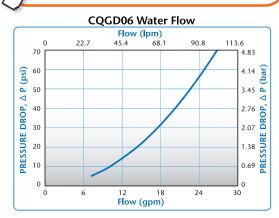
Panel Mount: Optional adaptor kit

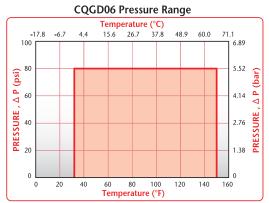
Tubing Sizes:

3/8" to 3/4" flare; 3/8" to 3/4" NPT

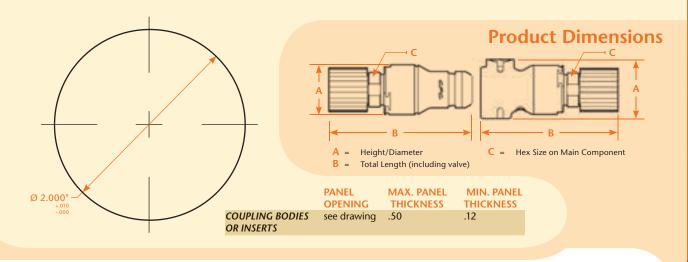
Compatible with DrumQuik® MODULAR Dispense System, Universal and Asian Drum Adaptors.

Visit www.colder.com for information about CQH and CQV modified product options.





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.



Coupling Bodies

OLYPROPYLENE

TERMINATION IN-LINE BODIES	TUBING/THREAD SIZE 3/8" OD 1/2" OD 3/4" OD	TERMINATION TYPE Flare compression Flare compression Flare have been seen as the seen as t	SHUTOFF CQGD06100106 CQGD06100108 CQGD06100112	A 1.96 1.96 1.96	B 4.21 4.42 4.49	C	
	1/2" Taper	Male NPT	CQGD06100208	1.96	3.81	1.00	

Coupling Inserts

POLYPROPYL

TERMINATION	TUBING/THREAD SIZE	TERMINATION TYPE	SHUTOFF	Α	В	C	150
IN-LINE	3/8" OD	Flare compression	CQGD06200106	1.62	4.35		THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW
INSERTS	1/2" OD	Flare compression	CQGD06200108	1.62	4.45		Co. College Clarester
	3/4" OD	Flare compression	CQGD06200112	1.62	4.63		The second second
	3/8" Taper	Male NPT	CQGD06200206‡	1.62	3.81	1.00	Value of the last
	1/2" Taper	Male NPT	CQGD06200208	1.62	3.95	1.00	
	3/4" Taper	Male NPT	CQGD06200212‡	1.62	4.15	1.00	

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters.

Panel Mount Adaptor

PART NO. CQG06PMKIT01 Panel mount adapter kit (fits both bodies & inserts)

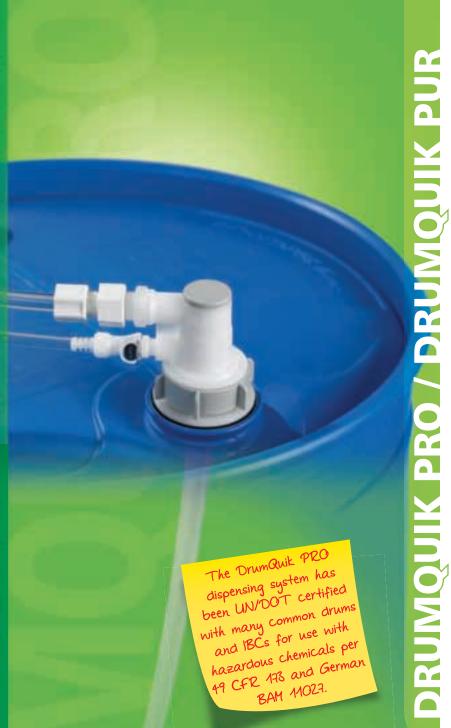
The ChemQuik® Dual Containment System is an easy way to "double contain" critical chemical lines, protecting plant and personnel in case a primary process line ruptures or "sweats". The system provides a protective secondary line to catch any fluid and routes it to a safe location.

ChemOuik® Dual Containment Flare Nuts

These fittings work with any ChemQuik coupling with fine thread flare terminations or a common flare style fitting. In addition, the panel mount version can be mounted into a pump cabinet or other panel mount connection point. The primary line can then be routed from the coupling directly to a pump, connected to a ChemQuik coupling or to a fitting at the panel mount fitting.

The "weep port" serves to vent the area between the primary and secondary lines so that pressure cannot build up in case of a primary line rupture. The leaking fluid can then be routed to a containment vessel or to a leak detector.

FLARE NUT	DESCRIPTION	FLARE FITTING	DESCRIPTION
CQDCNUT0408	Dual containment nut, 1/4" OD process line x	CQPMDCNUT0408	Panel mount dual containment nut, 1/4" OD
	1/2" OD secondary containment line.		Process line \times 1/2" OD secondary containment line.
CQDCNUT0612	Dual containment nut, 3/8" OD process line x	CQPMDCNUT0612	Panel mount dual containment nut, 1/4" OD
	3/4" OD secondary containment line.		Process line x 1/2" OD secondary containment line.
CQDCNUT0812	Dual containment nut, 1/2" OD process line x	CQPMDCNUT0812	Panel mount dual containment nut, 1/4" OD
	3/4" OD secondary containment line.		Process line x 1/2" OD secondary containment line.
CQDCNUT1216	Dual containment nut, 3/4" OD process line x	CQPMDCNUT1216	Panel mount dual containment nut, 1/4" OD
	1" OD secondary containment line.		Process line x 1/2" OD secondary containment line.



DrumQuik® PRO and DrumQuik® PUR

dispensing systems are used with common pumps to create a closed transfer system for both general and high purity chemicals. These easy-to-use products meet the strict safety requirements of chemical handling applications as well as the demands of harsh operating environments. DrumQuik® dispensing systems minimize chemical exposure and facilitate the delivery of chemicals from bulk transfer containers to end use applications.

For general chemical dispensing DrumQuik PRO offers a rugged and cost-effective solution. DrumQuik PUR is a 100% metal free, cleanroom packaged, PVDF product designed specifically for applications demanding the highest level of purity.

Specifications

Pressure:

Uncoupled: Vacuum to 45 psig (3.1 bar) **Coupled:** Vacuum to 22 psig (1.5 bar)

Temperature:

Drum insert: -20°to 120°F (-29°to 49°C)

Coupler: HDPE, 32° to 120°F (0° to 49°C)

PVDF, 0° to 120°F (-18° to 49°C)

Materials:

Drum insert & dip-tube:

Virgin polyethylene (HDPE)

Shipping plug:

Virgin polyethylene (HDPE)

Coupler:

Virgin PVDF or virgin polypropylene (PP)

Spring (coupler only):

316 stainless steel, Hastelloy® C optional, virgin PEEK UHP PPS or Teflon® encapsulated 316 stainless steel

Seals:

Coupler seals: EPDM, FKM (Simriz® UHP FFKM

Perfluoroelastomer optional)

Bung seal: Polyolefin (POE) (EPDM or FKM

optional)

Shipping plug seal: EPDM (FKM optional)

Torque specifications:

2" Buttress - 20ft-lbs (27 N m) BCS 56x4 - 20ft-lbs (27 N m)

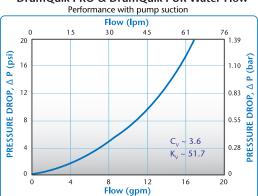
2" NPS (plastic drum) - 20ft-lbs (27 N m)

2" NPS (steel drum) - 15ft-lbs (20 N m)

Shipping plug - hand tight

NOTE: The torque specifications listed above are general recommendations which may need to be adjusted + or – depending on specific application.

DrumQuik PRO & DrumQuik PUR Water Flow



The graph above characterizes the flow of the DrumQuik PRO with the coupler vent port open to the atmosphere and a pump drawing liquid out.

₹ 5 E

Visit www.colder.com/dqpro and click on Flow Performance Graphs for flow performance with other possible plumbing configurations.

Couplers: Polypropylene

PART NUMBER	DESCRIPTION
DQPRO 120312	3/4" Hose barb (EPDM seals, 316 SST spring)
DQPRO 120208	1/2" Male NPT (EPDM seals, 316 SST spring)
DQPRO 120208202	1/2" Male NPT (FKM seals, 316 SST spring)
DQPRO 120208206	1/2" Male NPT (EPDM seals, Hastelloy C spring)
DQPRO 120208207	1/2" Male NPT (FKM seals, Hastelloy C spring)
DQPRO120712	3/4" Male BSPP (EPDM seals, 316 SST spring)
DQPRO120712202	3/4" Male BSPP (FKM seals, 316 SST spring)
DQPRO120712206	3/4" Male BSPP (EPDM seals, Hastelloy C spring)
DQPRO 120712207	3/4" Male BSPP (FKM seals, Hastelloy C spring)

Couplers: PVDF

DESCRIPTION
3/4" flare liquid port
Simriz® FFKM liquid contact seals, FKM vent seal,
PEEK plastic spring
FKM liquid contact seals, FKM vent seal, PPS plastic spring
Simriz FFKM liquid contact seals, FKM vent seal,
PPS plastic spring
FKM liquid contact seals, FKM vent seal, Teflon
encapsulated 316 stainless steel spring
Simriz FFKM liquid contact seals, FKM vent seal,
Teflon encapsulated 316 stainless steel spring

Drum Inserts: Polyethylene (HDPE)

PART NUMBER	DESCRIPTION
DQPRO202BUT	2" American buttress thread, EPDM seals (NA plastic drums)
DQPRO202BUT202	2" buttress thread, FKM seals (NA plastic drums)
DQPRO2056X4	BCS 56x4 thread, EPDM seals (European plastic drums)
DQPRO2056X4202	BCS 56x4 thread, FKM seals (European plastic drums)
DQPRO20G2NPSST	2" NPS (ISO G2) thread, EPDM seals
	(steel drums and IBC caps)
DQPRO20G2NPSST202	2" NPS (ISO G2) thread, FKM seals
	(steel drums and IBC caps)
DQPRO20G2NPSPL	2" NPS (ISO G2) thread, EPDM flat bung seal
	(plastic drums and IBCs)
DQPRO20G2NPSPL202	2" NPS (ISO G2) thread, FKM flat bung seal
	(plastic drums and IBCs)
DQPUR202BUT	2" American buttress thread, Polyolefin (POE bung seal,
	EPDM shipping plug seal)
DQPUR202BUT202	2" American buttress thread, Polyolefin (POE bung seal,
	FKM shipping plug seal)

Dip-Tubes: Polyethylene (HDPE)

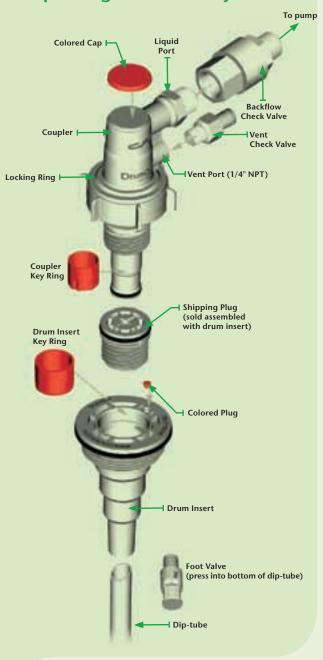
PART NUMBER	DESCRIPTION
DQPRODT0410	13.0" (330mm) long for 5 gal/25L jerry cans
DQPRODT0985	35.5" (902mm) long for 55 gal/200L drums
DQPRODT1070	39.0" (990mm) long for 275 gal/1040L IBCs
DQPRODT1274	47.0" (1194mm) long for 330 gal/1250L IBCs
DQPUR2BUT0334	Drum insert assembly, NAMPAC square jerry can, 20L,
	334mm long
DQPUR2BUT0985	Drum insert assembly with universal dip-tube (drum),
	985mm long
DQPUR2BUT1274	Drum insert assembly with universal dip-tube (IBC),
	1274mm long

Note: The length indicated in the part number is the length as measured from the sealing surface of the container to the end of the dip-tube. This is ~ 80mm longer than the actual length

Assembled Drum Inserts & Dip-Tubes

PART NUMBER	DESCRIPTION
DQPUR2BUT0334	Drum insert assembly, NAMPAC square jerry can, 20L,
	334mm long
DQPUR2BUT0985	Drum insert assembly with universal dip-tube (drum),
	985mm long
DQPUR2BUT1274	Drum insert assembly with universal dip-tube (IBC),
	1274mm long

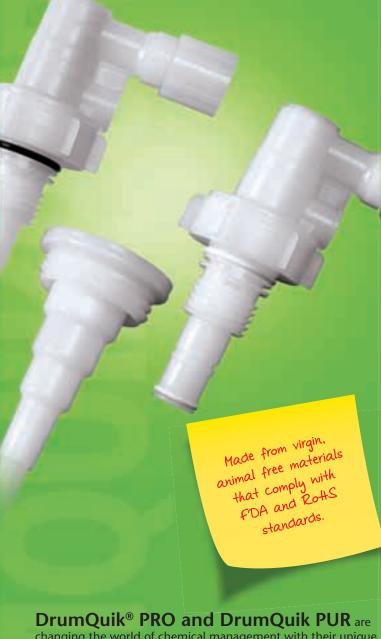
DrumQuik® PRO & PUR **Dispensing Connector System**



Vapor Management Options:

- 1. OPEN: Vent port left open to atmosphere
- 2. REMOTE: Vent port routed to fume hood, scrubber or vapor recovery system
- 3. CHECKED: Connect vent check valve to allow make-up air in without allowing fumes to escape
- 4. BLANKET GAS: Connect a Colder quick disconnect coupling for blanket gas (N₂, CO₂)





changing the world of chemical management with their unique closed-system design. Innovative DrumQuik systems help companies reduce costs, increase worker safety and protect the environment. From basic chemical handling to specialty high purity and pharmaceutical applications, DrumQuik dispensing systems make chemical management cleaner, faster, safer and smarter.

DrumQuik PRO

Features

Quick connect/disconnect
Automatic shutoff valve
Disposable drum insert

Ported vent system for vapor management

Multiple standard thread sizes

Benefits

Allows faster drum change-outs Stops flow when disconnected Reduces messy handling and chemical exposure

Allows make-up air into drum or connection of blanket gas (N_2,CO_2)

Can be used with many common steel and plastic containers

DrumQuik® Dispensing Systems for Safer Chemical Management

Whether you're dispensing edible oils, condiments, detergents, Diesel Exhaust Fluid (DEF), or industrial chemicals, acids, caustics or solvents, DrumQuik PRO and the high purity DrumQuik PUR can make your process cleaner, faster, safer and smarter.

- Provide the critical connection between your chemical container and the end use process
- Create a closed transfer system to protect workers and keep a cleaner work environment

DrumQuik solutions are available for a variety of container types providing interchangeable, reusable connections for:

- Plastic or steel drums
- Chemical packs
- IBCs or totes

For high purity applications DrumQuik PUR provides the assurance of compatibility with chemicals used in semiconductor and flat panel production, pharmaceutical and photovoltaic or solar cell manufacturing.

Advanced dispensing solutions integrate RFID technology to verify container contents, track container usage, identify potentially hazardous misconnections and much more. Contact Colder to find out how our patented RFID solutions can make your dispensing system smarter.

DrumQuik PUR

Features

RUMQUIK PRO

Quick connect/disconnect

All plastic construction

Automatic shutoff valve

Cleanroom manufactured

Disposable drum insert

Benefits

Allows faster drum change-outs

No metallic corrosion/contamination

Stops flow when disconnected

Assures high level of purity

Minimizes chemical exposure & contamination

Color Coding and Keying Options

Colored Key Kits for Physical Coding: Polyethylene

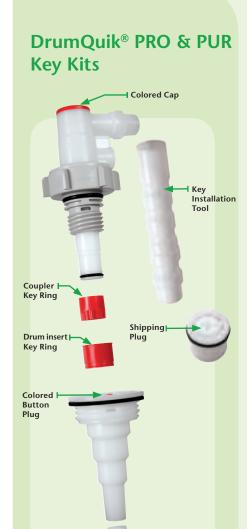
DQPRO PART NUMBER	DQPUR PART NUMBER	DESCRIPTION
DQPROKEYCPGRY00	DQPURKEYCPGRY00	Key kit for coupler, gray
DQPROKEYCPRED01	DQPURKEYCPRED01	Key kit for coupler, red
DQPROKEYCPYEL02	DQPURKEYCPYEL02	Key kit for coupler, yellow
DQPROKEYCPGRN03	DQPURKEYCPGRN03	Key kit for coupler, green
DQPROKEYCPBRN04	DQPURKEYCPBRN04	Key kit for coupler, brown
DQPROKEYCPBLU05	DQPURKEYCPBLU05	Key kit for coupler, blue
DQPROKEYCPBLK99	DQPURKEYCPBLK99	Key kit for coupler, black
DODDOL/EVCDCOL 4DO	DQPURKEYCPCOMBO	One of every coupler key ring
DQPROKEYCPCOMBO	DQFORKLICFCOMBO	one of every coupler key mig
DQPROKEYCPCOMBO	DQFORRETCFCOMBO	and cap
Example of the state of the sta	`	, , , ,
Key kits for coupler include coupl	ler key ring and cap.	and cap
Key kits for coupler include coupl	ler key ring and cap. DQPURKEYDIRED01	and cap Key kit for drum insert, red
Key kits for coupler include coupl DQPROKEYDIRED01 DQPROKEYDIYEL02	ler key ring and cap. DQPURKEYDIRED01 DQPURKEYDIYEL02	and cap Key kit for drum insert, red Key kit for drum insert, yellow
Key kits for coupler include coupl DQPROKEYDIRED01 DQPROKEYDIYEL02 DQPROKEYDIGRN03	ler key ring and cap. DQPURKEYDIRED01 DQPURKEYDIYEL02 DQPURKEYDIGRN03	And cap Key kit for drum insert, red Key kit for drum insert, yellow key kit for drum insert, green
Key kits for coupler include coupl DQPROKEYDIRED01 DQPROKEYDIYEL02 DQPROKEYDIGRN03 DQPROKEYDIBRN04	DQPURKEYDIRED01 DQPURKEYDIYEL02 DQPURKEYDIGRN03 DQPURKEYDIBRN04	Key kit for drum insert, red Key kit for drum insert, yellow key kit for drum insert, green Key kit for drum insert, brown
Key kits for coupler include coupl DQPROKEYDIRED01 DQPROKEYDIYEL02 DQPROKEYDIGRN03 DQPROKEYDIBRN04 DQPROKEYDIBLU05	DQPURKEYDIRED01 DQPURKEYDIYEL02 DQPURKEYDIGRN03 DQPURKEYDIBRN04 DQPURKEYDIBLU05	and cap Key kit for drum insert, red Key kit for drum insert, yellow key kit for drum insert, green Key kit for drum insert, brown Key kit for drum insert, blue

Color Coded Parts Colored Caps & Button Plugs for Visual Coding: Polyethylene

PART NUMBER	DESCRIPTION
DQPROCAPGRY00	Colored cap for coupler, gray
DQPROCAPRED01	Colored cap for coupler, red
DQPROCAPYEL02	Colored cap for coupler, yellow
DQPROCAPGRN03	Colored cap for coupler, green
DQPROCAPBRN04	Colored cap for coupler, brown
DQPROCAPBLU05	Colored cap for coupler, blue
DQPROCAPBLK99	Colored cap for coupler, black
DQPROCAPCOMBO	One each of every color cap
DQPROPLUGGRY00	Colored button plug for drum insert, gray
DQPROPLUGRED01	Colored button plug for drum insert, red
DQPROPLUGYEL02	Colored button plug for drum insert, yellow
DQPROPLUGGRN03	Colored button plug for drum insert, green
DQPROPLUGBRN04	Colored button plug for drum insert, brown
DQPROPLUGBLU05	Colored button plug for drum insert, blue
DQPROPLUGBLK99	Colored button plug for drum insert, black
DQPROPLUGCOMBO	One each of every color plug

^{*} Colored caps and button plugs can be used with both DrumQuik PRO and DrumQuik PUR.







Easy Installation and Dispensing



(1)



2 Place the drum insert assembly in drum.



3 Turn shipping plug counter-clockwise to remove. (Use a large, flat blade or #4 Phillips screwdriver.)



Insert coupler into drum insert assembly.

(4)



5 Turn the coupler locking ringclockwise until stop is reached (approximately 2 full turns); valve is opened during this process.





Visit www.colder.com/dqpro and click on Installation Guide for more information.

Tools

PART NUMBER	DESCRIPTION
2408900*	Torque socket tool (glass-filled nylon)
2290301*	Torque socket tool (Stainless steel)
	*Required for drum insert installation, mates with 1/2" torque
	wrench and common bung wrenches
2479100	Bung wrench (aluminum)
2375600*	Key installation tool (for key kits)
	*Shipping plug may also be used to install keys
DQPURSP	Shipping plug with FEP encapsualted silicone seal
DQPURDISEALPOE	Drum insert POE bung seal
DQPURDISEALFEP	Drum insert FEP encapsulated silicone bung seal
DQPURCPSEALFKM	Coupler seal kit (2 seals), FKM
DQPURCPSEALSMZ	Coupler seal kit (2 seals), Simriz

Sample Kits

(Includes one coupler, one insert and one dip-tube)

PART NUMBER	DESCRIPTION
DQPRONASAMP	2" Buttress drum insert, 902mm dip-tube, 1/2 NPT
	coupler (EPDM O-rings, 316 SST spring in coupler)
DQPRONASAMP207	2" Buttress drum insert, 902mm dip-tube, 1/2 NPT
	coupler (FKM seals & Hastelloy C spring in coupler)
DQPROEUSAMP	BSC 56x4 drum insert, 902mm dip-tube, 3/4 BSPP
	coupler (EPDM seals, 316 SST spring in coupler)
DQPROEUSAMP207	BSC 56x4 drum insert, 902mm dip-tube, 3/4 BSPP
	coupler (FKM seals & Hastelloy C spring in coupler)
DQPRONPSSTSAMP	2" NPS (ISO G2) drum insert, 902mm dip-tube, 1/2 NPT
	coupler (EPDM Bung O-rings, 316 SST spring in coupler)
DQPRONPSSTSAMP207	2" NPS (ISO G2) drum insert, 902mm dip-tube, 1/2 NPT
	coupler (FKM seals & Hastelloy C spring in coupler)
DQPRONPSPLSAMP	2" NPS (ISO G2) drum insert, 902mm dip-tube, 1/2
	NPT coupler (EPDM Flat Gasket, 316 SST Spring)
DQPRONPSPLSAMP207	2" NPS (ISO G2) drum insert, 902mm dip-tube, 1/2
	NPT coupler (FKM seals & Hastelloy C spring in coupler)
DQPURSAMP202	Kit includes 1 Coupler (DQPUR 12 0112 (PEEK & FKM)
	& 1 assembled Dip-tube (DQPUR 2BUT 0985 202)
DQPURSAMP209	Kit includes 1 Coupler (DQPUR 12 0112 209 (PPS & SIMRIZ)
	& 1 Dip-tube assy. (DQPUR 2BUT 0985 202)

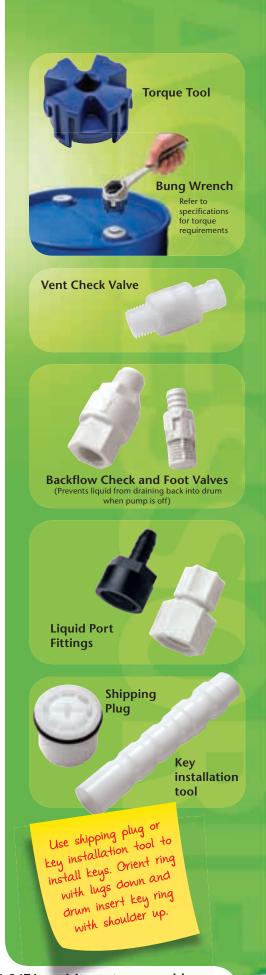


Accessories

PART NUMBER	DESCRIPTION
Venting Options	
2324300	Vent check valve, 1/2" ID x 1/4" male NPT
	(Polypropylene, 316 SST, EPDM)
2324301	Vent check valve, 1/2" ID x 1/4" male NPT
	(Polypropylene, Hastelloy® C, Alcryn®)
APCD24004	Vent coupling insert, 1/4" male NPT
APCD17004SH	(Acetal, 316 SST, Buna-N)
APCD170045H	Vent coupling body with shroud, 1/4" hose barb (Acetal, 316 SST, Buna-N)
APCD17006SH	Vent coupling body with shroud, 3/8" hose barb
AI CD17000311	(Acetal, 316 SST, Buna-N)
EFCD24412	Vent coupling insert, 1/4" male NPT
	(Polypropylene, 316 SST, EPDM)
EFCD17412	Vent coupling body, 1/4" hose barb
	(Polypropylene, 316 SST, EPDM)
EFCD17612	Vent coupling body, 3/8" hose barb
NOTE: Parts listed above are sugges	(Polypropylene, 316 SST, EPDM) ted for use in the vent port, but any 1/4" NPT Colder coupling can be used for
blanket gas applications (see page 9	5.)
Backflow Prevention Options	Material: Polypropylene
2478900	Check valve for couplers,
	1/2" female NPT x 1/2" male NPT (EPDM, 302 SST)
2478901	Check valve for couplers,
	1/2" female NPT x 1/2" male NPT (FKM, 302 SST)
2478902	Check valve for couplers,
	1/2" female NPT x 1/2" male NPT (EPDM, Hastelloy C)
2478903	Check valve for couplers,
	1/2" female NPT x 1/2" male NPT (FKM, Hastelloy C)
2479000	Foot valve for dip-tube, 1/2" hose barb (EPDM, 316 SST)
2479001	Foot valve for dip-tube, 1/2" hose barb (FKM, 316 SST)
2479002	Foot valve for dip-tube, 1/2" hose barb (EPDM, Hastelloy C)
2479003	Foot valve for dip-tube, 1/2" hose barb (FKM, Hastelloy C)
	istributes the above check valves and foot valves. These valves are not produced
by Colder and Colder makes no claim	ms or warranty regarding suitability for use in specific applications.
Liquid Port Fittings Materia	al: Polypropylene
2402600	1/2" female NPT x 3/8" OD compression
2402700	1/2" female NPT x 1/2" OD compression
2402800	1/2" female NPT x 5/8" OD compression
2402900	1/2" female NPT x 3/8" OD hose barb
2403000	1/2" female NPT x 1/2" OD hose barb
2403100	1/2" female NPT x 3/4" OD hose barb
DQPUR Accessory Fittings	
DQPURMC0404	Male Connector, PVDF, 1/4" Flare x 1/4" NPT
DQPURMC0604	Male Connector, PVDF, 3/8" Flare x 1/4" NPT
DQPURFR1208	Flare Reducer, PFA, 3/4" Female Flare x 1/2" Male Flare
DQPURSE0808	Sweep Elbow, PFA, 1/2" Female Flare x 1/2" Male Flare
DQPURSE1212	Sweep Elbow, PFA, 3/4" Female Flare x 3/4" Male Flare
DQPURDCPM0812	Double Containment Panel Mount Fitting, PFA,
	1/2" process line x 3/4" secondary containment line
DQPURDCPM1216	Double Containment Panel Mount Fitting, PFA,
	3/4" process line x 1" secondary containment line
DQPURDCN0812	Double Containment Adapter, PFA,
	1/2" process line x 3/4" secondary containment line
DQPURDCN1216	Double Containment Adapter, PFA,
	3/4" process line x 1" secondary containment line
DQPURFT08	Flaring Tool, 1/2" tubing
DQPURFT12	Flaring Tool, 3/4" tubing

Replacement Parts

PART NUMBER	DESCRIPTION
2007900	Shipping plug for drum insert (Does not include shipping plug o-ring)
2290100	Shipping plug o-ring, EPDM
2307200	Shipping plug o-ring, FKM
2423400	Coupler o-ring kit, EPDM (Includes 2 o-rings)
2423500	Coupler o-ring kit, FKM (Includes 2 o-rings)
2166000	Drum insert flat gasket, 2" buttress, EPDM
2166100	Drum insert flat gasket, 2" buttress, FKM
2165800	Drum insert o-ring, 2" NPS (ISO G2) EPDM for steel drums
2165900	Drum insert o-ring, 2" NPS (ISO G2) FKM for steel drums
2165800	Drum insert o-ring, BCS 56x4, EPDM (same as ISO G2 for steel)
2165900	Drum insert o-ring, BCS 56x4, FKM (same as ISO G2 for steel)
2525200	Drum insert flat gasket, 2" NPS (ISO G2) EPDM for plastic drums
2525300	Drum insert flat gasket, 2" NPS (ISO G2) FKM for plastic drums



DRUMQUIK MODULAR

Specifications

Pressure: 0 to 45 psig (0 to 3.1 bar)

Temperature: 0°to 150°F (-17°to 65°C), polypropylene limited to 32°F (0°C)

Materials:

Main components:

Natural, virgin PTFE or polypropylene

Dip-Tube o-ring:

FEP Encapsulated Viton® FKM

DrumQuik o-rings: FEP Encapsulated Viton

(included with drum insert)

Lubricants: None used

Number of Ports: Two; one 3/4" female NPT liquid port and one 3/8" female NPT vent port (with backup o-rings included in o-ring kit)

Drum Thread: Industry standard 2" buttress coarse thread, 2" NPS fine thread and BCS 56x4 (European standard) – others available by special order; contact factory

Dip-Tube Length: 35.3" (897mm) or 55" (1397mm) (measured from sealing surface, may be trimmed to fit special container)

Visit <u>www.colder.com</u> for information about CQH and CQV modified product options.

Shown with CQG06 and CQH06 couplings.

Select your fluid line connector from the ChemQuik, HFC12 or Non-Spill coupling series. Contact Customer Service for assistance.

The easy to use DrumQuik® MODULAR

dispense system combines your choice of ChemQuik® or general purpose couplings with a modular dip-tube based system for the extraction of aggressive or ultra-pure chemicals from drums and IBCs. This extremely durable and reliable two-port, closed system increases operator safety and reduces downtime by virtually eliminating dangerous spills and fumes.

Features

Modular design

Two-port system

Standard threads

Polypropylene and PTFE materials

Benefits

Provides flexibility in system configuration

Eliminates fumes and allows blanket gas connection (N_2, CO_2) and recirculation

Fits common drum bungs (2" buttress, BCS 56x4, etc.)

Broad chemical compatibility

Look for part numbers marked with a ‡ for DrumQuik compatible couplings.

DrumQuik® MODULAR Configuration

DrumQuik® dip-tubes and mating ChemQuik® or general purpose couplings provide multiple configuration options for extracting chemicals from drums and IBC/tote containers, minimizing the potential for exposure and contamination.

Colder's ChemQuik, NSH or HFC12 Series couplings (or common fittings) can be used with the DrumQuik system to provide instant, safe and reliable connections of chemical lines to rigid containers. Simply thread the coupling(s) into the DrumQuik drum insert to provide the system connection. Then thread in a DrumQuik dip-tube of proper length (and a foot valve as required) for a perfect match to your drum or IBC/ tote. Insert the assembly into the container and your system is complete.

Drum Inserts: Polypropylene, PTFE

PART NO.	DESCRIPTION
DQMDI2PP2BUT	Polypropylene, 3/4" NPT liquid port, 3/8" NPT vent, 2" buttress
DQMDI2PP2NPS	Polypropylene, 3/4" NPT liquid port, 3/8" NPT vent, 2" NPS
DQMDI2PP56X4	Polypropylene, 3/4" NPT liquid port, 3/8" NPT vent, BCS 56x4
DQMDI2PP2BSPP	Polypropylene, 3/4" NPT liquid port, 3/8" NPT vent, 2" BSPP
DQMDI2PTFE2BUT	PTFE, 3/4" NPT liquid port, 3/8" NPT vent, 2" buttress
DQMDI2PTFE2NPS	PTFE, 3/4" NPT liquid port, 3/8" NPT vent, 2" NPS
DQMDI2PTFE56X4	PTFE, 3/4" NPT liquid port, 3/8" NPT vent, BCS 56x4
DQMDI2PTFE2BSPP	PTFE, 3/4" NPT liquid port, 3/8" NPT vent, 2" BSPP

Dip-Tubes: Polypropylene, PTFE

PART NO.	DESCRIPTION
DQMDTUBEPP35	Polypropylene, 35.3" (897mm) long from sealing surface
DQMDTUBEPP55	Polypropylene, 55" (1397mm) long from sealing surface
DQMDTUBEPTFE35	PTFE, 35.3" (897mm) long from sealing surface
DQMDTUBEPTFE55	PTFE, 55" (1397mm) long from sealing surface

Replacement O-ring Kit: FEP Encapsulated Viton®

PART NO. DESCRIPTION

DQMSKITFEPVITON Complete o-ring kit, FEP encapsulated Viton® FKM

(includes liquid port and bung o-ring)

Pipe Plugs: PFA

PART NO. DESCRIPTION DQMPLUGPFA06 Hex pipe plug, 3/8" NPT, PFA material Hex pipe plug, 3/4" NPT, PFA material DQMPLUGPFA12

Vent Check Valves: PVDF

PART NO. DOMCKPVDF0206 Check valve, PVDF, PTFE ball, Hastelloy® C spring, 3/8" male NPT inlet & outlet

Foot Valves: Polypropylene

PART NO.

DQMFVPP0208

Foot valve with screen, polypropylene & polypropylene screen, ceramic ball, DQMFVPP0204

PTFE seat, 1/4" male NPT (threads into bottom of DQM PTFE dip-tubes to

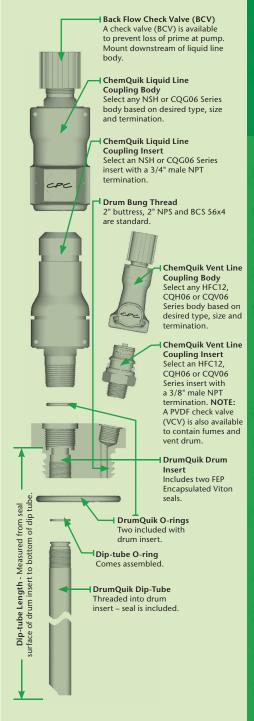
prevent back flow and loss of pump prime)

Foot valve with screen, polypropylene & polypropylene screen, ceramic ball, PTFE seat, 1/2" male NPT (threads into bottom of DQM polypropylene dip-tubes

to prevent back flow and loss of pump prime)

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. NOTE: Some applications require the use of a back flow check valve (BCV) which prevents reverse flow when suction pump is turned off. Colder recommends that the BCV be installed immediately downstream from the liquid line coupling body. Similarly, to allow air into drum, but prevent fumes from escaping, install a vent check valve (VCV) in vent port. Contact Colder's factory for assistance

DrumQuik Modular Dispense System



WARNING: Always check for chemical compatibility of all DrumQuik and coupling components for suitability in a specific application prior to use.



(shown with NSH Series)





BottleQuik UBA 2-Port Bottle Adaptor Kit (shown with CQG and CQH)

DrumQuik® UDA Kit **Polypropylene**

The DrumQuik® UDA Kit turns ChemQuik® or general purpose (HFC or NSH) couplings into a dip-tube that can easily be threaded into the 3/4" female NPS port of common drum closures. It provides a simple and inexpensive way to dispense chemicals in pumped systems. For your convenience, Colder offers a variety of drum adaptor plugs to facilitate easy drum connections. (See plugs and caps on page 103.)



DESCRIPTION PART NO.

DQUDAKITPP35 Adaptor & dip-tube, 37" (889mm) long from o-ring

surface (approx.), Viton® FKM seal

DOUDAKITPP55 Adaptor & dip-tube, 55" (1397mm) long, Viton FKM o-ring Use above kits with HFC12, NSH, CQG06 and CQH06 Series couplings.

DrumQuik UDA 2-Port Kit Polypropylene

Like the DrumQuik UDA Kit, the DrumQuik UDA 2-port system is intended to thread into the 3/4" female NPS port of common closures found in drums, jerry cans, pails or Nalgene® bottles. However, it features two ports; a 3/8" female NPT liquid port that connects to the dip-tube (included), and a 1/4" female NPT vent port. For your convenience, Colder offers a variety of drum adaptor plugs to facilitate easy drum connections. (See plugs and caps on page 103.)

DESCRIPTION PART NO.

DQUDA2PKITPP 2-Port adaptor & dip-tube, 35.5" (902mm) long,

Viton FKM o-ring.

3/8" Female NPT liquid port, 1/4" Female NPT vent port

Use above kits with EFC12, NS4, NSH, and HFC12 Series couplings.

DQUDA2PNALNUT 3/4" NPS hex nut with 1 3/8" hex

(Fits DQUDA2PKITPP to secure it to Nalgene bottle.

Must bore a 1 1/8" (28.5mm) hole in cap).

BottleQuik® UBA 2-Port Kit Polypropylene

The BottleQuik® is very similar to the DQ UDA 2-port, but is intended for use on reagent bottles with SP400-38mm threads. It can be used in either the upright position or inverted and has two 3/8" female NPT ports for liquid and vent ports.

PART NO. **DESCRIPTION**

2-Port adaptor CAP for 38mm SP-444 bottles DQUDACAP2PKITPP

& dip-tube, 17.75" (451mm) long, Viton FKM o-ring. 3/8" Female NPT liquid port, 3/8" female NPT vent port,

3/8" Female NPT vent port

Use above kits with CQG, CQH and CQV Series couplings.

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters. NOTE: The DQ UDA kits are designed to work with Colder couplings that have 3/4" NPT male terminations. The DQ UDA 2-Port kits are designed to work with a 3/8" NPT male on the liquid port and a 1/4" NPT male on the vent port. A 3/8" male NPT to 1/4" female NPT reducer bushing may be required to accommodate smaller NS4, PLC and PMC Series couplings. BottleQuik features two 3/8" female NPT ports. NOTE: The DrumQuik Modular and DrumQuik Adaptors are intended for end-use applications not requiring compliance with UN/DOT standards for use in transportation of hazardous materials.

DrumQuik® Asian Drum Adaptors **Polypropylene**

The DrumQuik® Asian drum adaptors allow ChemQuik® or general purpose (HFC or NSH) couplings to be easily connected to the unique threads common in many drum closures (with integral dip-tubes) manufactured in Asia, e.g., Kodama, Accelo, Stella, Dung Woo, etc. A 3/4" female NPT inner thread can accept any coupling or fitting with a 3/4" male NPT termination.

PART NO. DQADAPP0212	DESCRIPTION Adaptor, Viton® FKM seals, 3/4" female NPT inner port x 3/4" NPS male thread to fit drum plug.
DQADAPP0622	Adaptor, Viton FKM seals, $3/4$ " female NPT inner port x 1-3/8" male buttress thread to fit drum plug.

DrumQuik Modular and UDA Check Valves and Foot Valves Check Valves: PVDF | Foot Valves: Polypropylene

The DrumQuik check valves and foot valves are intended for use with DrumQuik MODULAR and UDA Dispense Systems. Check valves can be used as a vent check valve (VCV), which allows make-up air into the drum when liquid is removed, but will prevent fumes from escaping. They can also be used as a back flow check valve (BCV), which will prevent the pump from losing its prime during extended periods of inactivity. Foot valves serve the same function as the BCV, with the added benefit of preventing fluid loss from the bottom of the dip-tube during transfer from drum to drum.

PART NO. DQMCKPVDF0204	DESCRIPTION PVDF, PTFE Ball, Hastelloy® C spring, viton o-ring, 1/4" male NPT inlet & outlet (use for DQUDA2PKITPP vent line)
DQMCKPVDF0206	PVDF, PTFE Ball, Hastelloy C spring, Viton o-ring, 3/8" male NPT inlet & outlet (use for DQM vent line OR for DQUDA2PKIT liquid line back flow prevention)
DQMCKPVDF0208	PVDF, PTFE Ball, Hastelloy C spring, Viton o-ring, 1/2" male NPT inlet & outlet (use for DQM back flow prevention for polypropylene DQM systems)
DQMFVPP0204	Polypropylene & polypropylene screen, ceramic ball, PTFE seat, 1/4" male NPT (threads into bottom of DQM PTFE dip-tubes to prevent back flow and loss of pump prime)
DQMFVPP0208	Polypropylene & polypropylene screen, ceramic ball, PTFE seat, 1/2" male NPT (threads into bottom of DQM polypropylene dip-tubes to prevent back flow and loss of pump prime)
DQMFVPP0708	Polypropylene & polypropylene screen, ceramic ball, PTFE seat, compression for 1/2" OD tube (attaches to bottom of DQUDA & DQUDA2P dip-tubes to prevent back flow and loss of pump prime)

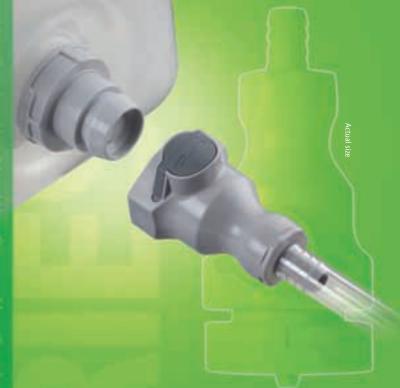
DrumQuik Plugs and Caps

For your convenience, Colder offers several sizes of common bung plugs and caps that have the internal 3/4" female NPS thread, into which the DrumQuik Universal Drum Adaptors/ChemQuik couplings are threaded.

PART NO. DQMBUNGPP2BUT12	DESCRIPTION Bung closure, polypropylene, EPDM o-ring, 2" buttress x 3/4" female NPS
DQMBUNGPP2NPS12	Bung closure, polypropylene, EPDM o-ring, 2" NPS x 3/4" female NPS
DQMBUNGPP56X412	Bung closure, polypropylene, EPDM o-ring, BCS56x4 x 3/4" female NPS
DQMCAPPP70MM	Cap closure, polypropylene, EPDM o-ring, 70mm x 3/4" female NPS







The patented 3/8" flow Universal Dispensing Coupler (UDC) provides a universal connection to a 38mm fitment neck. Make instant connections to bulk packaging systems including bag-in-box (BIB), flexible and rigid packaging styles. Automatic flush face valves minimize costly or dangerous spillage. An ergonomic design and a large, shrouded thumb latch pad produce a coupling that is easy to grip and simple to operate.

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

Features

Universal 38mm cap Flush face/non-spill valves Integral terminations

Shrouded thumb latch RFID technology (iUDC only)

Benefits

Fits most manufacturers' fitment necks Minimizes spillage

Fewer leak points, shorter assemblies, faster installations

Protects against accidental disconnects Helps maintain warranty, integrity, brand protection

Specifications

Pressure:

20" Hg vacuum to 15 psi, 1 bar (body only)

Temperature:

32°F to 160°F (0°C to 71°C)

Materials:

Main body components and valves:

Polypropylene

Springs: Stainless steel

UDC caps: Acetal, polypropylene

O-rings (food grade):

UDC: EPDM, silicone, Buna-N

iUDC: EPDM, silicone CIP adapter: Acetal

Color: Light gray with dark gray latch

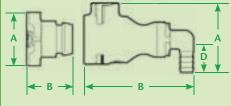
Closure Size: SP-400 38mm

Tubing Sizes:

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

All UTOC Series products are listed under NSF/ ANSI standard 169

Product Dimensions



Height/Diameter

Total Length (including valve)

D = Elbow Radial Length

Coupling Bodies



TERMINATION IN-LINE HOSE BARB

TUBING SIZE SILICONE O-RING 3/8" ID 99000 1/2" ID 95600 5/8" ID 99100 3/4" ID 99200

98400 97600 97900

98600

BUNA-N O-RING EPDM O-RING 98500 95300 98100

1.73 3.06 1.73 3.06 1.73 3.20 1.73 3.21



TERMINATION FIBOW **HOSE BARB**

TUBING SIZE 3/8" ID 1/2" ID

SILICONE O-RING 99300 95400

BUNA-N O-RING 97800 97700

EPDM O-RING 99400 95100

98700

Α 1.73 1.73

В D 3.25 .93 3.25

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters.

TERMINATION DESCRIPTION SILICONE O-RING **EPDM O-RING BUNA-N O-RING** THREAD-ON. Without thread seal 95800 96400 97400 1.70 1.47 38MM, VALVED With thread seal 95801 96401 97401 1.70



POLYPROPYL

TERMINATION SNAP-IN 38MM VALVED	DESCRIPTION	SILICONE O-RING 9461300	EPDM O-RING 9500000	A 1.15	B 1.77
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THREAD-ON, With thread seal 9462000 1.70 1.48 38MM, VALVED

NOTE: Snap-in closure designed to fit Scholle 900 bag necks.

Clean-in-Place (CIP) Adapter

TERMINATION PART NO. DESCRIPTION Α В **IN-LINE** 1/2" HB (no o-ring) 96000 1.15 1.56

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.



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.

SMART COUPLINGS WITH RFID

IdentiQuik UDC 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:

8-25 V standard. 5V only available

Power Consumption:

350mW maximum

Communications:

ASCII RS-232 (DB-9)

RFID Tag:

13.56 MHz ISO/5693 - 112 bytes programmable

NOTE: I-Code SL1 tags are available for existing applications, contact the factory for assistance.

Temperature:

32°F to 158°F (0°C to 70°C)

Coupling Readers

Product Dimensions (See drawing on page 106)

4	3						
ij,	TERMINATION	TUBING SIZE	METRIC EQ.	SHUTOFF			
4	IN-LINE	1/4" ID	6.4mm ID	iUDCD4HP24A00	2.00	3.49	
	HOSE BARB	3/8" ID	9.5mm ID	iUDCD6HP24A00	2.00	3.49	
		1/2" ID	12.7mm ID	iUDCD8HP24A00	2.00	3.49	
		5/8" ID	15.9mm ID	iUDCD10HP24A00	2.00	3.49	
		3/4" ID	19mm ID	iUDCD12HP24A00	2.00	3.49	

Caps

TERMINATION DESCRIPTION METRIC EQ. THREAD-ON. 1.70 1.47 Without thread seal 38mm **IUDCDPU** 38MM, VALVED **IUDCDPT** With thread seal

W.							
	TERMINATION THREAD-ON, 38MM, VALVED	DESCRIPTION Without thread seal With thread seal	METRIC EQ. 38mm 38mm	SHUTOFF iUDC12DPU iUDC12DPT	A 1.70 1.70	B 1.48 1.48	
	TERMINATION SNAP-IN 38MM VALVED		METRIC EQ. 38mm	SHUTOFF iUDCDPS	A 1.62	B 1.76	

 $All\,measurements\,are\,in\,in ches (millimeters)\,unless\,other wise noted.\,Tubing\,must\,meet\,stated\,in side\,and\,out side\,diameters.$

Materials are listed on page 104. Customized parts (materials, voltage, termination, cable length, etc.) available. Call for more information.



Pressure: 120 psi, 8.3 bar

Temperature:

32°F to 160°F (0°C to 71°C)

Materials:

Main components and valves: Polypropylene

38mm closure: Polyethylene (LDPE)

Thumb latch: Stainless steel Valve spring: 316 stainless steel

External spring and pin: Stainless steel

O-rings: EPDM

Closure Size: SP-400 38mm

Tubing Sizes:

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

The 1/4" flow Puncture Seal dispensing system provides clean and safe liquid dispensing from bag-in-box (BIB) or other types of flexible packaging. The system consists of a Puncture Seal closure cap and a specially designed quick disconnect coupling body. The closure makes a positive thread or snap-in seal with a 38mm fitment neck. The Puncture Seal coupling body automatically breaks the membrane seal on the closure cap when connected. To switch to a new container, simply depress the Colder thumb latch to disconnect the system and then connect the Puncture Seal coupling body to a fresh container.

Features

Puncture Seal coupling

Polypropylene and polyethylene materials
Puncture Seal membrane
Colder thumb latch

Benefits

Easily breaks the Puncture Seal membrane

Greater chemical resistance

Eliminates shipping caps and o-rings One-hand connection and disconnection Also available in
NSF listed versions,
please visit our web
site for part number
information

Coupling Body

TERMINATION IN-LINE HOSE BARB

TUBING SIZE 1/4" ID 3/8" ID

METRIC EQ. 6.4mm ID 9.5 mm ID

STRAIGHT THRU PS1700412 PS1700612

SHUTOFF PSD1700412 PSD1700612

1.95 1.95

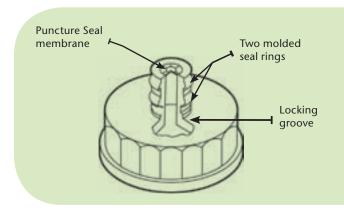


Closure

POLYETHYLENE

TERMINATION THREAD-ON, 38MM	PSC38mm	1.7	HEIGHT 1.12
TERMINATION SNAP-IN 38MM	PART NO. 496200	LENGTH 1.88	HEIGHT 1.62







DID YOU KNOW...

Colder's Puncture Seal closures can be used to dispense virtually any liquid from flexible packages? The Puncture Seal makes transporting and dispensing cleaning concentrates, dry cleaning chemicals and soaps cleaner and safer. Printing inks, photo developers and dying agents can also be dispensed quickly and easily, without messy drips or spills. The Puncture Seal can also be used with beverage and condiment dispensing systems, just look for the NSF-listed part numbers.

Custom Coupling Designs

Collaborative solutions result from cooperation between Colder and its customers to develop diverse designs that improve their products' performance while leveraging our extensive design and manufacturing expertise.



Identify misconnections, automatically identify fluid characteristics, capture connection usage data - the possibilities are endless!









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Custom Tube Connections Connect to a wide variety of types and sizes of tubing



Custom designed products are exclusively produced for a specific customer. These proprietary products might not be for sale. Contact your local distributor for special application

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



Sterilization and Disinfectant Methods

						METH	OD		
KEY	Y= Excellent, recommended material for this sterilization method N= No, not recommended N/A = Not Applicable	FORMALIN	ISOPROPYL ALCOHOL	ETHYL ALCOHOL SAN	ETHYLENE OXIDE	AUTOCLAVE	SO KILOGRAYS SO KILOGRAYS	SO KILOGRAYS	DRY HEAT
	METALS 302 STAINLESS STEEL 316 STAINLESS STEEL CHROME-PLATED BRASS-CDA 360	Y Y N	Y Y	Υ Υ Υ	Y Y	ү ү ү	Υ Υ Υ	Υ Υ Υ	Y Y Y
MATERIAL	POLYMERS ABS ACETAL LDPE NYLON POLYCARBONATE POLYPROPYLENE POLYSULFONE	N Y Y Y Y Y	N/A Y Y N Y Y	Y Y Y N Y Y	Y Y Y Y Y Y	N Y N N Y N	Y N Y N Y Y	Y N Y N Y Y	N N N N Y
	ELASTOMERS NITRILE/BUNA-N SILICONE KALREZ® EPR/EPDM FKM/VITON®	Y Y Y Y	ү ү ү ү	Y Y Y Y	N Y Y Y N	N Y Y Y N	Y Y N Y	Y Y N Y	Y Y Y Y

Sterilization Methods

DISINFECTANTS: 70°F (20°C), Formalin, ethyl alcohol, etc. Sterilize coupled or uncoupled.

ETHYLENE OXIDE, EtO: Four hours, 100% EtO @ 110°F (43°C), up to five repetitions, coupled or uncoupled.

AUTOCLAVE:

Polycarbonate: 250°F (121°C), 30 minutes, up to 10

repetitions. Sterilize uncoupled only.

Polysulfone: 270°F (132°C) for 60 minutes, up to 25

repetitions. Sterilize uncoupled only.

Steam-Thru Connection: 265°F (129°C) for 30 minutes, up to

two cycles. (part number specific)

HFC39: 270°F (132°C) for 60 minutes, up to 25 repetitions for uncoupled units and up to one repetition for coupled units.

ELECTRON BEAM (E-BEAM): Maximum cumulative exposure of 50 kilograys. Sterilize coupled or uncoupled.

GAMMA: Maximum cumulative exposure of 50 kilograys. Sterilize coupled or uncoupled.

DRY HEAT: 250°F (121°C), 12 hours, no pressure. Sterilize uncoupled only.

SIP PROCESS:

Up to 266°F (130°C) for 60 minutes (Steam-Thru Connection) Up to 275°F (135°C) for 60 minutes (Steam-Thru II Connection)

Regulatory and Compliance

FDA and USDA

The U.S. Food and Drug Administration publishes, through the Code of Federal Regulations, standardized criteria which govern the acceptability of materials used in food contact. The U.S. Department of Agriculture publishes similar standards that mirror FDA criteria. Neither agency approves or disapproves products for particular applications. Most of Colder's products are made using resins that comply with applicable FDA or USDA standards. When necessary, the standard o-ring seals are replaced with specific, recognized materials.

NSF International, based in Ann Arbor, Michigan, develops and publishes consensual criteria that govern the acceptability of materials and equipment used in food and beverage processing. They also do testing to verify the performance of materials or devices to their published criteria. Colder lists many of its product lines under the criteria of NSF/ANSI Standard 169 (formerly C-2), which governs components used in food and beverage contact applications.

ISO 9001:2000 Certification

ISO 9001:2000 is a standard which assures consistency of a product ordered by customers. Organizations having ISO 9001:2000 certification have demonstrated compliance to the ISO 9001:2000 requirements by an independent registration authority. Colder Products Company's Quality Management System has been approved and certified under the ISO 9001:2000 standard.

Regulation of Hazardous Substances
The RoHS Directive stands for "the restriction of the use of certain hazardous substances in electrical and electronic equipment". This Directive bans the placing on the EU market of new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants.

Cleanroom Manufacturing

Colder Products Company manufactures certain Life Sciences and Chemical Management product lines in a cleanroom certified by an external testing service to meet or exceed ISO Class 7 (10,000) at 0.5 mm per ISO 14644 and the former Federal Standard 209E. Certification data can be provided upon request.

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Coupling Material Descriptions

Thermoplastics

Economical medical-grade thermoplastic that withstands gamma and e-beam sterilization. It is commonly used in medical devices. ABS is an amorphous material with good physical properties and high resistance to chemical attack.

Strong, lightweight and economical, and is used for a wide variety of chemical and mechanical components. Acetal offers high strength and rigidity over a broad temperature range, low wear, toughness and resistance to repeated use.

Polyamide (Nylon)

Very resistant to wear and abrasion, good mechanical properties even at elevated temperatures, low permeability to gases, and good chemical resistance.

PEEK (Polyetheretherketone)

Highly temperature resistant, engineered thermoplastic with excellent chemical and fatigue resistance. It exhibits superior mechanical and electrical properties.

Polycarbonate

Resistant to some chemicals, withstands sterilization and is transparent. It is commonly used in medical devices and offers impact resistance, outstanding dimensional stability and good optical properties.

Polyethylene

Low-cost, chemically resistant thermoplastic. It is opaque, and can withstand reasonably high temperature. Polyethylene, unlike polypropylene, cannot withstand normally required autoclaving

Polypropylene

Excellent general purpose resin that is highly resistant to chemical attack from solvents and chemicals in harsh environments. In general, polypropylene is resistant to environmental stress cracking, and it can be exposed to challenging environments.

Polysulfone

Rigid material with excellent strength, good chemical resistance, withstands repeated sterilization, and higher temperatures than other thermoplastics. Its high hydrolytic stability allows its use in medical applications requiring autoclave and steam sterilization.

PPS (Polyethylene Sulfide)

Broadest resistance to chemicals for its market as an advanced engineering plastic. (PEEK and PTFE have better resistance, but are not considered engineering resins.)

Fluoropolymers

PTFE

Chemically resistant to all chemicals and solvents with the exception of some molten metals, molten sodium hydroxide, elemental fluorine, and certain fluorinating agents. PTFE offers chemical resistance and stability at high temperature.

Tough engineering thermoplastic with a balance of physical and chemical properties that qualify it for high performance in a wide range of applications. It is mechanically strong and tough, has good ductility, and has a broad, useful temperature range.

Alloys

Aluminum

Lightweight metal with an available hard anodized finish for durability. Aluminum is non-toxic, non-magnetic and non-sparking and is known for its high strength to weight ratio.

Chrome-plated Brass

Rugged metallic material with an attractive appearance, chromeplated brass is excellent for higher pressure and temperature.

Die-cast Zinc

Durable and lightweight (about 20% less than comparable brass) material that withstands high pressure and temperature.

O-Rings

Buna-N

The most common o-ring material is Buna-N due to its solvent, oil and water resistance. It has a temperature range of -30° to 250° F.

Ethylene-propylene-diene rubber (EPDM, also sometimes referred to as EPR) is a chemically resistant family of compounds. Colder uses high quality peroxide cured EPDMs that provide exceptional resistance to temperatures with a wide range of chemicals.

FFKM (Chemraz®, Simriz®, Kalrez®)

Broadest range of chemical resistance of any elastomeric material, combining the resilience and sealing force of an elastomer with chemical resistance approaching that of PTFE.

Well known for its outstanding resistance to heat, oxidation, weathering, and ozone. The temperature range is -15° to 400° F.

Food-grade

Commonly used when food, beverages or potable water is going through the coupling.

PFA & FEP Encapsulated Seals

Encapsulated seals combine the resiliency of the elastomer with the superior chemical resistance of the fluoropolymer to achieve a seal that is lower cost than a pure fluoroelastomer FFKM seal.

Seals have good temperature resistance. The temperature range is -70° to 400° with special compounds that can reach 175° to 450° F. Silicone can also be supplied with Class VI requirements for life sciences applications.

Elastomers

Thermoplastic Elastomer (TPE) is a blend of additives and copolymers in a special formulation that forms extremely durable bonds to a substrate, while offering the traditional properties of soft-touch overmold.

TPV

Thermoplastic Vulcanizate (TPV) is an alloy of polypropylene thermoplastic and fully vulcanized EPDM rubber. TPV is typically resistant to water, acids and bases.

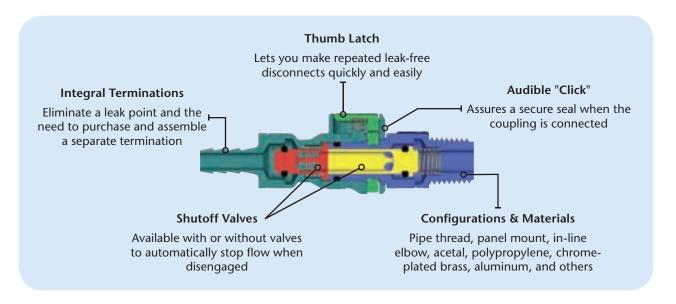
Don't forget: you can always visit <u>www.colder.com</u> for more product information.

Why Choose a Colder Product?

Colder's proprietary, engineered solutions improve the overall functionality and design of the equipment and processes in which they are used. For users of Colder's advanced coupling technologies the result is cleaner, faster, safer and smarter fluid management.

Key Features and Benefits

- Flexibility: allows quick connection of subassemblies
- Utility: makes equipment replacement and upgrades fast and easy
- Safety: eliminates dangerous and messy spills
- Serviceability: no tools needed to disconnect for maintenance and repairs
- Modularity: allows quick connection of attachments and accessories
- Convenience: they're easy to use and economical



Notes:













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Colder Patent Statement: Colder Products Company takes pride in its innovative quick disconnect coupling solutions, many of which have been awarded United States and International patents. Colder Products Company has a strong tradition of leadership in the quick disconnect market, and aggressively pursues and protects its proprietary information and intellectual property. In cases where it is practical and as a benefit to its customers, Colder Products Company has licensed its proprietary technology. Please contact Colder Products to discuss your unique needs.

CPC Warranty Statement: Colder Products Company warrants its products against defects in workmanship and materials a period of 12 months from the date of sale by Colder Products Company to its initial customer (regardless of any subsequent sale of the products). This warranty is void if the product is misused, altered, tampered with or is installed or used in a manner that is inconsistent with Colder Product Company's written recommendations, specifications and/or instructions, or fails to perform due to normal wear and tear. Colder Products Company does not warrant the suitability of the product for any particular application. Determining product application suitability is solely the customer's responsibility. Colder Products Company is not liable for special, indirect, incidental, consequential or other damages including, but not limited to, loss, damage, personal injury, or any other expense directly or indirectly arising from the use of or inability to use its products either separately or in combination with other products. ALL OTHER WARRANTIES EXPRESS OR IMPLIED, WHETHER ORAL, WRITTEN OR IN ANY OTHER FORM, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY EXCLUDED.

The sole and exclusive remedy under this warranty is limited, at the option of Colder Products Company, to replacement of the defective product or an account credit in the amount of the original selling price. All allegedly defective Colder Products Company products must be returned prepaid transportation to Colder Products Company, together with information describing the product's application and performance, unless otherwise authorized in writing by Colder Products Company.

Colder Trademark Statement: ChemQuik®, DrumQuik®, IdentiQuik®, Steam-Thru®, and Softube® are registered trademarks with the U.S. Patent & Trademark office. AseptiQuik™, BreakAway™, Twin Tube™, Sixtube™, Tentube™ and SaniQuik™ are registered trademarks with the U.S. Patent & Trademark Office. All other trademarks or service marks are property of their respective owners.

WARNING: Due to the wide variety of possible fluid media and operating conditions, unintended consequences may result from the use of this product, all of which are beyond the control of Colder. It is the user's responsibility to carefully determine and test for compatibility for use with their application. All such risks shall be assumed by the buyer.

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