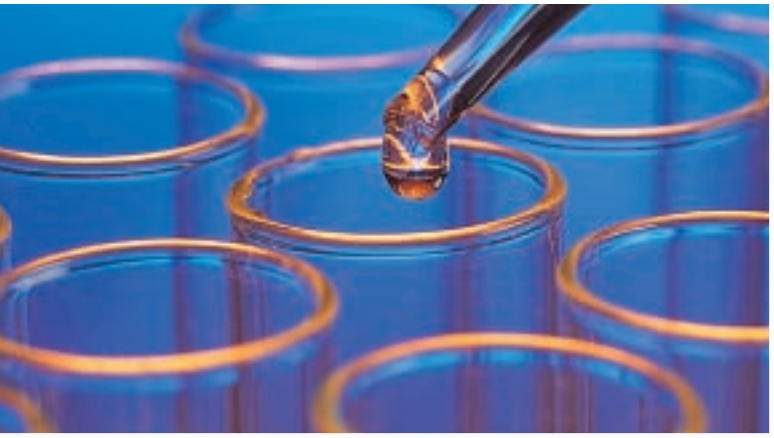
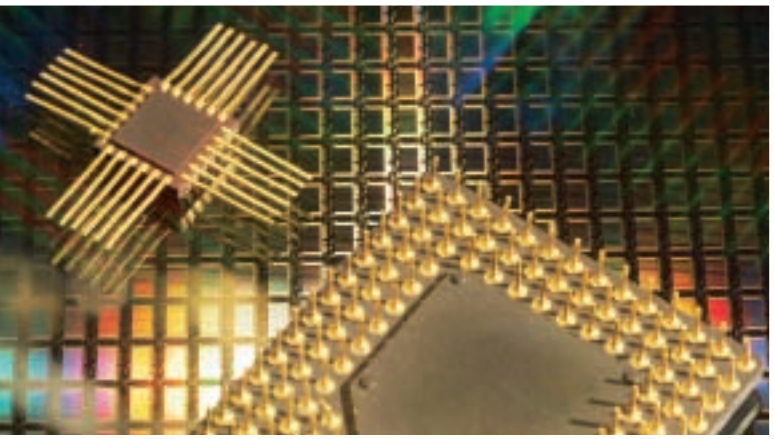
Quick Disconnect Couplings for
CHEMICAL MANAGEMENT

Featuring ChemQuik® High Purity Couplings






Colder Products Company®
Quick Couplings & Fittings for Plastic Tubing

Colder Products Company

This Chemical Management catalog features Colder Products' most popular and sophisticated products, designed for handling aggressive chemical media. The world leader in plastic quick disconnect technology, Colder offers you the largest selection available anywhere.

Increase Safety, Time-Savings and Profits

Colder couplings have a variety of unique features to help improve your application:

- Corrosion resistant material combinations provide broad chemical compatibility options
- Automatic shutoff valves allow instant disconnection without draining lines
- All plastic couplings and versions with all plastic and spring-free flow paths
- Pressure-balanced designs allow disconnects and reconnects while under pressure
- Non-spill designs reduce spillage/air inclusion to < 0.1 ml — no more fumes or vapors
- Color-coding and/or physical keying systems help prevent misconnects of critical lines
- Integral fitting terminations are more compact, and reduce assembly time and leak points
- The thumb latch design is easy to use and allows single-handed operation

Chemical Jerry Cans, Drums, IBCs, and Rigid Container Systems

For extraction of chemicals from jerry cans, drums, IBC's (totes), and other rigid containers, Colder offers the **DrumQuik® MODULAR** system, a closed system that helps protect operators from fluid or vapor contact. The DrumQuik system can be assembled from off-the-shelf components using any of the Colder coupling models featured in this catalog. In addition, the new **DrumQuik MODULAR Universal Drum Adaptor** kits turn any coupling into a dip-tube system.

Special Design Features

To quickly select the best coupling for your application, look for the colored icons located throughout the catalog to quickly find the coupling series that has the features you want.

PB Pressure-Balanced Couplings:

Only available from Colder, couplings featuring our unique patented Pressure-Balanced design have no springs in the flow path, which eliminates the potential for corrosion and results in exceptionally high flow capacity. Also, there is no increase in the force-to-connect as system pressure increases, i.e., the coupling is no harder to connect at high pressure than at ambient pressure. Coupling may be disconnected/reconnected under pressure.

NS Non-Spill Couplings:

Couplings with this symbol feature Non-Spill valves. Spillage upon disconnect and air inclusion upon reconnect are minimized to almost zero — typically in the range of 0.1 ml or less, a fraction of standard couplings, even when disconnected under pressure.

HP High Purity Couplings:

High Purity couplings are manufactured and packaged in a manner that helps preserve the purity of high grade PPM, PPB or even PPT chemicals. No lubricants are used in HP couplings. All **ChemQuik®** couplings conform to HP specifications. Some models feature all plastic, Pressure-Balanced and/or Non-Spill construction.

GP General Purpose Couplings:

Couplings with this symbol are intended for general purpose chemical handling applications, with emphasis on high performance at the lowest possible cost. Some GP models feature Pressure-Balanced and/or Non-Spill construction. Typically GP couplings use a seal lubricant such as Krytox® PFPE (inert in virtually all media) or silicone to facilitate long life and low force-to-connect.

www.colder.com

ChemQuik® winner of these awards

Member of semi

Choosing the Right Coupling for your Application

To simplify the process of selecting a coupling for your application, we recommend that you first identify the following design parameters, then, proceed to the most appropriate coupling section, using the table located below.

1. What is the required flow capacity in gallons per minute (liters per minute)?
2. What is the acceptable pressure drop at the required flow rate (psid/bar)?
3. What are acceptable materials of construction for main components, springs and seals?
4. What is the required operating pressure and temperature?
5. Is a Non-Spill (NS) coupling required or is a small amount of spillage acceptable? The trade-off is that a Non-Spill coupling may be a bit larger in size for a given flow capacity rating and may be slightly more costly.
6. Are springs located in the flow path acceptable? If NO, choose a Pressure-Balanced (PB) coupling.
7. Is a High Purity (HP) coupling needed or will a General Purpose (GP) coupling suffice?
8. Is all plastic construction required? Are plastic springs located in the flow path acceptable? If YES, only ChemQuik CQH06 and CQV06 couplings offer these features. ChemQuik CQG06, CQN06, CQN08, and NSH have a spring-free, all plastic flow path. NS4, NS6, EFC12, and HFC12 have 316SS metal springs in the flow path.

WARNING: Pressure, temperature, chemical type and concentration, 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.

	Coupling Series	ChemQuik CQG06	ChemQuik CQH06	ChemQuik CQV06	ChemQuik CQN06	ChemQuik CQN08	NSH	NS6	NS4	HFC-12	EFC12
1	*Cv (Kv) Flow Cap.	3.2 (46.0)	1.6 (23.0)	1.6 (23.0)	3.0 (43.1)	7.3 (104.9)	3.3 (47.4)	2.2 (31.6)	0.6 (8.6)	2.0 (28.7)	0.87 (12.5)
2	@ 10 psid	10.2 (38.6)	5.1 (19.2)	5.1 (19.2)	9.5 (36.0)	23.1 (87.4)	10.4 (39.4)	7.0 (26.3)	1.9 (7.2)	6.3 (23.9)	2.8 (10.4)
2	@25 psid GPM(LPM)	16.0 (60.6)	8.0 (30.3)	8.0 (30.3)	15.0 (56.8)	36.5 (138.2)	16.5 (62.4)	11.0 (41.6)	3.0 (11.4)	10.0 (37.9)	4.4 (16.5)
3	Material	Natural Polypro/ PTFE Valve	Natural Polypro	Natural PVDF	Natural PTFE/ PTFE Valve	Natural PTFE/ PFA	Glass-Filled, Gray Polypro	Glass-Filled, Gray Polypro/ TPE case	Glass-Filled, Gray Polypro/ TPE case	Gray, Unfilled Polypro	Gray, Unfilled Polypro
3	Seal Material	Viton® FKM	Viton® FKM	Chemraz® FFKM	Chemraz® FFKM	Chemraz® FFKM	EPDM	EPDM	EPDM	EPDM	EPDM
3 8	Spring Material	Hastelloy C Non-Wetted	PEEK® Wetted	PEEK® Wetted	Teflon® Encapsulated 316 SST Non-Wetted	Teflon® Encapsulated 316 SST Non-Wetted	316 SST Non-wetted	316 SST Wetted	316 SST Wetted	316 SST Wetted	316 SST Wetted
4	**Op Press. Psig (Bar)	Vac - 80 (Vac - 5.5)	Vac - 80 (Vac - 5.5)	Vac - 80 (Vac - 5.5)	Vac - 80 (Vac - 5.5)	Vac - 80 (Vac - 5.5)	Vac - 120 (Vac - 8.3)	Vac - 120 (Vac - 8.3)	Vac - 120 (Vac - 8.3)	Vac - 60 (Vac - 4.1)	Vac - 105 (Vac - 7.2)
4	**Op Temp. ° F (° C)	32 - 150 (0 - 66)	32 - 225 (0 - 107)	0 - 150 (-18 - 66)	0 - 150 (-18 - 66)	0 - 150 (-18 - 66)	32-120 (0 - 49)	32 - 160 (0 - 71)	32 - 160 (0 - 71)	32 - 160 (0 - 71)	32 - 160 (0 - 71)
NS 5	Non-Spill/ Amt in ml	YES (< 0.1)	NO (1.5)	NO (1.5)	YES (< 0.1)	YES (< 0.15)	YES (< 0.1)	YES (< 0.1)	YES (< 0.1)	NO (1.5)	NO (1.0)
PB 6	Pressure Balanced	YES	NO	NO	YES	YES	YES	NO	NO	NO	NO
GP HP 7	Purity Grade	HP, No Lube Used	HP, No Lube Used	HP, No Lube Used	HP, No Lube Used	HP, No Lube Used	GP, Krytox® PFPE Used	GP, Krytox® PFPE Used	GP, Krytox PFPE Used	GP, Silicone Lube Used	GP, Silicone Lube Used
	Page Number	9	10	11	12	13	14	16	18	20	22

***FLOW COEFFICIENT (C_V)** is based on imperial units of gpm and psi. **FLOW FACTOR (K_V)** is based on SI/metric units of lpm and bar. C_V and K_V are related as follows: $K_V = 14.368 \times C_V$.

****NOTE:** Operational pressure rating varies with operating temperature. Consult individual coupling section for detailed pressure/temperature information. Many couplings are rated for vacuum service. Please consult factory for details and ratings.

Table of Contents

Couplings connected and shown actual size (approximate).
For additional terminations and configurations, see product pages.

Smart Coupling Technology

Smart Coupling Technology Overview

This section describes how the application of Colder's innovative RFID electronic data transfer capability can make our couplings safer to use and provide valuable process/tracking information to user systems.

High Purity ChemQuik® Series

CQG06 Series HP PB NS

CQGD06 20 0108 & CQGD 06 10 0108

Wetted Material: Natural, Virgin Polypropylene, PTFE, Viton® FKM
Flow Rating: C_V 3.2/K_V 46.0
Temperature Rating: 32-150° F, 0-66° C
Pressure Rating: Vac-80 psig, 5.5 bar

CQH06 Series HP

CQHD06 20 0106 05 & CQHD06 10 0106 05
(05 color-coded option shown)

Wetted Material: Natural, Virgin Polypropylene, PEEK®, Viton® FKM
Flow Rating: C_V 1.6/K_V 23.0
Temperature Rating: 32-225° F, 0-107° C
Pressure Rating: Vac-80 psig, 5.5 bar

High Purity ChemQuik® Series

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CQV06 Series HP

CQVD06 20 0108 & CQVD06 10 0106

Wetted Material: Natural, Virgin PVDF, PEEK®, Chemraz® FFKM
Flow Rating: C_V 1.6/K_V 23.0
Temperature Rating: 0-225° F, -17-107° C (see note)
Pressure Rating: Vac-80 psig, 5.5 bar

NOTE: If coupling will be left disconnected while under pressure and temperature, then limit temperature to 150° F, 65° C.

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CQN06 Series HP PB NS

CQND06 20 0108 & CQND06 10 0108

Wetted Material: Virgin PTFE (modified, Dyneon™ TFM and/or Teflon® NXT 75), Chemraz® FFKM
Flow Rating: C_V 3.0/K_V 43.1
Temperature Rating: 0-150° F, -17-66° C
Pressure Rating: Vac-80 psig, 5.5 bar

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CQN08 Series HP PB NS

CQND08 20 0112 05 & CQND08 10 0116 05

(05 color-coding & physical key shown)

Wetted Material: Virgin PTFE (modified, Dyneon™ TFM and/or Teflon® NXT 75) and/or PFA, Chemraz® FFKM
Flow Rating: C_V 7.3/K_V 104.9 (C_V 9.4/K_V 135.1 with non-valved insert)
Temperature Rating: 0-150° F, -17-66° C
Pressure Rating: Vac-80 psig, 5.5 bar

General Purpose Series

PAGE 14

NSH Series GP PB NS

NSHD22006 & NSHD17012

Wetted Material: Glass-Filled, Gray Polypropylene, EPDM
Flow Rating: Cv 3.3/Kv 47.4
Temperature Rating: 32-120° F, 0-49° C
Pressure Rating: Vac-120 psig, 8.3 Bar

NEW! PAGE 16

NS6 Series GP NS

NS6D22006 & NS6D17008

Wetted Material: Glass-Filled, Gray Polypropylene, EPDM, 316SS
Flow Rating: Cv 2.2/Kv 31.6
Temperature Rating: 32-160° F, 0-71° C
Pressure Rating: Vac-120 psig, 8.3 bar

NEW! PAGE 18

NS4 Series GP NS

NS4D22002 & NS4D17006

Wetted Material: Glass-Filled, Gray Polypropylene, EPDM, 316SS
Flow Rating: Cv 0.6/Kv 8.6
Temperature Rating: 32-160° F, 0-71° C
Pressure Rating: Vac-120 psig, 8.3 bar

PAGE 20

HFC12 Series GP

HFCD22612 & HFC171212

Wetted Material: Gray Polypropylene, EPDM, 316SS
Flow Rating: Cv 2.0/Kv 28.7
Temperature Rating: 32-160° F, 0-71° C
Pressure Rating: Vac-60 psig, 4.1 bar

PAGE 22

EFC12 Series GP

EFCD22412 & EFCD17612

Material: Gray Polypropylene, EPDM, 316SS
Flow Rating: Cv 0.87/Kv 12.5
Temperature Rating: 32-160° F, 0-71° C
Pressure Rating: Vac-105 psig, 7.2 bar

DrumQuik® Series Dip-Tube Systems for Rigid Containers (photos shown not to scale)

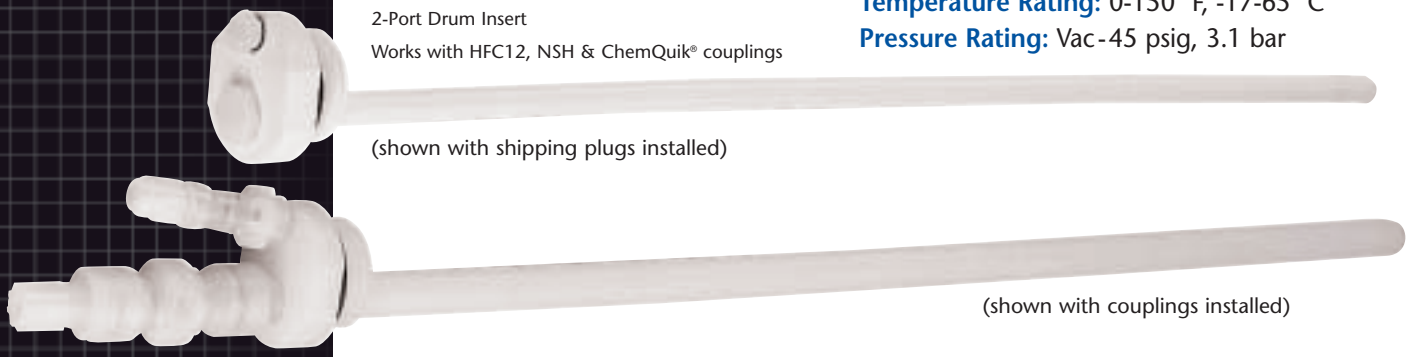
NEW! PAGE 24

DrumQuik® GP HP MODULAR Series

2-Port Drum Insert

Works with HFC12, NSH & ChemQuik® couplings

Wetted Material: Virgin Polypropylene or PTFE
Flow Rating (C_V): Dependent on coupling used
Temperature Rating: 0-150° F, -17-65° C
Pressure Rating: Vac-45 psig, 3.1 bar



(shown with shipping plugs installed)

(shown with couplings installed)

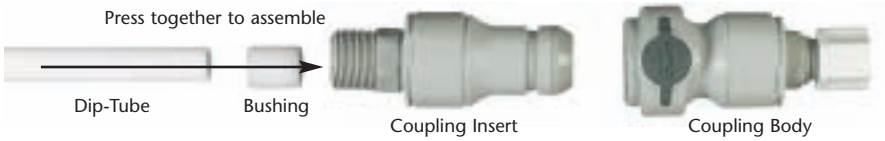
NEW! PAGE 26

DrumQuik® Universal Drum and Bottle Adaptor Kits GP HP

Any coupling with a 3/4 male NPT termination can now become a dip-tube that screws into standard closures. Single, 2-port and 2-port bottle designs available.

Works with HFC12, NSH and ChemQuik® couplings.

Wetted Material: Polypropylene or PTFE
Flow Rating (C_V): Dependent on coupling used
Temperature Rating: 0-150° F, -17-65° C
Pressure Rating: Vac-15 psig, 1 bar



NEW! PAGE 27

DrumQuik® Asian Drum Adaptor Kits GP HP

Adaptor facilitates connection to center port of Asian drum closures with integral dip-tubes.

Wetted Material: Virgin Polypropylene
Flow Rating (C_V): Dependent on coupling used
Temperature Rating: 0-225° F, -17-107° C
Pressure Rating: Vac-45 psig, 3.1 bar

Type A
For use with closure plugs with a 3/4" NPS center port.

Type B
For use with closure plugs with a 1-3/8" buttress center port.

Coupling Accessories

PAGE 28

- Dual Containment System for Tubing NEW!
- Dust Caps and Plugs
- Panel Mount Adaptors
- Colored Flare Nuts and Keying System for Couplings

Dimensions

PAGE 31

This section details the major dimensions for each product featured in this catalog, highlighting lengths in both the connected and disconnected state. For CAD files, go to www.colder.com or contact the factory.

IdentiQuik™ Series Couplings

Colder's **IdentiQuik™** series of Smart Couplings utilizes RFID technology to automatically identify fluid products and their characteristics and capture data from point-of-origin through point-of-use. Data stored on the package insert or fluid delivery line is transferred across the coupling before the two halves are connected. Your control system obtains this data via RS232 communications and uses it to improve safety, prevent misconnections, avoid dangerous combinations, verify processes, protect your brand, and capture important process data.

Smart Coupling Technology with Integrated RFID

The IdentiQuik series of couplings from Colder Products Company adds the power of RFID to your fluid management process.

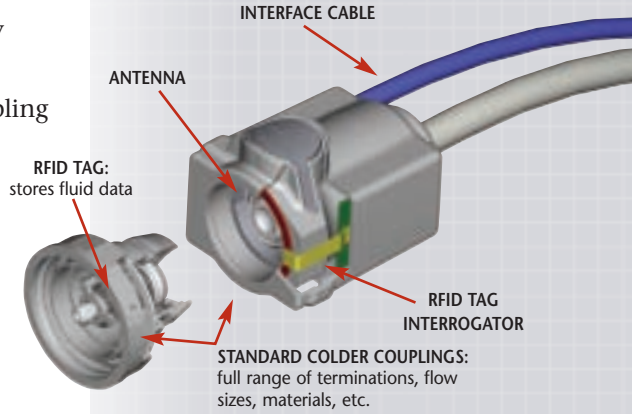
RFID tags, storing up to 64 bytes of data, are encapsulated on coupling inserts. Product identification, date, batch, and lot codes can be automatically transferred from inserts on bags, totes, drums, and supply lines to the connecting dispense or fill lines.

Identification of an authorized connection can be achieved and used to notify a machine to turn on, start a pump or alter flow rates.

This data can be used to initiate logic control, such as a turning on a pump, preventing misconnections, validating process recipes, locking out hazardous mixing at a systems level, all resulting in improved safety and more cost-efficient process control.

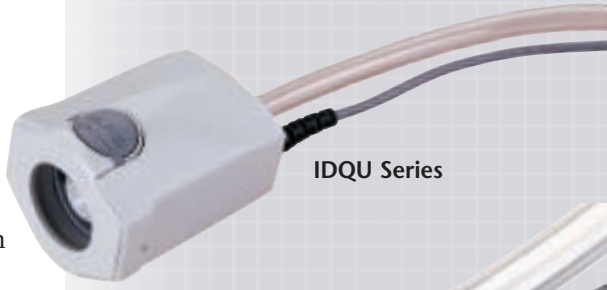
Smart coupling technology can be applied to virtually any Colder coupling series. Colder engineers work with you to identify the optimal solution for your application.

Smart Coupling Technology with Integrated RFID



IDQU Series

The Universal Dispensing Coupling, designed for bag-in-box and rigid packaging offers a screw on cap or disposable fitment for 38mm spouts. Polypropylene bodies with EPDM seals offer greater chemical resistance and NSF listings. Available in 3/8" flow with hose barbs for 1/4"-3/4" ID tubing.



IDQU Series

IDQ Series

The intelligent version of our widely popular PLC series features acetal bodies with 1/4" flow and hose barbs for 1/4"-3/8" ID tubing.

Straight thru and shutoff bodies are available. In-line and elbow inserts with built-in RFID tags can be used for in-line and bag-in-box applications.

IDQ12 Series

A polypropylene version of the IDQ series is available with hose barbs for 1/4" and 3/8" ID tubing. Shown here with non-valved insert and encapsulated RFID tag.

IDQ & IDQ12 Series

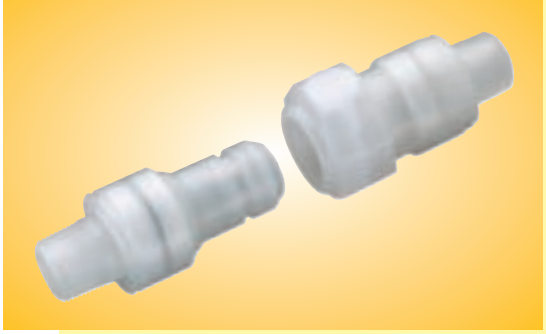
Visit www.colder.com/sc for more information.

Contact our team of "smart" experts for assistance in applying this revolutionary capability to your coupling application.

ChemQuik® CQG06 Series

Material: Polypropylene HP PB NS

The CQG06 Series is the lowest cost version of our Pressure-Balanced, Non-Spill, High Purity couplings. Molded virgin polypropylene, Viton® 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.



Patent Protected

FEATURES	BENEFITS
Non-Spill design	Ultimate protection from chemicals and fumes
Pressure-Balanced design	Failsafe disconnect, even under pressure; easy to reconnect at high pressure
Springless flow path design	Eliminates source of metallic contaminants
Mechanical keying system	Helps prevent accidental misconnects

Applications may include:

- Portable chemical cart connections
- Equipment, pump and filter connections
- Drums and IBC (tote) connections
- DI water line connections

CQG06 Series Specifications

Materials:

Main components: Natural, virgin polypropylene

Seals: Viton® FKM
Optional: Simriz® FFKM perfluoroelastomer

Springs (non-wetted): Hastelloy C

Flare nuts: PVDF

Lubricants: None used

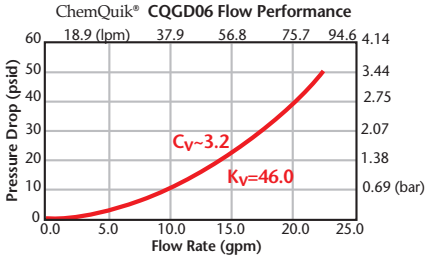
Spillage (air inclusion): <0.1 cc (ml)/disconnect (reconnect)

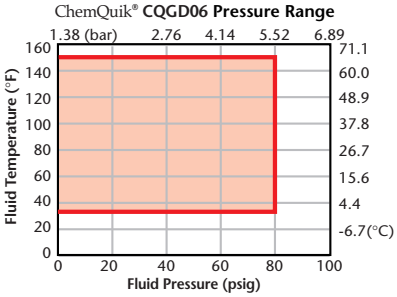
Panel Mount: Optional adaptor kit (see accessories section)

Keying System: Mechanical keying and color-coding (see page 30)

Compatible with ChemQuik® Dual Containment System

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





Shaded area indicates operating range.

Coupling Bodies

Polypropylene

	TUBING/THREAD SIZE	TERMINATION TYPE	PART NO.
In-Line *Bodies*	3/8" OD	Flare Compression	CQGD06 10 0106
	1/2" OD	Flare Compression	CQGD06 10 0108
	3/4" OD	Flare Compression	CQGD06 10 0112
	1/2 Taper	Male NPT	CQGD06 10 0208

Coupling Inserts

Polypropylene

	TUBING/THREAD SIZE	TERMINATION TYPE	PART NO.
In-Line *Inserts*	3/8" OD	Flare Compression	CQGD06 20 0106
	1/2" OD	Flare Compression	CQGD06 20 0108
	3/4" OD	Flare Compression	CQGD06 20 0112
	3/8 Taper	Male NPT	CQGD06 20 0206†
	1/2 Taper	Male NPT	CQGD06 20 0208
	3/4 Taper	Male NPT	CQGD06 20 0212†

For accessories, see page 28. For dimensions, see page 31.

†Indicates coupling that can be used with DrumQuik® (see pages 24-27).

New & improved!

ChemQuik® CQH06 Series

Material: Polypropylene – **All Plastic** HP

The CQH06 Series is the most compact and lowest cost version of our ChemQuik® High Purity couplings. They are all plastic couplings with no metal components. Molded, virgin, natural polypropylene, Viton® FKM seals, PEEK® plastic springs, and lube-free design provide broad compatibility and high flow capacity.

FEATURES	BENEFITS
100% metal free	No risk of metal contaminants or corrosion
High flow valve design	High flow in a compact package
Disconnect under pressure	Speeds servicing and reduces risk of injury
Color coding system	Helps prevent line misconnects

Patent Protected

Applications may include:

- Portable chemical cart connections
- Equipment, pump and filter connections
- DI water line connections/ DI spray guns
- Sampling port lines

CQH06 Series Specifications

Materials:

Main components: Natural, virgin polypropylene

Valve seals: Viton® FKM (black)
Optional: EPDM, Chemraz® FFKM perfluoroelastomer (white)

External insert seal: Simriz® FFKM perfluoroelastomer (black)

NOTE: Simriz™ FFKM seal material will be used when optional Viton® FKM or EPDM valve seals are ordered.

Valve (wetted) **and thumb latch spring:** PEEK®
Optional: PPS, Teflon® Encapsulated 316SS

Flare nuts: PVDF

Lubricants: None used

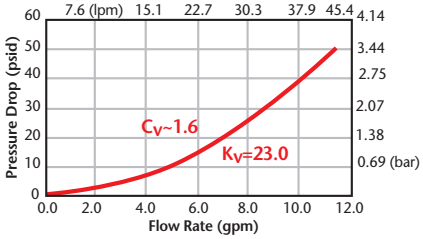
Spillage (air inclusion): ~1.5cc (ml)/disconnect (reconnect)

Keying System: Color-coding only, mechanical key not available (see page 30)

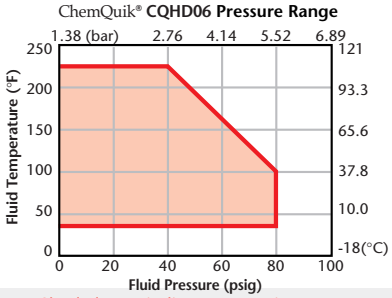
Compatible with ChemQuik® Dual Containment System

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

ChemQuik® **CQHD06 Flow Performance**



ChemQuik® **CQHD06 Pressure Range**



Shaded area indicates operating range.

Coupling Bodies

Polypropylene

In-Line

TUBING/THREAD SIZE	TERMINATION TYPE	PART NO.
1/4" OD	Flare Compression	CQHD06 10 0104
3/8" OD	Flare Compression	CQHD06 10 0106
1/2" OD	Flare Compression	CQHD06 10 0108
3/4" OD	Flare Compression	CQHD06 10 0112
3/8 Taper	Male NPT	CQHD06 10 0206

Panel Mount

TUBING/THREAD SIZE	TERMINATION TYPE	PART NO.
1/4" OD	Flare Compression	CQHD06 11 0104
3/8" OD	Flare Compression	CQHD06 11 0106
1/2" OD	Flare Compression	CQHD06 11 0108
3/8 Taper	Male NPT	CQHD06 11 0206

Coupling Inserts

Polypropylene

In-Line

TUBING/THREAD SIZE	TERMINATION TYPE	PART NO.
1/4" OD	Flare Compression	CQHD06 20 0104
3/8" OD	Flare Compression	CQHD06 20 0106
1/2" OD	Flare Compression	CQHD06 20 0108
3/4" OD	Flare Compression	CQHD06 20 0112
3/8 Taper	Male NPT	CQHD06 20 0206†
3/4 Taper	Male NPT	CQHD06 20 0212†

For accessories, see page 28. For dimensions, see page 31. †Indicates coupling that can be used with DrumQuik® (see pages 24-27).

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

New & improved!

ChemQuik® CQV06 Series

Material: PVDF – All Plastic HP

The CQV06 Series couplings are similar to the all plastic CQH06 Series couplings; however, they feature molded, virgin PVDF, with superior acid, UV and fire-resistant properties, passing ASTM, UL and ISO testing standards. Chemraz® FFKM perfluoroelastomer seals, PEEK® plastic springs and lube-free design provide broad compatibility and high flow capacity.

Patent Protected

FEATURES	BENEFITS
PVDF material	Superior acid resistance and purity; UV stable
100% metal-free	No risk of metal contaminants or corrosion
Standard Chemraz® seals	Broadest chemical resistance and purity
UV stable and fire-resistant	Suitable for extreme environments

Applications may include:

- Portable chemical cart connections
- Equipment, pump and filter connections
- Aggressive acid lines
- Sampling port lines

CQV06 Series Specifications

Materials:

Main components: Natural, virgin PVDF

Valve seals: Chemraz® FFKM perfluoroelastomer (white)
Optional: EPDM, Viton® FKM

External insert seal: Chemraz® FFKM perfluoroelastomer (white)
NOTE: Simriz™ FFKM will be used when optional EPDM or Viton valve seal is ordered.
White Chemraz™ FFKM will be used when optional Chemraz® FFKM valve seal is ordered.

Valve (wetted) **and thumb latch spring:** PEEK®
Optional: PPS, Teflon® Encapsulated 316SS

Flare nuts: PVDF

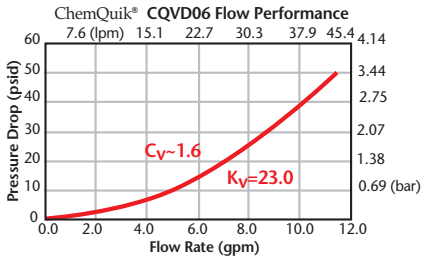
Lubricants: None used

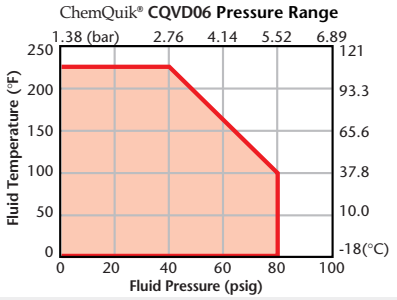
Spillage (air inclusion): ~1.5cc (ml)/disconnect (reconnect)

Keying System: Color-coding only (mechanical key not available, see page 30)

Compatible with ChemQuik® Dual Containment System

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





Shaded area indicates operating range.

Coupling Bodies

PVDF

	TUBING/THREAD SIZE	TERMINATION TYPE	PART NO.
In-Line	1/4" OD	Flare Compression	CQVD06 10 0104
	3/8" OD	Flare Compression	CQVD06 10 0106
	1/2" OD	Flare Compression	CQVD06 10 0108
	**3/4" OD	Flare Compression	CQVD06 10 0112
	3/8 Taper	Male NPT	CQVD06 10 0206

	TUBING/THREAD SIZE	TERMINATION TYPE	PART NO.
Panel Mount	1/4" OD	Flare Compression	CQVD06 11 0104
	3/8" OD	Flare Compression	CQVD06 11 0106
	1/2" OD	Flare Compression	CQVD06 11 0108
	3/8 Taper	Male NPT	CQVD06 11 0206†

Coupling Inserts

PVDF

	TUBING/THREAD SIZE	TERMINATION TYPE	PART NO.
In-Line	1/4" OD	Flare Compression	CQVD06 20 0104
	3/8" OD	Flare Compression	CQVD06 20 0106
	1/2" OD	Flare Compression	CQVD06 20 0108
	**3/4" OD	Flare Compression	CQVD06 20 0112
	3/8 Taper	Male NPT	CQVD06 20 0206†
	**3/4 Taper	Male NPT	CQVD06 20 0212†

For accessories, see page 28. For dimensions, see page 31.

†Indicates coupling that can be used with DrumQuik® (see pages 24-27). ** Special order only.

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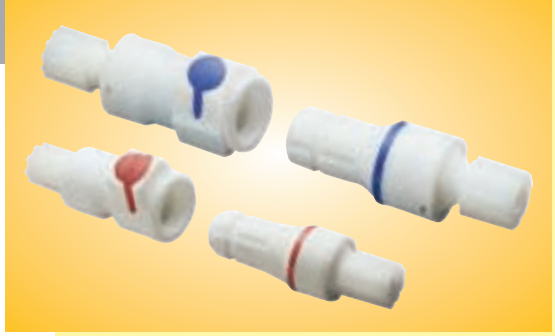
ChemQuik® CQN06 Series

Material: PTFE HP PB NS

The CQN Series features Colder's patented Pressure-Balanced technology in a Non-Spill coupling that can be disconnected and reconnected under pressure. A springless, 100% metal and lubricant-free flow path design, and PTFE material, with its almost universal chemical compatibility and ultra high purity, make them ideal for the most demanding applications in microelectronic, pharmaceutical and laboratory industries.



Patent Protected

FEATURES	BENEFITS
Non-Spill design	Ultimate protection from chemicals and fumes
PTFE material and Chemraz® FFKM seals	Can be used with almost any chemical
Springless & metal-free	No contaminants and exceptional flow capacity
Mechanical & color keys	Helps prevent accidental misconnects

Applications may include:

- Portable chemical cart connections
- Equipment, pump and filter connections
- Drums and IBC (tote) connections
- Those requiring universal chemical compatibility

CQN06 Series Specifications

Materials:

Main components: Natural, virgin modified** PTFE (ECTFE thumb latch)
****NOTE:** Dyneon™ TFM and/or Teflon® NXT-75

Seals: Chemraz® FFKM perfluoroelastomer

Optional: Simriz® FFKM perfluoroelastomer (lower cost)

Springs (non-wetted): Teflon® encapsulated (not coated) 316 SS

(Ultra pure fluids are isolated by two degrees of protection. Therefore, the CQN06 & CQN08 Series quick disconnects incorporate the superior performance of metal springs without the danger of fluid contamination. Only Teflon® encapsulated springs located out of the flow path can assure this.)

Dowel pins: PCTFE

Flare nuts: PVDF, PFA optional

Lubricants: None used

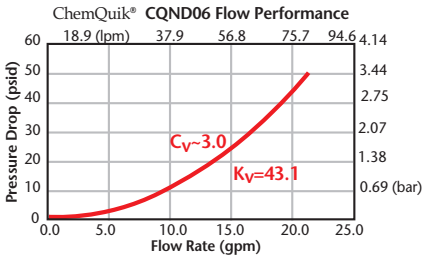
Spillage (air inclusion): <0.1 cc (ml)/disconnect/reconnect

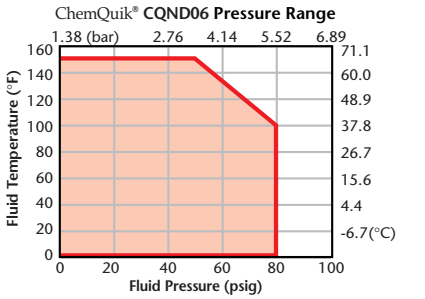
Panel Mount: Optional adaptor kit (see accessories section)

Keying System: Mechanical keying and color coding (see page 30)

Compatible with ChemQuik® Dual Containment System

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





Shaded area indicates operating range.

Coupling Bodies

PTFE

	TUBING/THREAD SIZE	TERMINATION TYPE	PART NO.
In-Line	1/4" OD	Flare Compression	CQND06 10 0104
	3/8" OD	Flare Compression	CQND06 10 0106
	1/2" OD	Flare Compression	CQND06 10 0108
	3/4" OD	Flare Compression	CQND06 10 0112
	1/2 Taper	Female NPT	CQND06 10 0308

Coupling Inserts

PTFE

	TUBING/THREAD SIZE	TERMINATION TYPE	PART NO.
In-Line	1/4" OD	Flare Compression	CQND06 20 0104
	3/8" OD	Flare Compression	CQND06 20 0106
	1/2" OD	Flare Compression	CQND06 20 0108
	3/4" OD	Flare Compression	CQND06 20 0112
	3/4 Taper	Male NPT	CQND06 20 0212†
	1/2 Taper	Female NPT	CQND06 20 0308

For accessories, see page 28. For dimensions, see page 31. †Indicates coupling that can be used with DrumQuik® (see pages 24-27).

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ChemQuik® CQN08 Series

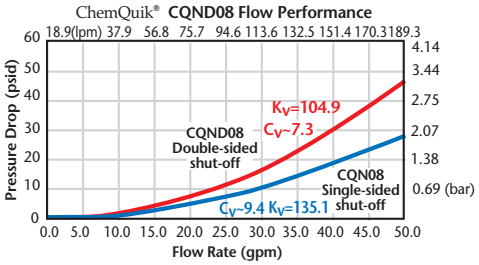
Material: PTFE Hp PB NS

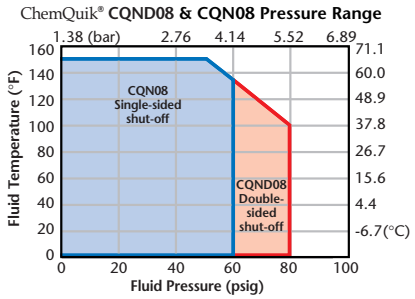
As big brother to the CQN06 Series, the CQN08 Series couplings have all of the same great features but in a larger flow size. Extremely rugged, they are designed for aggressive high flow/high purity applications. Coupling inserts can be panel mounted. The unique keying system helps prevent misconnects.

FEATURES	BENEFITS
Large flow capacity (7.3 to 9.4 Cv)	Fast fluid transfer
Non-Spill design	Ultimate protection from chemicals and fumes
Pressure-Balanced design	Large flow capacity, yet as easy to connect under pressure as at 0 psig
Mechanical and color keys	Helps prevent accidental misconnects

Applications may include:

- Bulk chemical transfer (drums, IBCs, ISO-tainers, tanker trucks, etc.)
- Portable chemical cart connections
- Equipment, pump and filter connections
- Those requiring universal chemical compatibility





Shaded area indicates operating range.

CQN08 Series Specifications

Materials:

Main components: Natural, virgin modified** PTFE & PFA

****NOTE:** Dyneon™ TFM and/or Teflon® NXT-75

Seals: Chemraz® FFKM perfluoroelastomer
Optional: Simriz® FFKM perfluoroelastomer (lower cost)

Springs (non-wetted): Teflon® encapsulated (not coated) 316 SS

(Ultra pure fluids are isolated by two degrees of protection. Therefore, the CQN06 & CQN08 Series quick disconnects incorporate the superior performance of metal springs without the danger of fluid contamination. Only Teflon® encapsulated springs located out of the flow path can assure this.)

Dowel pins: PCTFE

Flare nuts: PVDF, PFA optional

Lubricants: None used

Spillage (air inclusion): ~0.1 cc (ml)/disconnect/reconnect

Panel Mount: Optional adaptor kit (see accessories section)

Keying System: Mechanical keying and color-coding (see page 30)

Compatible with ChemQuik® Dual Containment System

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

Coupling Bodies

PTFE

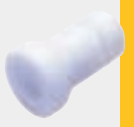
	TUBING/THREAD SIZE	TERMINATION TYPE	PART NO.
In-Line	3/4" OD Tube	Flare Compression	CQND08 10 0112
	1" OD Tube	Flare Compression	CQND08 10 0116
	3/4 Taper Thread	Male NPT	CQND08 10 0212†
	3/4 Taper Thread	Female NPT	CQND08 10 0312

Coupling Inserts

PTFE

	TUBING/THREAD SIZE	TERMINATION TYPE	PART NO.
In-Line	3/4" OD Tube	Flare Compression	CQND08 20 0112
	1" OD Tube	Flare Compression	CQND08 20 0116
	3/4 Taper Thread	Male NPT	CQND08 20 0212†
	3/4 Taper Thread	Female NPT	CQND08 20 0312
	**3/4 Taper Thread	Female NPT (non-valved)	CQN08 20 0312

valved



non-valved

For accessories, see page 28. For dimensions, see page 31.

†Indicates coupling that can be used with DrumQuik® (see pages 24-27).

**Special order only, this non-valved coupling insert will yield a Cv of 9.4 when coupled with valved body.

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NEW!

NSH Series

Material: Polypropylene GP PB NS

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.

Color-coded NSH couplings.

FEATURES	BENEFITS
Non-Spill design	Ultimate protection from chemicals and fumes
Pressure-Balanced design	Failsafe disconnect, even if under pressure; easy to reconnect at high pressure
Springless flow path design	Eliminates source of metallic contaminants
Optional color-coding	Helps prevent accidental misconnects

Applications may include:

- Portable chemical cart connections
- Equipment, pump and filter connections
- Drums & IBC (tote) connections
- Water treatment plants, car washes, industrial laundry

Coupling Bodies

Polypropylene

Pipe Thread

THREAD SIZE	TERMINATION TYPE	PART NO.
3/8" NPT	Female NPT Thread	NSHD19006
3/8" BSPT	Male BSPT Thread	NSHD10006BSPT†
1/2" NPT	Male NPT Thread	NSHD10008
3/4" NPT	Male NPT Thread	NSHD10012†

In-Line *Compression*

TUBING SIZE	METRIC EQ.	TERMINATION TYPE	PART NO.
3/8" OD	9.5mm OD	Compression	NSHD13006
1/2" OD	12.7mm OD	Compression	NSHD13008

Hose Barb

TUBING SIZE	METRIC EQ.	TERMINATION TYPE	PART NO.
3/8" ID	9.5mm ID	Hose Barb	NSHD17006
1/2" ID	12.7mm ID	Hose Barb	NSHD17008
5/8" ID	15.9mm ID	Hose Barb	NSHD17010
3/4" ID	19.0mm ID	Hose Barb	NSHD17012

For accessories, see page 28. For dimensions, see page 31.

†Indicates coupling that can be used with DrumQuik® (see pages 24-27).

NSH Series Specifications

Panel mount NSH series coupling.

Materials:

Main components: Glass-filled, light gray polypropylene

Thumb latch: Glass-filled, dark gray polypropylene

Seals: EPDM
Optional: Viton® FKM

Springs (non-wetted): 316 stainless steel
Optional: Hastelloy C

Compression nuts: Glass-filled, white polypropylene

Lubricants: Krytox® PFPE (inert)

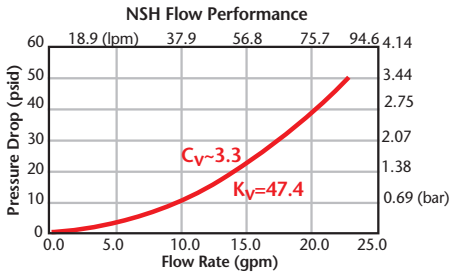
Spillage (air inclusion): <0.1 cc (ml)/disconnect (reconnect)

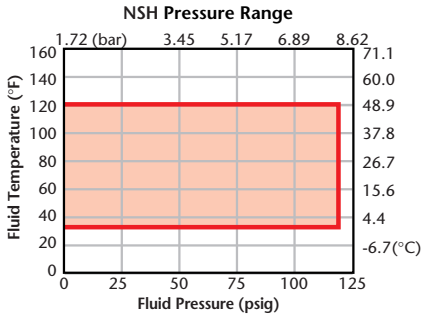
Panel Mount: Optional adaptor kit (see accessories section)

Keying System: Color-coding only (red or blue), mechanical key not available

Compatible with ChemQuik® Dual Containment System

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





Shaded area indicates operating range.

Coupling Inserts

Polypropylene

	THREAD SIZE		TERMINATION TYPE	PART NO.
Pipe Thread	3/8" NPT		Female NPT Thread	NSHD26006
	3/8" BSPT		Male BSPT Thread	NSHD24006BSPT†
	1/2" NPT		Male NPT Thread	NSHD24008
	3/4" NPT		Male NPT Thread	NSHD24012†

	TUBING SIZE	METRIC EQ.	TERMINATION TYPE	PART NO.
In-Line *Compression*	3/8" OD	9.5mm OD	Compression	NSHD20006
	1/2" OD	12.7mm OD	Compression	NSHD20008

	TUBING SIZE	METRIC EQ.	TERMINATION TYPE	PART NO.
Hose Barb	3/8" ID	9.5mm ID	Hose Barb	NSHD22006
	1/2" ID	12.7mm ID	Hose Barb	NSHD22008
	5/8" ID	15.9mm ID	Hose Barb	NSHD22010
	3/4" ID	19.0mm ID	Hose Barb	NSHD22012

For accessories, see page 28. For dimensions, see page 31.

†Indicates coupling that can be used with DrumQuik® (see pages 24-27).

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NEW!

NS6 Series Non-Spill Couplings

Material: Polypropylene GP NS

Patent-pending NS6 Series couplings feature non-spill valves in a compact size, 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.

Patent Pending

FEATURES	BENEFITS
Non-Spill design	Disconnect under pressure with no spills
Color-coding	Instant visual differentiation of media lines
Glass-filled polypropylene	Durable and compatible with many chemicals
Colder thumb latch	One-hand connection and disconnection
TPV overmold	Provides "soft touch" feel for excellent ergonomics

Applications may include:

- Ink handling
- Chemical delivery systems
- Electronic cooling
- Instrumentation
- Medical devices
- Water treatment plants, car washes, industrial laundry

Coupling Bodies

Polypropylene

Pipe Thread

THREAD SIZE	TERMINATION TYPE	PART NO.
1/2" NPT	Male NPT Thread	NS6D10008†
1/2" BSPT	Male BSPT Thread	NS6D10008BSPT

In-Line
Compression

TUBING SIZE	METRIC EQ	TERMINATION TYPE	PART NO.
1/2" OD	12.7mm OD	Compression	NS6D13008

Hose Barb

TUBING SIZE	METRIC EQ	TERMINATION TYPE	PART NO.
3/8" ID	9.5mm ID	Hose Barb	NS6D17006
1/2" ID	12.7mm ID	Hose Barb	NS6D17008

For accessories, see page 28. For dimensions, see page 31.

†Indicates coupling that can be used with DrumQuik® (see pages 24-27).

NS6 Series Specifications

Materials:

Main components: Glass-filled, polypropylene

Thumb latch: Glass-filled, polypropylene

Valve spring (wetted)**:** 316 stainless steel
Optional: Hastelloy C

External spring: 316 stainless steel
Optional: Hastelloy C

O-rings: EPDM
Optional: FKM

Soft touch overmold: TPV*

Color: Gray with dark gray overmold standard
(gray with red or blue overmold available)

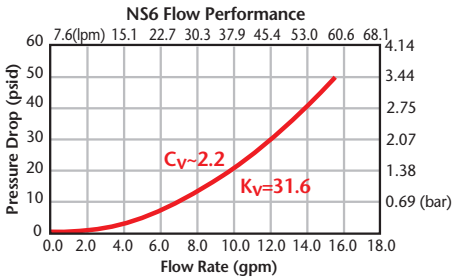
Lubricants: Krytox® PFPE (inert)

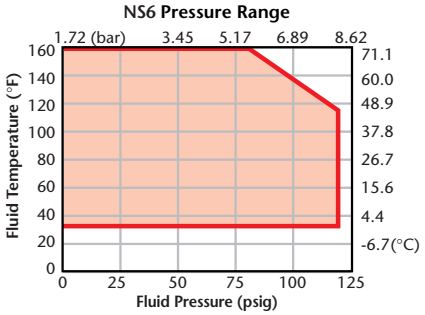
Spillage: ~0.03 cc/disconnect @ 0 psi,
~0.30 cc/disconnect @ 120 psi

Panel Mount: Integral; available on insert only

Keying System: Color-coding only (mechanical key not available)

*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.





Shaded area indicates operating range.

Coupling Inserts

Polypropylene

	THREAD SIZE		TERMINATION TYPE	PART NO.
Pipe Thread	1/2" NPT		Male NPT Thread	NS6D24008†
	1/2" BSPT		Male BSPT Thread	NS6D24008BSPT
	TUBING SIZE	**METRIC EQ**	**TERMINATION TYPE**	**PART NO.**
In-Line *Compression*	1/2" OD	12.7mm OD	Compression	NS6D20008
	TUBING SIZE	**METRIC EQ**	**TERMINATION TYPE**	**PART NO.**
Hose Barb	3/8" ID	9.5mm ID	Hose Barb	NS6D22006
	1/2" ID	12.7mm ID	Hose Barb	NS6D22008
	TUBING SIZE	**METRIC EQ**	**TERMINATION TYPE**	**PART NO.**
Panel Mount *Compression*	1/2" OD	12.7mm OD	Compression	NS6D40008
	TUBING SIZE	**METRIC EQ**	**TERMINATION TYPE**	**PART NO.**
Hose Barb Panel Hole 1-1/4" (31.8mm)	3/8" ID	9.5mm ID	Hose Barb	NS6D42006
	1/2" ID	12.7mm ID	Hose Barb	NS6D42008

For accessories, see page 28. For dimensions, see page 31.

†Indicates coupling that can be used with DrumQuik® (see pages 24-27); requires a 3/4" NPT to 1/2" NPT adaptor bushing for use with DrumQuik MODULAR.

NEW!

NS4 Series Non-Spill Couplings

Material: Polypropylene GP NS

Ideal for installations where space is at a premium, patented NS4 Series couplings have the same great features as NS6 couplings but in a more compact package, at a great price. Use the NS4 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.

Patent Protected

FEATURES	BENEFITS
Non-Spill design	Disconnect under pressure with no spills
Color-coding	Instant visual differentiation of media lines
Glass-filled polypropylene	Durable and compatible with many chemicals
Colder thumb latch	One-hand connection and disconnection
TPV overmold	Provides "soft touch" feel for excellent ergonomics

Applications may include:

- Ink handling
- Chemical delivery systems
- Electronic cooling
- Instrumentation
- Medical devices
- Lab uses

Coupling Bodies

Polypropylene

Pipe Thread

THREAD SIZE	TERMINATION TYPE	PART NO.
1/4" NPT	Male NPT Thread	NS4D10004†
1/4" BSPT	Male BSPT Thread	NS4D10004BSPT

In-Line
Ferruless Polytube Fitting, PTF‡

TUBING SIZE	METRIC EQ	TERMINATION TYPE	PART NO.
3/8" OD 1/4" ID	9.5mm OD 6.4mm ID	Compression	NS4D13006

Hose Barb

TUBING SIZE	METRIC EQ	TERMINATION TYPE	PART NO.
1/8" ID*	3.2mm ID*	Hose Barb	NS4D17002
1/4" ID	6.4mm ID	Hose Barb	NS4D17004
3/8" ID	9.5mm ID	Hose Barb	NS4D17006

For accessories, see page 28. For dimensions, see page 31.

*For 1/8" (3.2mm) ID tubing, maximum tube OD is 1/4" (6.4mm).

‡Colder's Ferruless 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, e.g., polyethylene, nylon, polyurethane, etc.

†Indicates coupling that can be used with DrumQuik® (see pages 24-27); requires a 3/8" NPT to 1/4" NPT adaptor bushing for use with DrumQuik UDA 2-Port.

NS4 Series Specifications

Materials:

Main components: Glass-filled, polypropylene

Thumb latch: Glass-filled, polypropylene

Valve spring (wetted)**:** 316 stainless steel
Optional: Hastelloy C

External spring: 316 stainless steel
Optional: Hastelloy C

O-rings: EPDM
Optional: FKM

Soft touch overmold: TPV*

Color: Gray with dark gray overmold standard
(gray with red or blue overmold available)

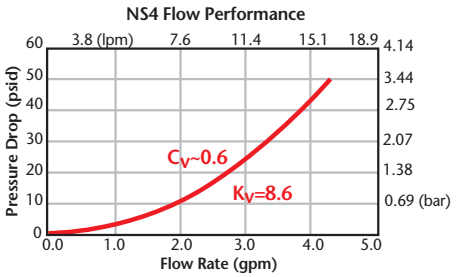
Lubricants: Krytox® PFPE (inert)

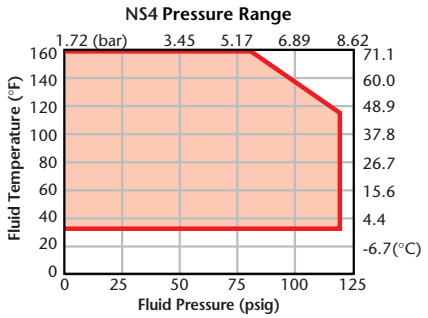
Spillage: <0.10 cc/disconnect

Panel Mount: Integral; available on insert only

Keying System: Color-coding only (mechanical key not available)

*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.





Shaded area indicates operating range.

Coupling Inserts

Polypropylene

	THREAD SIZE		TERMINATION TYPE	PART NO.
Pipe Thread	1/4" NPT		Male NPT Thread	NS4D24004†
	1/4" BSPT		Male BSPT Thread	NS4D24004BSPT

	TUBING SIZE	METRIC EQ	TERMINATION TYPE	PART NO.
In-Line *Ferruless Polytube Fitting, PTF‡*	3/8" OD 1/4" ID	9.5mm OD 6.4mm ID	Compression	NS4D20006

	TUBING SIZE	METRIC EQ	TERMINATION TYPE	PART NO.
Hose Barb	1/8" ID*	3.2mm ID*	Hose Barb	NS4D22002
	1/4" ID	6.4mm ID	Hose Barb	NS4D22004
	3/8" ID	9.5mm ID	Hose Barb	NS4D22006

	TUBING SIZE	METRIC EQ	TERMINATION TYPE	PART NO.
Panel Mount *Ferruless Polytube Fitting, PTF‡*	3/8" OD 1/4" ID	9.5mm OD 6.4mm ID	Compression	NS4D40006

	TUBING SIZE	METRIC EQ	TERMINATION TYPE	PART NO.
Hose Barb Panel Hole 15/16" (23.9mm)	1/8" ID*	3.2mm ID*	Hose Barb	NS4D42002
	1/4" ID	6.4mm ID	Hose Barb	NS4D42004
	3/8" ID	9.5mm ID	Hose Barb	NS4D42006

For accessories, see page 28. For dimensions, see page 31.

*1/8" (3.2mm) ID tubing, maximum tube OD is 1/4" (6.4mm).

‡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, e.g., polyethylene, nylon, polyurethane, etc.

†Indicates coupling that can be used with DrumQuik® (see pages 24-27); requires a 3/8" NPT to 1/4" NPT adaptor bushing for use with DrumQuik UDA 2-Port.

HFC12 Series

Material: Polypropylene GP

Patented HFC12 Series couplings have flow comparable to many 1/2" nominal 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.

Patent Protected

FEATURES	BENEFITS
High efficiency valve	More flow and less spillage in a compact size
Ergonomic design	Easy to grip, simple to operate
Polypropylene material	Chemically-resistant and gamma sterilizable
Colder compatible	Mates with HFC35 and HFC57 couplings

Applications may include:

- Photo processing chemicals
- Battery filling equipment
- Air mattress systems
- Spray equipment
- Antifreeze recycling
- Thermal management

Coupling Bodies

Polypropylene

Pipe Thread

THREAD SIZE	STRAIGHT THRU	SHUTOFF
3/8" NPT	HFC10612	HFCD10612†
3/8" BSPT	HFC10612BSPT	HFCD10612BSPT
1/2" NPT	HFC10812	HFCD10812
3/4" NPT	HFC101212	HFCD101212†

Bulkhead Panel Mount
Hose Barb
Panel Hole 1.21" (31mm)

TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF
3/8" ID	9.5mm ID	HFC16612	HFCD16612
1/2" ID	12.7mm ID	HFC16812	HFCD16812
5/8" ID	15.9mm ID	HFC161012	HFCD161012
3/4" ID	19.0mm ID	HFC161212	HFCD161212

Compression

TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF
3/8" OD	9.5mm OD	HFC12612	HFCD12612
1/2" OD	12.7mm OD	HFC12812	HFCD12812

In-Line
Hose Barb

TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF
3/8" ID	9.5mm ID	HFC17612	HFCD17612
1/2" ID	12.7mm ID	HFC17812	HFCD17812
5/8" ID	15.9mm ID	HFC171012	HFCD171012
3/4" ID	19.0mm ID	HFC171212	HFCD171212

Compression

TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF
3/8" OD	9.5mm OD	HFC13612	HFCD13612
1/2" OD	12.7mm OD	HFC13812	HFCD13812

For accessories, see page 28. For dimensions, see page 31.

†Indicates coupling that can be used with DrumQuik® (see pages 24-27).

HFC12 Series Specifications

HFC couplings are used on liquid chillers to recirculate cooling fluids in laser, laboratory and medical products.

Materials:

Main components and valves: Virgin, gray polypropylene

Thumb latch: Virgin, dark gray polypropylene

Valve spring (wetted)**:** 316 stainless steel
Optional: Hastelloy C

External springs: 316 stainless steel
Optional: Hastelloy C

O-rings: EPDM
Optional: FKM

Panel mount gasket: EPDM
Optional: Hastelloy C

Lubricant: Silicone

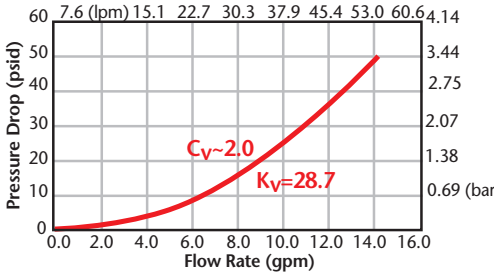
Spillage: ~1.5 cc/disconnect

Panel Mount: Integral; available on body only

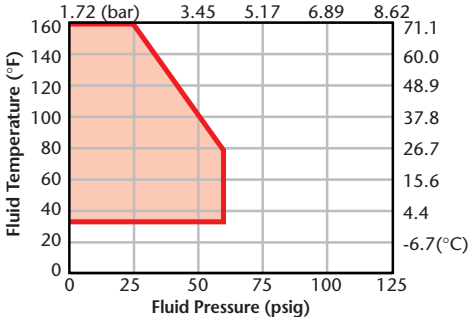
Keying System: Not available

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 guide.

HFC12 Flow Performance



HFCD12 Pressure Range



Shaded area indicates operating range.

Coupling Inserts

Polypropylene

	THREAD SIZE		STRAIGHT THRU	SHUTOFF
Pipe Thread	3/8" NPT		HFC24612	HFCD24612†
	3/8" BSPT		HFC24612BSPT	HFCD24612BSPT
	1/2" NPT		HFC24812	HFCD24812
	3/4" NPT		HFC241212	HFCD241212†
	TUBING SIZE	**METRIC EQ.**	**STRAIGHT THRU**	**SHUTOFF**
In-Line	3/8" ID	9.5mm ID	HFC22612	HFCD22612
Hose Barb	1/2" ID	12.7mm ID	HFC22812	HFCD22812
	5/8" ID	15.9mm ID	HFC221012	HFCD221012
	3/4" ID	19.0mm ID	HFC221212	HFCD221212
	TUBING SIZE	**METRIC EQ.**	**STRAIGHT THRU**	**SHUTOFF**
Compression	3/8" OD	9.5mm OD	HFC20612	HFCD20612
	1/2" OD	12.7mm OD	HFC20812	HFCD20812
	TUBING SIZE	**METRIC EQ.**	**STRAIGHT THRU**	**SHUTOFF**
Elbow	3/8" ID	9.5mm ID	HFC23612	HFCD23612
Hose Barb	1/2" ID	12.7mm ID	HFC23812	HFCD23812

For accessories, see page 28. For dimensions, see page 31.

†Indicates coupling that can be used with DrumQuik® (see pages 24-27).

EFC12 Series

Material: Polypropylene GP

The EFC Series couplings feature a high efficiency valve design that provides for a greater flow capability than any other coupling its size. Chemically-resistant polypropylene material makes it ideal for harsh environments. The EFC Series adds a bulkhead panel mount option for tight seals against tank walls and drums.

FEATURES	BENEFITS
High efficiency valve	More flow in a compact size
Plastic thumb latch	Fewer moving parts
Polypropylene material	Chemically-resistant and gamma sterilizable
Colder compatible	Mates with most APC couplings

Applications may include:

- Soap dispensing
- Fume hoods
- Dry cleaning chemicals
- Battery filling equipment
- Package filling machinery
- Electronics water treatment

Coupling Bodies

Polypropylene

	THREAD SIZE	METRIC EQ.	SHUTOFF
Pipe Thread	1/4" NPT		EFCD10412†
	3/8" NPT		EFCD10612†

	TUBING SIZE	METRIC EQ.	SHUTOFF
Bulkhead Panel Mount	1/4" ID	6.4mm ID	EFCD16412
Hose Barb	3/8" ID	9.5mm ID	EFCD16612
Panel Hole 11/16" (18mm)			

	TUBING SIZE	METRIC EQ.	SHUTOFF
In-Line	1/4" ID	6.4mm ID	EFCD17412
Hose Barb	3/8" ID	9.5mm ID	EFCD17612

For accessories, see page 28. For dimensions, see page 31.

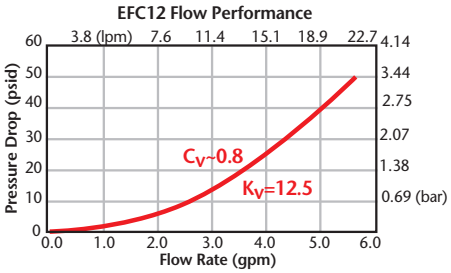
†Indicates coupling that can be used with DrumQuik® (see pages 24-27).

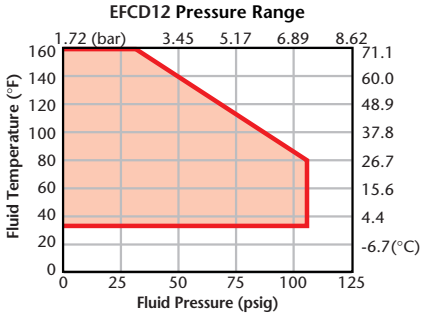
EFC12 Series Specifications

Materials:

Main components and valves: Virgin, light gray polypropylene
Thumb latch: Virgin, dark gray polypropylene
Valve spring (wetted)**:** 316 stainless steel
External springs: 302 stainless steel
O-rings: EPDM
Panel mount gasket: EPDM
Lubricant: Silicone
Spillage: ~1.3 cc/disconnect
Panel Mount: Integral; available on body only
Keying System: Not available

EFC quick disconnect coupling simplifies chemical draining process.





Shaded area indicates operating range.

Coupling Inserts

Polypropylene

	THREAD SIZE	SHUTOFF
Pipe Thread	1/4" NPT	EFCD24412†
	3/8" NPT	EFCD24612†

	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF
In-Line	1/4" ID	6.4mm ID	EFC22412	EFCD22412
Hose Barb	3/8" ID	9.5mm ID	EFC22612	EFCD22612

	TUBING SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF
Elbow	1/4" ID	6.4mm ID	EFC23412	EFCD23412
Hose Barb	3/8" ID	9.5mm ID	EFC23612	EFCD23612

For accessories, see page 28. For dimensions, see page 31.

†Indicates coupling that can be used with DrumQuik® (see pages 24-27).

See red part numbers throughout catalog for couplings that are DQ compatible

NEW!

DrumQuik® MODULAR Dispense System GP HP

Material: Polypropylene and PTFE

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	BENEFITS
Modular design	Provides flexibility in system configuration
Two-port system	Eliminates fumes and allows N2 ports and recirculation
Standard threads	Fits common drum bungs (2" buttress,BCS 56x4, etc.)

Applications may include:

- Bio/Pharm CIP chemicals
- Micro-electronic high purity chemicals
- Industrial chemicals used in water treatment, car wash, laundry, and more

DrumQuik Specifications (will vary based on couplings and container selected)

Materials:

Main Components: Natural, virgin PTFE or polypropylene

Dip-Tube Seal: FEP Encapsulated Viton® FKM

***Vent Check Valve:** PVDF with Hastelloy C spring, Viton® seal

***Back Flow Check Valve:** PFA, Kalrez® seal

Seals: FEP Encapsulated Viton® – included with Drum Insert

Lubricants: None used

Coupling Components: Dependent on coupling (see coupling product pages for specifications)

***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, also see page 27.

Construction Type: Modular drum insert bung and dip-tube

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

Drum Thread: Industry standard 2" buttress, 2" NPS 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)

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)

For DrumQuik accessories, see page 27.

Standard Products

	DESCRIPTION	PART NO.	
Drum Inserts	Bung, polypropylene, 3/4" NPT liquid port, 3/8" NPT vent, 2" buttress	DQM D2PP 2BUT	(coarse thread, U.S. standard)
	Bung, polypropylene, 3/4" NPT liquid port, 3/8" NPT vent, 2" NPS	DQM DI2PP 2NPS	(fine thread, U.S. standard)
	Bung, polypropylene, 3/4" NPT liquid port, 3/8" NPT vent, BCS 56x4	DQM DI2PP 56X4	(European standard)
	Bung, PTFE, 3/4" NPT liquid port, 3/8" NPT vent, 2" buttress	DQM DI2PTFE 2BUT	(coarse thread, U.S. standard)
	Bung, PTFE, 3/4" NPT liquid port, 3/8" NPT vent, 2" NPS	DQM DI2PTFE 2NPS	(fine thread, U.S. standard)
	Bung, PTFE, 3/4" NPT liquid port, 3/8" NPT vent, BCS 56x4	DQM DI2PTFE 56X4	(European standard)

	DESCRIPTION	PART NO.
Dip-Tubes	Dip-tube, polypropylene, 35.3" (897mm) long from sealing surface	DQM DTUBE PP35
	Dip-tube, polypropylene, 55" (1397mm) long from sealing surface	DQM DTUBE PP55
	Dip-tube, PTFE, 35.3" (897mm) long from sealing surface	DQM DTUBE PTFE35
	Dip-tube, PTFE, 55" (1397mm) long from sealing surface	DQM DTUBE PTFE55

	DESCRIPTION	PART NO.
Pipe Plugs	Hex pipe plug, 3/8" NPT, PFA material	DQM PLUG PFA06
	Hex pipe plug, 3/8" NPT, PFA material	DQM PLUG PFA12

	DESCRIPTION	PART NO.
Replacement Seal Kit for DQM	Complete seal kit FEP Encapsulated Viton® FKM (includes liquid port and bung seals)	DQM SKIT FEPVITON

	DESCRIPTION	PART NO.
Vent Check Valve (VCV)	For DrumQuik vent port (see page 27)	DQM CK PVDF0206

	DESCRIPTION	PART NO.
Back Flow Check Valve (BCV)	Mount downstream of liquid coupling (see page 27)	DQM CK PFA0308

	DESCRIPTION	PART NO.
Foot Valve	Mount at bottom of dip tube (see page 27)	DQM FV PP0204 (for PTFE dip-tubes) DQM FV PP0208 (for polypropylene dip-tubes)

NEW! DrumQuik® MODULAR Configuration

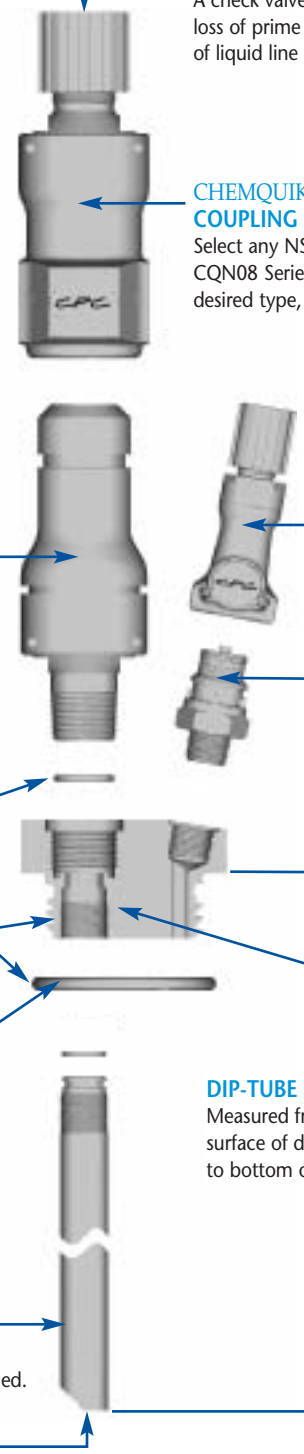
DrumQuik® dip-tubes and mating ChemQuik® or General Purpose couplings provide the ultimate system for extracting chemicals from drums and larger IBC/tote containers.

Any standard Colder ChemQuik, NSH or HFC12 Series coupling set (or even 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 DrumQuik drum insert to provide the system connection. Then, thread in a DrumQuik dip-tube of proper length for a perfect match to your drum or IBC/tote. Insert the assembly into the container and your system is complete.

DrumQuik MODULAR Dispense System

(with quick disconnect)

Shown with CQN08 liquid and CQH06 vent line couplings.



BACK FLOW CHECK VALVE (BCV):
A check valve (BCV) is available to prevent loss of prime at pump. Mount downstream of liquid line body. (see page 27)

CHEMQUIK **LIQUID LINE COUPLING BODY:**
Select any NSH, CQG06, CQN06 or CQN08 Series body based on desired type, size and termination.

CHEMQUIK **LIQUID LINE COUPLING INSERT:**
Select an NSH, CQG06, CQN06 or CQN08 Series insert with a 3/4" male NPT termination.

CHEMQUIK **VENT LINE COUPLING BODY:**
Select any HFC12, CQH06 or CQV06 Series body based on desired type, size and termination.

CHEMQUIK **VENT LINE COUPLING INSERT:**
Select an HFC12, CQH06 or CQV06 Series insert with a 3/8" male NPT termination.
NOTE: A PVDF check valve (VCV) is also available to contain fumes and vent drum. (see page 27)

DRUMQUIK **SEALS**
Two included with Drum Insert.

DRUM BUNG THREAD
2"buttress, 2" NPS and BCS 56x4 are standard.

DRUMQUIK **DRUM INSERT**
Includes two FEP Encapsulated Viton® seals.

***DIP-TUBE SEAL**
Comes assembled.

DIP-TUBE LENGTH
Measured from seal surface of drum insert to bottom of dip tube.

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

FOOT VALVE

DRUMQUIK **DIP-TUBE**
Threaded into drum insert – seal is included.

***NOTE:** Be sure that seal is installed on dip-tube before assembling dip-tube with drum insert.

See red part numbers throughout catalog for couplings that are DQ compatible

NEW!

DrumQuik®
Universal Drum Adaptors

Universal Drum Adaptor Kit.

DrumQuik **DQ UDA Drum Adaptor Kit**

The DrumQuik® DQ UDA kit turns any ChemQuik® or General Purpose (HFC or NSH) coupling 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 page 27.

PART NO.	DESCRIPTION
DQ UDAKIT PP35	Kit for 55 gal drum (approx 35.5" (902mm) dip-tube, trim to length), polypropylene
DQ UDAKIT PP55	Kit for IBC (approx 55.5" (1410mm) dip-tube, trim to length), polypropylene
Use above kits with HFC, NSH, CQG06, and CQH06 Series couplings.	
DQ UDAKIT PTFE35	Kit for 55 gal drum (approx 35.5" (902mm) dip-tube, trim to length), PTFE
DQ UDAKIT PTFE55	Kit for IBC (approx 55.5" (1410mm) dip-tube, trim to length), PTFE
Use above kits with CQN Series couplings.	

Universal 2-Port Drum Adaptor Kit.

DrumQuik **DQ UDA 2-Port Drum Adaptor Kit**

Like the DQ UDA, the DQ UDA 2-port system is intended to thread into the 3/4 female NPS port of common drums, 5 gallon (20 liter) pails or even Nalgene® bottle closures. However, it features 2-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 page 27.

PART NO.	DESCRIPTION
DQ UDA2PKIT PP	2-port adaptor, polypropylene with FKM seal (approx 35.5" (902mm) dip-tube, trim to length) (3/8" female NPT liquid port, 1/4" female NPT vent port)
DQ UDA2P NALNUT	Adaptor nut to secure to Nalgene® cap, polypropylene

(A 1-1/8" (28.5mm) hole must be punched in top of Nalgene cap to allow adaptor to be inserted. Seal to go on outside, not inside of cap.)

BottleQuik UBA 2-Port Bottle Adaptor Kit.

NEW!

BottleQuik **UBA 2-Port Bottle Adaptor Kit**

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 for this reason has two 3/8 female NPT ports for liquid and vent ports.

PART NO.	DESCRIPTION
DQ UDACAP2PKIT PP	2-port adaptor for bottles with SP400-38mm threads (3/8" female NPT liquid port, 3/8" female NPT vent port)

NOTE: The DQ UDA kits are designed to only 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.

NEW! DrumQuik® Accessories

DrumQuik® Asian Drum Adaptors

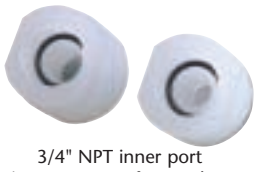
The DrumQuik® Asian Drum Adaptors are bushings that allow any ChemQuik® or General Purpose (HFC or NSH) coupling to easily be connected to the unique threads common in many drum closures (with integral dip-tubes) manufactured in Asia, e.g., Kodama, Accelo, Stella, Dung Woo, etc. A 3/4" female NPT inner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

Type A
For use with closure plugs with a 3/4" NPS center port.

Type B
For use with closure plugs with a 1-3/8" buttress center port.

PART NO.	DESCRIPTION
DQ ADA PP 0212	Type A Adaptor; polypropylene, with Viton® FKM seals
DQ ADA PP 0622	Type B Adaptor; polypropylene, with Viton® FKM seals

NOTE: Other materials possible; contact factory for quote and lead time.



3/4" NPT inner port incorporates a face seal to assure a leak-free connection.

DrumQuik Check Valves and Foot Valves

The DrumQuik check valves and foot valves are intended for use with DrumQuik MODULAR 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. *New* 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.

Foot Valve

Foot Valve

Check Valve (PVDF)

PART NO.	DESCRIPTION
DQM CK PVDF 0204	PVDF, Hastelloy C spring, Viton® FKM seal (1/4" male NPT inlet and outlet) *Use with DQM PTFE dip-tube part number DQM DTUBE PTFE35 & 55: Mount at bottom of dip-tube, seal with "Teflon" tape.*
DQM CK PVDF 0206	PVDF, Hastelloy C spring, PTFE ball, Viton® FKM seal (3/8" male NPT inlet and outlet)
DQM CK PVDF 0208	PVDF, Hastelloy C spring, Viton® FKM seal (1/2" male NPT inlet and outlet) *Use with DQM polypropylene dip-tube part number DQM DTUBE PP35 & 55:* *Mount at bottom of dip-tube, must tap dip-tube first, seal with "Teflon" tape.*
DQM CK PFA 0308‡	High purity PFA, Kalrez® FFKM seal (1/2" female NPT inlet and outlet)
DQM FV PP0204	For PTFE dip-tubes – mount at bottom of dip-tube
DQM FV PP0208	For polypropylene dip-tubes – mount at bottom of dip-tube
DQM FV PP0708	For UDA Kit dip-tubes. *Use with all DQ UDA & BottleQuik dip-tubes: Mount at bottom of dip-tube with integral compression fitting.*

‡**NOTE:** Special order; contact factory for availability.

DrumQuik Universal Drum Adaptor Bung Plugs

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

Couplings can be adapted to a wide range of closures.

PART NO.	DESCRIPTION
DQM BUNGPP 2BUT12	Bung closure, poly, 2" buttress x 3/4" female NPS
DQM BUNGPP 2NPS12	Bung closure, poly, 2" NPS x 3/4" female NPS
DQM BUNGPP 56X412	Bung closure, poly, BCS56 x 4, 3/4" female NPS
DQM CAPPP 70mm	Cap closure, poly, 70mm, 3/4" female NPS

Coupling Accessories

ChemQuik® Dual Containment System

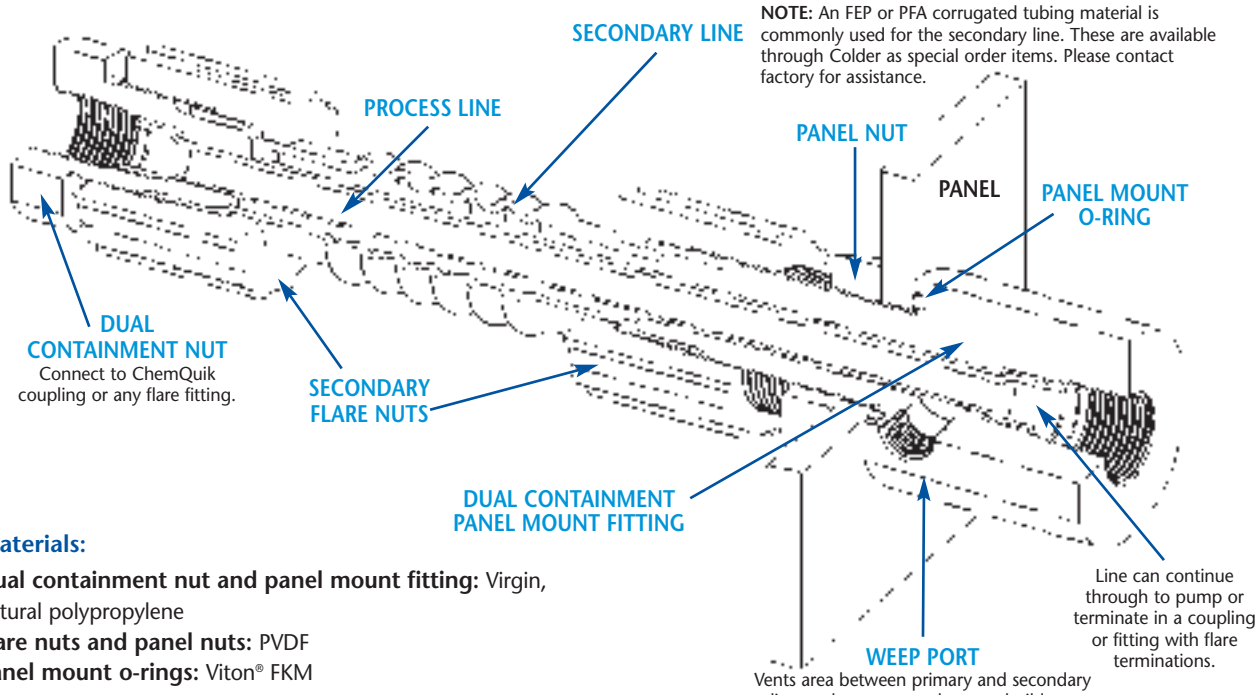
The ChemQuik® Dual Containment System is an easy way to 'double contain' critical chemical lines, protecting plant and personnel in case a primary process line ruptures or 'sweats.' The system provides a protective secondary line to catch any fluid and routes it to a safe location.

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.

ChemQuik Dual Containment Flare Nuts and Panel Mount Fittings

(compatible with standard flare style fittings)



Materials:

Dual containment nut and panel mount fitting: Virgin, natural polypropylene
Flare nuts and panel nuts: PVDF
Panel mount o-rings: Viton® FKM

NOTE: Other materials possible; contact factory for quote and lead time.

PART NO.	DESCRIPTION	PANEL HOLE DIAMETER (MINIMUM)
CQ DCNUT 0408	Dual Containment Flare Nut: 1/4 OD Process line x 1/2 OD secondary line	N/A
CQ DCNUT 0612	DC Flare Nut: 3/8 x 3/4	N/A
CQ DCNUT0812	DC Flare Nut: 1/2 x 3/4	N/A
CQ DCNUT1216	DC Flare Nut: 3/4 x 1	N/A
CQ PM DCNUT 0408	Panel Mount DC Flare Fitting: 1/4 x 1/2	0.75" (19.05mm)
CQ PM DCNUT 0612	Panel Mount DC Flare Fitting: 3/8 x 3/4	1.00" (25.4mm)
CQ PM DCNUT 0812	Panel Mount DC Flare Fitting: 1/2 x 3/4	1.00" (25.4mm)
CQ PM DCNUT 1216	Panel Mount DC Flare Fitting: 3/4 x 1	1.44" (36.5mm)

For accessories, see page 28. For dimensions, see page 31.

Coupling Accessories

Dust Caps and Plugs

Dust caps and plugs will protect disconnected couplings from dirt or physical damage.

PART NO.	DESCRIPTION	MATERIALS	COUPLING USED WITH
CQG06 DC01	Dust Cap	HDPE	CQG06
CQHV06 DC01	Dust Cap	HDPE	CQH06 & CQV06
CQN06 DC01	Dust Cap	HDPE	CQN06
CQN08 DC01	Dust Cap	HDPE	CQN08
CQG06 DP01	Dust Plug	HDPE	CQG06
CQG06 DP01 Keyed	Dust Plug	HDPE	Keyed version of CQG06
CQHV06 DP01	Dust Plug	HDPE	CQH06 & CQV06
CQN06 DP01	Dust Plug	HDPE	CQN06
CQN06 DP01 Keyed	Dust Plug	HDPE	Keyed version of CQN06
CQN08 DP01	Dust Plug	HDPE	CQN08
CQN08 DP01 Keyed	Dust Plug	HDPE	Keyed version of CQN08
HFC 312L (with leash)	Dust Plug/Cap	Vinyl	HFC12/CQH06/CQV06

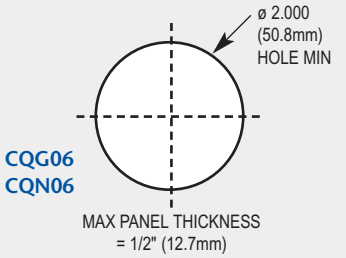
NOTE: Dust caps are not pressure tight.

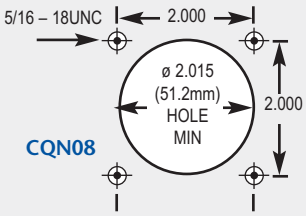
Panel Mount Adaptors

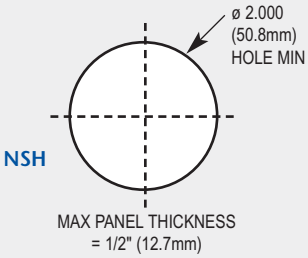
Panel mount adaptors work with coupling series that do not offer integrally-molded panel mount versions. The CQN06 and NSH adaptors are unique in that they can be "snapped" on to either the coupling body or insert by engaging the internal "fingers" of the adaptor into the grooves located on both the body and insert, resulting in exceptional flexibility for system configuration.

PART NO.	DESCRIPTION	MATERIALS	COUPLING USED WITH
**CQN06 PMKIT01	Panel Mount Adaptor	HDPE with Viton Seals	CQN06 & CQG06
CQN08 PMKIT01	Panel Mount Adaptor	PTFE with Viton Seal, ECTFE Screws	CQN08
NSH PMKIT12	Panel Mount Adaptor	Gray HDPE with EPDM Seal	NSH

****NOTE:** The CQN06 PMKIT comes with 2 spacers. Use one or both, depending on panel thickness (range is from 1/8"/3.2mm to 1/2"/12.7mm) to assure maximum holding force of panel mount adaptor on coupling.







Coupling Accessories

Color-Coding Options for the ChemQuik® CQH06 and CQV06 Series

CQH06 and CQV06 only available with color-coding; physical keys not available. Color-coded couplings are modified standard parts and are built to order. Consult factory for lead time.

CQH06 with color options.

How to order: Part numbering for color-coded CQH06 or CQV06 product: CQVD06 10 0106 XXX YY (YY color code). If part is to include modified options, use the part number suffix "XXX" from modified product options section of the ChemQuik® Price List before the color coding suffix "YY" as indicated to the right. Both thumb latch and flare nut are colored.

PART NO.	"YY" COLOR CODE	COLOR
CQVD06 10 0106 XXX YY	01	RED
(EXAMPLE)	02	YELLOW
	03	GREEN
	04	BROWN
	05	BLUE
	99	BLACK

CQN08 with panel mount adaptor and color-coding.

Physical Keying/Color-Coding Options for the ChemQuik CQG06, CQN06 and CQN08 Series

CQG06 and CQN couplings available with non-interchangeable physical/mechanical keys and color-coding. Keyed couplings are modified standard parts and are built to order. Consult factory for lead time.

How to order: Part numbering for keyed CQN or CQG06 product: CQN06 10 0106 XXX YY (YY color code). If part is to include modified options, use the part number suffix "XXX" from modified product options section of the ChemQuik Price List before the color coding suffix "YY" as indicated to the right.

NOTE: CQG06 is available in 01Red and 05Blue only.

PART NO.	"YY" KEY CODE	COLOR
CQN06 10 0106 XXX YY	01	RED
(EXAMPLE)	02	YELLOW
	03	GREEN
	04	BROWN
	05	BLUE
	99	BLACK
	06-98	WHITE

ChemQuik PVDF Color-Coded Flare Nuts

ChemQuik color-coded flare nuts are sold individually for use with any ChemQuik coupling or flare fitting commonly used with Teflon® PFA or FEP tubing. An ideal way to code any critical chemical line. Colored flare nuts are stock items.

Color-coded flare nuts.

How to order: Part numbering for color-coded nuts: CQH FNUT 06 YYY (3 character color code, e.g., "GRN" for green).

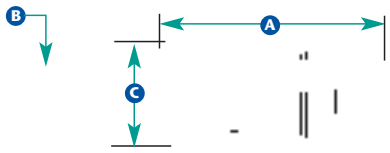
PART NO,	DESCRIPTION	"YYY" COLOR CODE
CQ FNUT 04 YYY	1/4" OD tube size flare nut	NAT, RED, GRN, BLU, EL, BRN, BLK
CQ FNUT 06 YYY	3/8" OD tube size flare nut	NAT, RED, GRN, BLU, EL, BRN, BLK
CQ FNUT 08 YYY	1/2" OD tube size flare nut	NAT, RED, GRN, BLU, YEL, BRN, BLK
CQ FNUT 12 YYY	3/4" OD tube size flare nut	NAT, RED, GRN, BLU, YEL, BRN, BLK

Part Dimensions

Dimensions are approximate. Drawings show only one termination, however, part numbers and dimensions are listed accurately for all terminations. For exact data please visit our web site and obtain downloadable drawings.

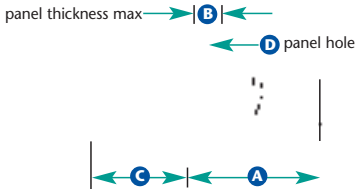
CQG06 In-Line Bodies

PRODUCT	A	B	C
CQGD06 10 0106	4.32	Ø1.90	1.96
CQGD06 10 0108	4.32	Ø1.90	1.96
CQGD06 10 0112	4.49	Ø1.90	1.96
CQGD06 10 0208	3.81	Ø1.90	1.96



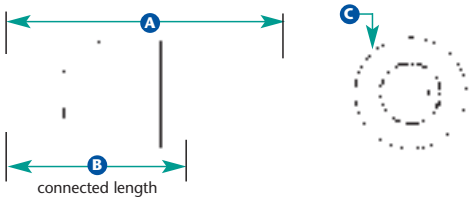
CQG06 In-Line Bodies *with Panel Mount Adaptor Installed*

PRODUCT	A	B	C	D
CQGD06 10 0106	2.47	0.50	1.85	Ø2.00
CQGD06 10 0108	2.42	0.50	1.85	Ø2.00
CQGD06 10 0112	2.64	0.50	1.85	Ø2.00
CQGD06 10 0208	1.96	0.50	1.85	Ø2.00



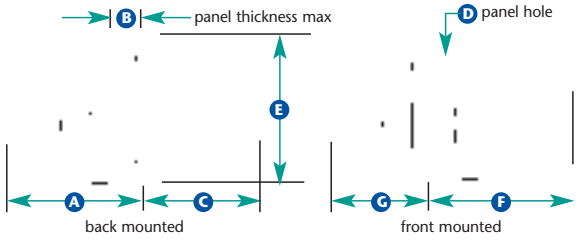
CQG06 In-Line Inserts

PRODUCT	A	B	C
CQGD06 20 0106	4.46	3.14	Ø1.62
CQGD06 20 0108	4.46	3.14	Ø1.62
CQGD06 20 0112	4.64	3.32	Ø1.62
CQGD06 20 0208	3.96	2.64	Ø1.62
CQGD06 20 0212	4.16	2.84	Ø1.62



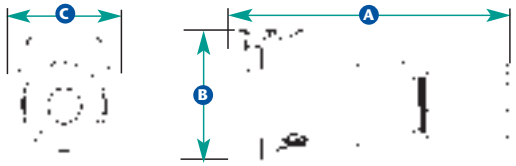
CQG06 In-Line Inserts *with Panel Mount Adaptor Installed*

PRODUCT	A	B	C	D	E	F	G
CQGD06 20 0106	2.39	0.50	2.07	Ø2.00	Ø2.50	2.58	1.88
CQGD06 20 0108	2.39	0.50	2.07	Ø2.00	Ø2.50	2.58	1.88
CQGD06 20 0112	2.57	0.50	2.07	Ø2.00	Ø2.50	2.58	2.06
CQGD06 20 0208	1.89	0.50	2.07	Ø2.00	Ø2.50	2.58	1.38
CQGD06 20 0212	2.09	0.50	2.07	Ø2.00	Ø2.50	2.58	1.58



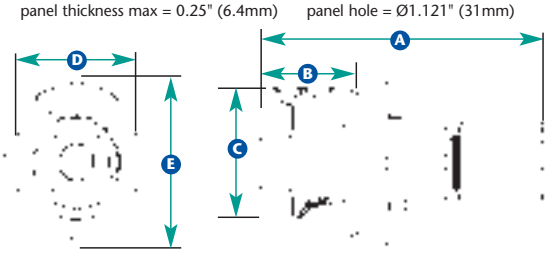
CQH/CQV In-Line Bodies

PRODUCT	A	B	C
06 10 0104	3.32	1.44	1.36
06 10 0106	3.38	1.44	1.36
06 10 0108	3.38	1.44	1.36
06 10 0206	2.70	1.44	1.36



CQH/CQV Panel Mount Bodies

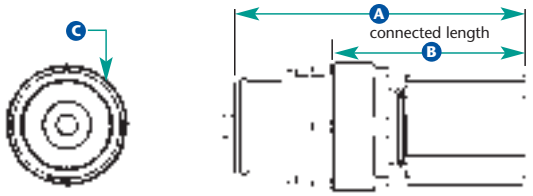
PRODUCT	A	B	C	D	E
06 11 0104	3.32	1.15	1.44	1.36	1.82
06 11 0106	3.38	1.15	1.44	1.36	1.82
06 11 0108	3.38	1.15	1.44	1.36	1.82
06 11 0206	2.70	1.15	1.44	1.36	1.82



Part Dimensions *(continued)*

CQH/CQV In-Line Inserts

PRODUCT	A	B	C
06 20 0104	2.39	1.47	Ø1.00
06 20 0106	2.45	1.53	Ø1.00
06 20 0108	2.44	1.52	Ø1.00
06 20 0206	1.77	.85	Ø1.00

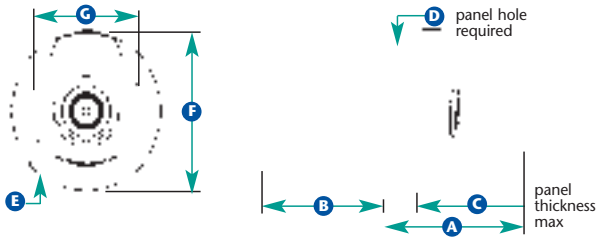


CQN06 In-Line Bodies

PRODUCT	A	B	C
CQND06 10 0104	3.99	1.72	1.98
CQND06 10 0106	4.09	1.72	1.98
CQND06 10 0108	4.19	1.72	1.98
CQND06 10 0112	4.35	1.72	1.98
CQND06 10 0308	3.71	1.72	1.98

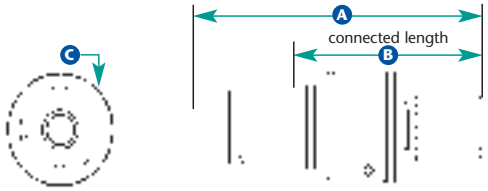
CQN06 In-Line Bodies *with Panel Mount Adaptor Installed*

PRODUCT	A	B	C	D	E	F	G
CQND06 10 0104	2.02	1.97	.50	Ø2.00	Ø2.44	Ø2.50	1.72
CQND06 10 0106	2.12	1.97	.50	Ø2.00	Ø2.44	Ø2.50	1.72
CQND06 10 0108	2.22	1.97	.50	Ø2.00	Ø2.44	Ø2.50	1.72
CQND06 10 0112	2.38	1.97	.50	Ø2.00	Ø2.44	Ø2.50	1.72
CQND06 10 0308	1.74	1.97	.50	Ø2.00	Ø2.44	Ø2.50	1.72



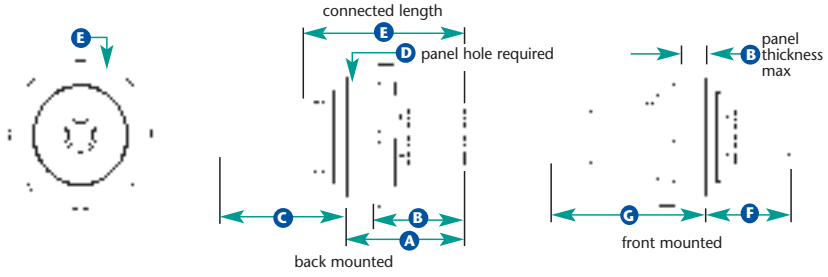
CQN06 In-Line Inserts

PRODUCT	A	B	C
CQND06 20 0104	4.39	3.14	Ø1.63
CQND06 20 0106	4.49	3.24	Ø1.63
CQND06 20 0108	4.58	3.33	Ø1.63
CQND06 20 0112	4.74	3.49	Ø1.63
CQND06 20 0308	4.11	2.86	Ø1.63



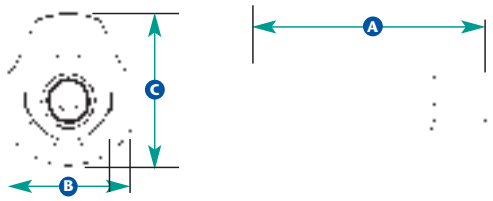
CQN06 In-Line Inserts *with Panel Mount Adaptor Installed*

PRODUCT	A	B	C	D	E	F	G	H
CQND06 20 0104	2.08	.50	2.37	Ø2.00	Ø2.44	1.44	2.95	3.14
CQND06 20 0106	2.12	.50	2.37	Ø2.00	Ø2.44	1.54	2.95	3.24
CQND06 20 0108	2.21	.50	2.37	Ø2.00	Ø2.44	1.63	2.95	3.35
CQND06 20 0112	2.37	.50	2.37	Ø2.00	Ø2.44	1.79	2.95	3.49
CQND06 20 0308	1.74	.50	2.37	Ø2.00	Ø2.44	1.16	2.95	2.86



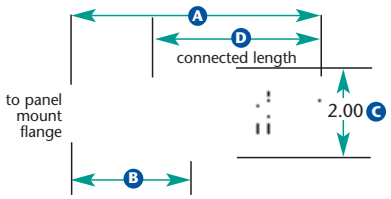
CQN08 In-Line Bodies

PRODUCT	A	B	C
CQND08 10 0112	5.47	2.06	2.41
CQND08 10 0116	5.68	2.06	2.41
CQND08 10 0212	4.93	2.06	2.41
CQND08 10 0312	4.81	2.06	2.41



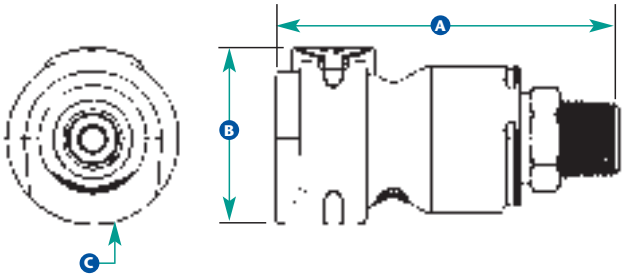
CQN08 In-Line Inserts

PRODUCT	A	B	C	D
CQND08 20 0112	5.89	2.87	Ø2.00	4.13
CQND08 20 0116	6.09	2.87	Ø2.00	4.33
CQND08 20 0212	5.33	2.87	Ø2.00	3.57
CQND08 20 0312	5.33	2.87	Ø2.00	3.57



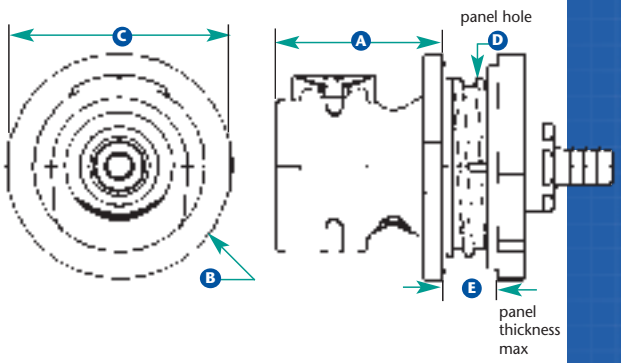
NSH In-Line Bodies

PRODUCT	A	B	C
NSHD10006BSPT	3.67	1.96	Ø1.90
NSHD10008	3.81	1.96	Ø1.90
NSHD13006	3.97	1.96	Ø1.90
NSHD13008	4.27	1.96	Ø1.90
NSHD17006	3.73	1.96	Ø1.90
NSHD17008	3.73	1.96	Ø1.90
NSHD17012	3.88	1.96	Ø1.90
NSHD19006	3.70	1.96	Ø1.90



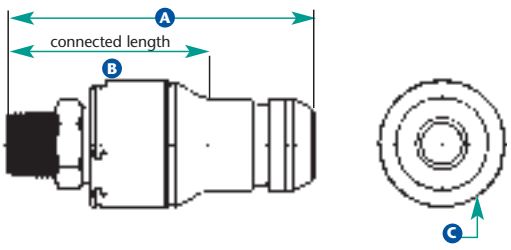
NSH In-Line Bodies *with Panel Mount Adaptor Installed*

PRODUCT	A	B	C	D	E
NSHD10006BSPT	1.85	Ø2.50	2.44	Ø1.98	.50
NSHD10008	1.85	Ø2.50	2.44	Ø1.98	.50
NSHD13006	1.85	Ø2.50	2.44	Ø1.98	.50
NSHD13008	1.85	Ø2.50	2.44	Ø1.98	.50
NSHD17006	1.85	Ø2.50	2.44	Ø1.98	.50
NSHD17008	1.85	Ø2.50	2.44	Ø1.98	.50
NSHD17012	1.85	Ø2.50	2.44	Ø1.98	.50
NSHD19006	1.85	Ø2.50	2.44	Ø1.98	.50



NSH In-Line Inserts

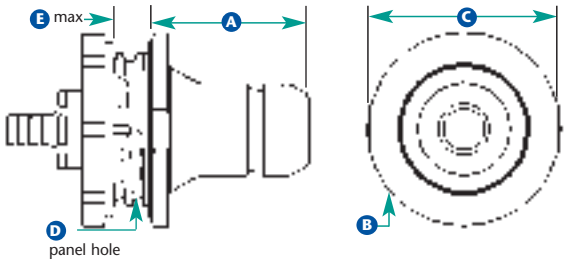
PRODUCT	A	B	C
NSHD20006	4.14	2.81	Ø1.63
NSHD20008	4.43	3.10	Ø1.63
NSHD22006	3.90	2.57	Ø1.63
NSHD22008	3.90	2.57	Ø1.63
NSHD22012	4.05	2.72	Ø1.63
NSHD24006BSPT	3.84	3.84	Ø1.63
NSHD24008	3.98	2.65	Ø1.63
NSHD24012	4.18	2.85	Ø1.63
NSHD26006	3.90	2.57	Ø1.63



Part Dimensions *(continued)*

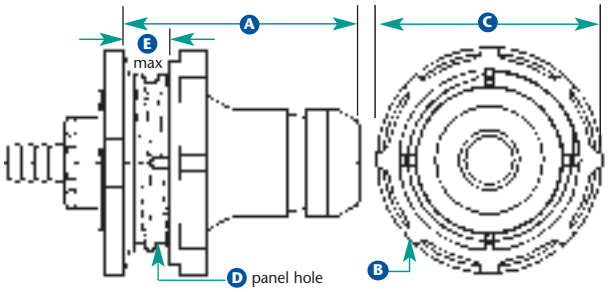
NSH Inserts *with Panel Mount Adaptor Back Mounted*

PRODUCT	A	B	C	D	E
NSHD20006	2.02	Ø2.50	2.44	Ø1.98	.50
NSHD20008	2.02	Ø2.50	2.44	Ø1.98	.50
NSHD22006	2.02	Ø2.50	2.44	Ø1.98	.50
NSHD22008	2.02	Ø2.50	2.44	Ø1.98	.50
NSHD22012	2.02	Ø2.50	2.44	Ø1.98	.50
NSHD24006BSPT	2.02	Ø2.50	2.44	Ø1.98	.50
NSHD24008	2.02	Ø2.50	2.44	Ø1.98	.50
NSHD24012	2.02	Ø2.50	2.44	Ø1.98	.50
NSHD26006	2.02	Ø2.50	2.44	Ø1.98	.50



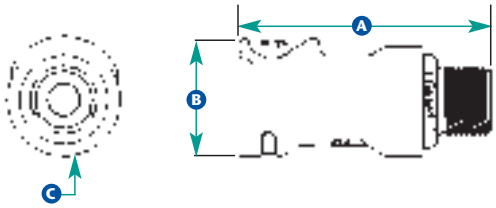
NSH Inserts *with Panel Mount Adaptor Front Mounted*

PRODUCT	A	B	C	D	E
NSHD20006	2.60	Ø2.50	2.44	Ø1.98	.50
NSHD20008	2.60	Ø2.50	2.44	Ø1.98	.50
NSHD22006	2.60	Ø2.50	2.44	Ø1.98	.50
NSHD22008	2.60	Ø2.50	2.44	Ø1.98	.50
NSHD22012	2.60	Ø2.50	2.44	Ø1.98	.50
NSHD24006BSPT	2.60	Ø2.50	2.44	Ø1.98	.50
NSHD24008	2.60	Ø2.50	2.44	Ø1.98	.50
NSHD24012	2.60	Ø2.50	2.44	Ø1.98	.50
NSHD26006	2.60	Ø2.50	2.44	Ø1.98	.50



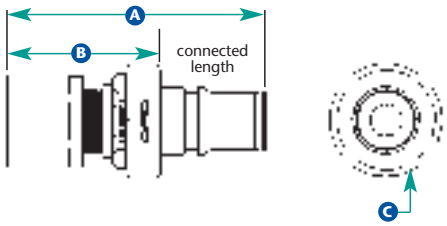
NS6 In-Line Bodies

PRODUCT	A	B	C
NS6D10008	3.00	1.39	Ø1.31
NS6D10008BSPT	3.00	1.39	Ø1.31
NS6D13008	3.59	1.39	Ø1.31
NS6D17006	3.16	1.39	Ø1.31
NS6D17008	3.16	1.39	Ø1.31



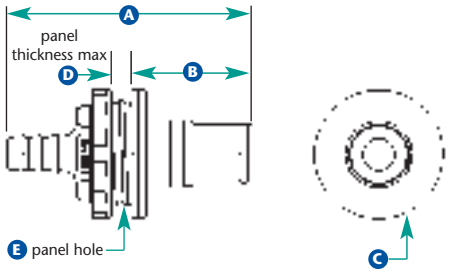
NS6 In-Line Inserts

PRODUCT	A	B	C
NS6D20008	3.02	1.78	Ø1.31
NS6D22006	2.59	1.35	Ø1.31
NS6D22008	2.59	1.35	Ø1.31
NS6D24008	2.44	1.20	Ø1.31
NS6D24008BSPT	2.44	1.20	Ø1.31



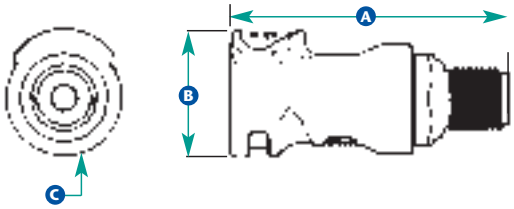
NS6 Panel Mount Inserts

PRODUCT	A	B	C	D	E
NS6D40008	3.28	1.40	Ø1.50	.33	Ø1.25
NS6D42006	2.85	1.40	Ø1.50	.33	Ø1.25
NS6D42008	2.85	1.40	Ø1.50	.33	Ø1.25



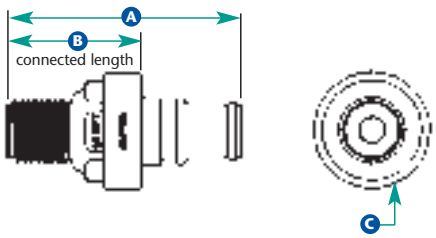
NS4 In-Line Bodies

PRODUCT	A	B	C
NS4D10004	2.31	1.05	Ø.96
NS4D10004BSPT	2.29	1.05	Ø.96
NS4D13006	2.45	1.05	Ø.96
NS4D17002	2.09	1.05	Ø.96
NS4D17004	2.34	1.05	Ø.96
NS4D17006	2.34	1.05	Ø.96



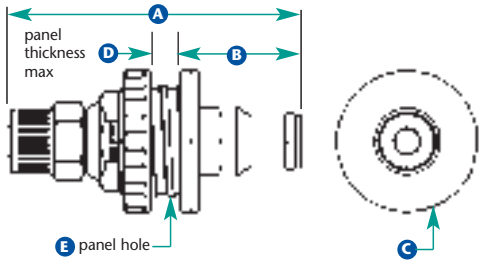
NS4 In-Line Inserts

PRODUCT	A	B	C
NS4D20006	2.09	1.24	Ø.96
NS4D22002	1.73	0.88	Ø.96
NS4D22004	1.98	1.13	Ø.96
NS4D22006	1.98	1.13	Ø.96
NS4D24004	1.95	1.10	Ø.96
NS4D24004BSPT	1.93	1.08	Ø.96



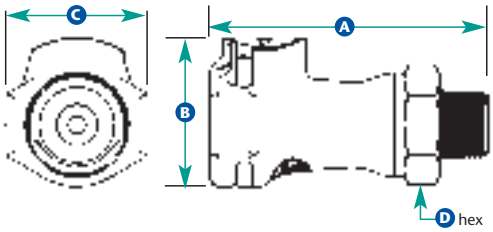
NS4 Panel Mount Inserts

PRODUCT	A	B	C	D	E
NS4D40006	2.43	1.00	Ø1.17	.33	Ø15/16
NS4D42002	2.07	1.00	Ø1.17	.33	Ø15/16
NS4D42004	2.32	1.00	Ø1.17	.33	Ø15/16
NS4D42006	2.32	1.00	Ø1.17	.33	Ø15/16



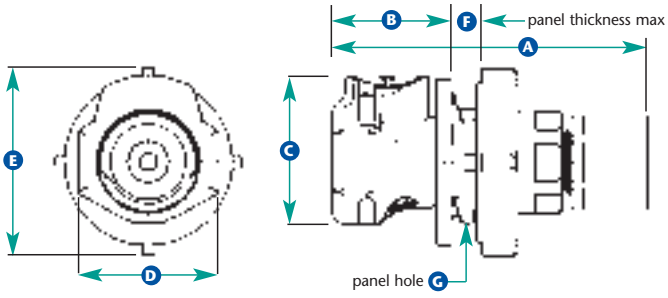
HFC In-Line Bodies

PRODUCT	A	B	C	D
HFC10612/HFCD10612	2.70	1.44	1.36	1.00
HFC10612BSPT/HFCD10612BSPT	2.74	1.44	1.36	1.00
HFC10812/HFCD10812	2.88	1.44	1.36	1.00
HFC101212/HFCD101212	3.08	1.44	1.36	1.05
HFC13612/HFCD13612	3.04	1.44	1.36	
HFC13812/HFCD13812	3.33	1.44	1.36	
HFC17612/HFCD17612	2.79	1.44	1.36	
HFC17812/HFCD17812	2.79	1.44	1.36	
HFC171012/HFCD171012	2.94	1.44	1.36	
HFC171212/HFCD171212	2.94	1.44	1.36	



HFC Panel Mount Bodies

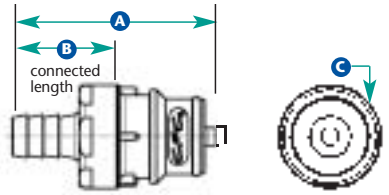
PRODUCT	A	B	C	D	E	F	G
HFC12612/HFCD12612	3.05	1.15	1.44	1.36	1.82	.25	Ø1.21
HFC12812/HFCD12812	3.36	1.15	1.44	1.36	1.82	.25	Ø1.21
HFC16612/HFCD16612	2.82	1.15	1.44	1.36	1.82	.25	Ø1.21
HFC16812/HFCD16812	2.82	1.15	1.44	1.36	1.82	.25	Ø1.21
HFC161012/HFCD161012	2.97	1.15	1.44	1.36	1.82	.25	Ø1.21
HFC161212/HFCD161212	2.97	1.15	1.44	1.36	1.82	.25	Ø1.21



Part Dimensions *(continued)*

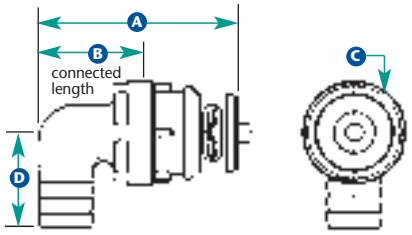
HFC In-Line Inserts

PRODUCT	A	B	C
HFC20612/HFCD20612	2.10	1.18	Ø1.00
HFC20812/HFCD20812	2.40	1.48	Ø1.00
HFC22612/HFCD22612	1.86	.94	Ø1.00
HFC22812/HFCD22812	1.86	.94	Ø1.00
HFC221012/HFCD221012	2.01	1.09	Ø1.00
HFC221212/HFCD221212	2.01	1.09	Ø1.00
HFC24612/HFCD24612	1.77	.85	Ø1.00
HFC24612BSPT/HFCD24612BSPT	1.81	.89	Ø1.00
HFC24812/HFCD24812	1.95	1.03	Ø1.00
HFC241212/HFCD241212	2.15	1.23	Ø1.05



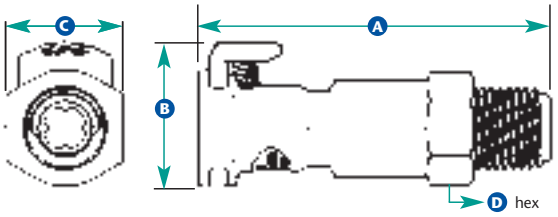
HFC Elbow Inserts

PRODUCT	A	B	C	D
HFC23612/HFCD23612	1.91	.99	Ø1.00	.93
HFC23812/HFCD23812	1.95	1.03	Ø1.00	.93
HFC231212/HFCD231212	1.93	1.01	Ø1.00	1.25



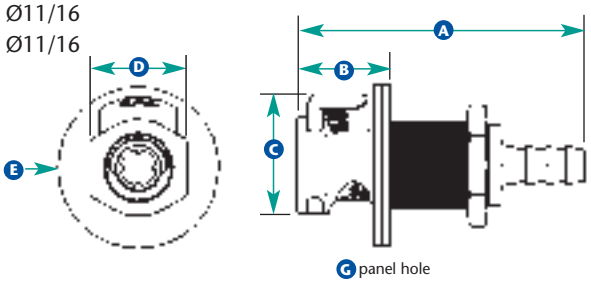
EFC In-Line Bodies

PRODUCT	A	B	C	D
EFCD10412	2.29	.93	.75	.63
EFCD10612	2.29	.93	.75	.63
EFCD17412	2.23	.93	.75	
EFCD17612	2.24	.93	.75	



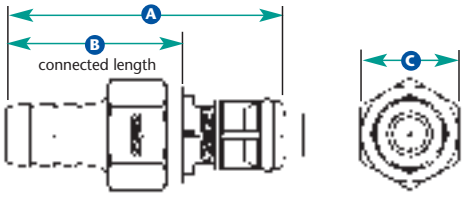
EFC Panel Mount Bodies

PRODUCT	A	B	C	D	E	F	G
EFCD16412	2.23	.72	.93	.75	Ø1.25	.50	Ø11/16
EFCD16612	2.24	.72	.93	.75	Ø1.25	.50	Ø11/16



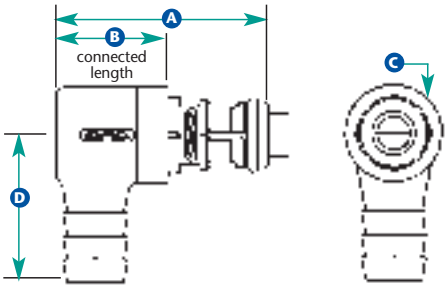
EFC In-Line Inserts

PRODUCT	A	B	C
EFCD22412/EFCD22412	1.97	1.32	.63
EFCD22612/EFCD22612	1.79	1.14	.63
EFCD24412	1.64	.99	.62
EFCD24612	1.64	.99	.69



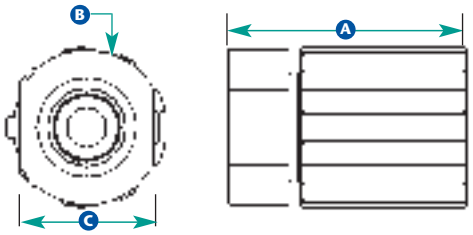
EFC Elbow Inserts

PRODUCT	A	B	C	D
EFC23412/EFCD23412	1.32	.67	Ø.63	.96
EFC23612/EFCD23612	1.38	.73	Ø.63	.96



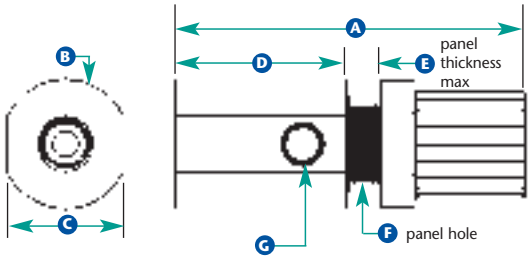
Dual Containment Nuts

PRODUCT	A	B	C
CQDCNUT0408	1.54	Ø1.04	.88
CQDCNUT0612	1.72	Ø1.43	1.13
CQDCNUT0812	1.72	Ø1.43	1.13
CQDCNUT1216	2.12	Ø1.82	1.63



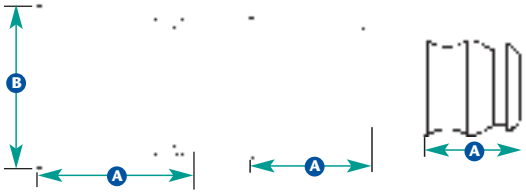
Dual Containment Panel Mount Fittings

PRODUCT	A	B	C	D	E	F	G
CQPMDCNUT0408	3.40	Ø1.25	1.13	1.65	.35	Ø3/4	1/8 NPT
CQPMDCNUT0612	3.91	Ø1.50	1.38	1.74	.50	Ø1.0	1/8 NPT
CQPMDCNUT0812	3.87	Ø1.50	1.38	1.70	.50	Ø1.0	1/8 NPT
CQPMDCNUT1216	4.16	Ø2.00	1.88	1.80	.50	Ø1-7/16	1/8 NPT



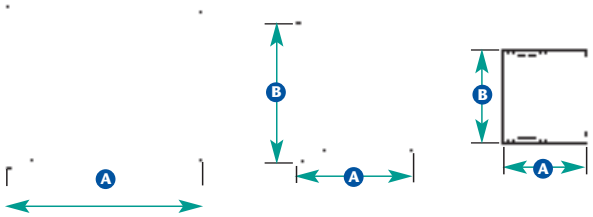
Dust Plugs

PRODUCT	A	B
CQH06DP/CQV06DP	1.03	Ø1.00
CQG06DP	1.46	Ø1.50
CQN06DP	1.30	Ø1.50
CQN08DP	1.70	Ø1.75



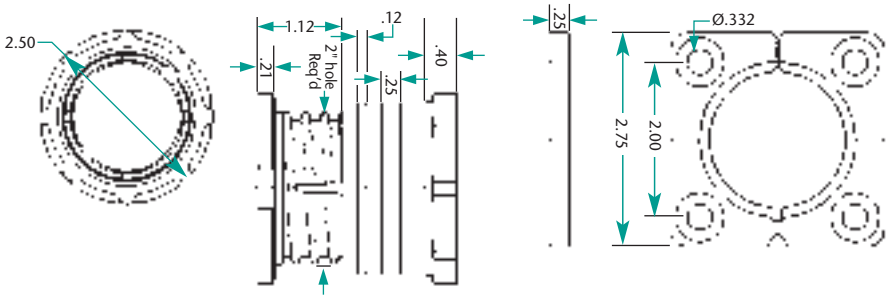
Dust Caps

PRODUCT	A	B
CQH06DC/CQV06DC	.88	Ø1.00
CQG06DC	1.25	Ø1.50
CQN06DC	1.25	Ø1.50
CQN08DC	2.10	Ø1.75



Panel Mount Kits

PRODUCT
CQN06PMKIT 01
CQN08PMKIT 01
NSHPMKIT 12



Chemical Coupling Material Descriptions

POLYMERS

Polypropylene
Polypropylene is an excellent general purpose, low cost resin that is highly resistant to chemical attack from solvents and chemicals in very harsh environments. Contact with some chemicals, such as liquid hydrocarbons, chlorinated chemicals and oxidizing acids, can cause surface crazing and material swelling. In general, polypropylene is not susceptible to environmental stress cracking, and it can be exposed under load in the toughest environments. Resistance to weathering may be limited without the use of ultraviolet light absorbers or stabilizers (gray colored Colder couplings will be superior to uncolored versions). It may be subjected to degradation when exposed to certain conditions of ultraviolet radiation. Due to its higher crystallinity, polypropylene has excellent moisture barrier properties and good optical properties. Higher crystallinity improves stiffness, but reduces impact strength and it will become brittle when exposed to temperatures below freezing.

PEEK
Polyetheretherketon (PEEK), a unique semi-crystalline, is a high temperature resistant, engineered thermoplastic with excellent chemical and fatigue resistance, plus thermal stability. It exhibits superior mechanical and electrical properties. With a maximum continuous working temperature of 480° F (249° C) and superior chemical resistance. PEEK works effectively as a metal replacement in harsh environments. It is inert to all common solvents and resists a wide range of organic and inorganic liquids. It has a superior dielectric with low loss, even at high temperatures and frequencies. PEEK exhibits good radiation resistance, absorbing more than 1000 M rads of irradiation with no significant reduction in mechanical properties, and exhibits exceptional resistance to high doses of gamma radiation. Its outstanding wear, abrasion resistance and low coefficient of friction result in very low particle generation. It exhibits low smoke and toxic gas emissions (among the lowest of any thermoplastic material). PEEK, is an excellent material for a wide spectrum of applications where thermal, chemical and combustion properties and high purity are critical to performance.

PPS
Polyphenylene sulfide (PPS) polymer offers the broadest resistance to chemicals of any advanced engineering plastic. It has no known solvents below 392° F (200° C) and is inert to steam, strong bases, fuels, and acids. Minimal moisture absorption and a very low coefficient of linear thermal expansion make it ideal for precise-tolerance machined components. In addition, PPS products exhibit excellent electrical characteristics and are inherently flame retardant. PPS is an excellent alternative to PEEK at lower temperatures and in certain chemicals, e.g., sulfuric acid.

FLUOROPOLYMERS

PVDF
Polyvinyliidene fluoride (PVDF) partially fluorinated polymer is a 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, exhibits high dielectric strength, and has a broad, useful temperature range. As a fluoropolymer, PVDF is highly resistant to most environmental conditions, including corrosive chemicals, ultraviolet and gamma radiation, and is ideally suited to handling wet or dry chlorine, bromine and other halogens. Grades used by Colder are among the most pure of all commercial resins. They resist strong acids, solvents and reducing agents and are used in many industries, including microelectronic processing, chemical processing, pharmaceutical manufacturing, and laboratory uses. Their inherent chemical resistance, high purity and natural fire retardancy make them ideal for contact with high purity water, acids, chlorine, halogenated solvents, and petrochemical mixtures.

PTFE
Polytetrafluoroethylene (PTFE) is a crystalline molecular structure with a melting point of 621° F (327° C). It has exceptional resistance to chemicals, a density of 2.15g, a dielectric constant of 2.1, and a loss factor that is low and stable across wide temperature and frequency range. PTFE has useful mechanical properties from cryogenic temperatures to 500° F (260° C). It's coefficient of friction is lower than almost any other material. It also has a high oxygen level. PTFE is a fluorocarbon resin that is isostatically compression molded into various shapes. It is chemically resistant to all chemicals and solvents with the exception of some molten alkali metals, molten sodium hydroxide, elemental fluorine, and certain fluorinating agents. This unique chemical resistance stems from (1) the strong interatomic bonds between fluorine and carbon atoms, (2) shielding of the polymer's carbon atom backbone by fluorine atoms, and (3) high molecular weight. PTFE offers chemical resistance and stability at high temperature.

Enhanced/Modified PTFE
In many ChemQuik® products, Colder utilizes Modified PTFE for critical components. Besides retaining all the proven advantages of conventional PTFE, Enhanced or Modified PTFE offers some significantly improved properties:

- substantially lower deformation under load
- lower permeation due to denser polymer structure and fewer voids
- better weldability
- improved stress recovery, particularly at elevated temperatures
- smoother surface finishes
- higher transparency
- higher dielectric breakdown voltage

PFA
PFA is a perfluoroalkoxy copolymer resin. It combines the processing ease of conventional thermoplastic resins with the excellent properties of polytetrafluoroethylene (PTFE). Products manufactured from PFA can offer continuous service temperatures up to 500° F (260° C). PFA provides superior creep resistance at high temperatures, excellent low-temperature toughness and exceptional flame resistance.

ECTFE/PCTFE
Ethylene-ChloroTriFluoro-Ethylene or ECTFE, commonly known as Halar®, and Poly-ChloroTriFluoro-Ethylene or PCTFE, commonly know as Kel-F®, both have excellent corrosion/chemical resistance (similar to PTFE or PFA), have superior toughness and physical properties, have excellent temperature limits, have low permeability and possess excellent electrical and fire retardant properties. Both fluoropolymers are high purity plastics suitable for use in ultra-pure applications.

ELASTOMERS

EPDM
Ethylene-propylene-diene rubber (EPDM, also sometimes referred to as EPR) is produced using a third monomer. Colder uses the higher quality peroxide-cured version. It provides exceptional resistance to temperatures through 300° F on a wide range of chemicals, and maintains good resistance to compression set and ozone. It is an ideal, reasonably-priced material for parts requiring a wide resistance to chemicals utilized and produced in the chlorine, caustic and bleach industries.

Viton® FKM
Viton® FKM is the most widely specified fluoroelastomer seal material, well known for its outstanding resistance to heat, oxidation, weathering, and ozone. It has outstanding resistance to a broad variety of fluids, including: aliphatic and aromatic hydrocarbons, halogenated fluids and strong acids. It has outstanding resistance to compression set and provides sealing performance and longevity unmatched by any non-fluorinated elastomer. These characteristics make Viton® fluoroelastomer the perfect choice for demanding sealing applications.

Chemraz® FFKM
Perfluoroelastomers provide the broadest range of chemical resistance of any elastomeric material, combining the resilience and sealing force of an elastomer with the chemical resistance approaching that of PTFE. Chemraz® brand seals last longer and seal completely in harsh environments and a wide range of temperatures (-20° F to 615° F, -29° C to 324° C). These critical process seals minimize microcontamination in wet and dry wafer fabrication and pharmaceutical processes. They can be utilized to provide minimal extractable ion content, significant plasma resistance, low particle generation, and high-dimensional stability, making these seals ideal for ultra high purity applications. Chemraz is the cost-effective solution for the most difficult sealing problems in many industries, particularly fluid handling

Simriz® FFKM
Simriz perfluoroelastomer seals are a cost-effective alternative to Kalrez® and Chemraz® brand perfluoroelastomer seals. They provide essentially equivalent performance at a substantial cost savings. Colder offers Simriz seals optional on many coupling series.

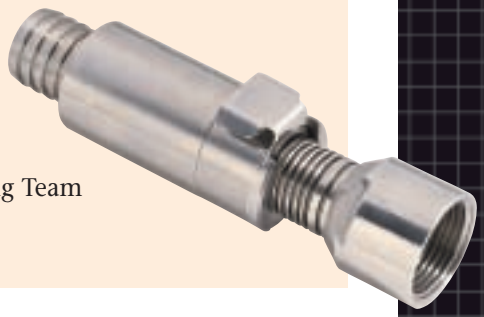
PFA & FEP Encapsulated Seals
Encapsulated seals are a hybrid seal combining an elastomeric core material with a fluoropolymer jacket typically made from PFA, FEP or some other compound. The idea is to combine the resiliency of the elastomer with the superior chemical resistance of the fluoropolymer to achieve a seal that is lower cost than a pure fluoroelastomer FFKM seal. Applications are limited, but where appropriate, Colder uses these types of seals to achieve high chemical performance at a lower cost.

Still Looking for That Perfect Solution?

Even with thousands of standard quick disconnect couplings available, we know you still may not have found the precise part you need. That's why, for more than 25 years, Colder's Application Engineering Team has worked with customers around the world to design custom coupling solutions to solve their specific problems and improve their products' performance. Colder has solid modeling capabilities, prototype equipment, an expansive test lab, and thousands of solutions. Combine that with our years of experience and a "can do" attitude, and there is no need for you to design your solution alone.

Consider a Custom-Designed Connector When:

- A quick disconnect will add value to your product, making it easier to use and more reliable
- Your requirements cannot be met by an existing standard Colder product
- Unique requirements, budgets or timing warrant your designer's collaboration with Colder's Application Engineering Team

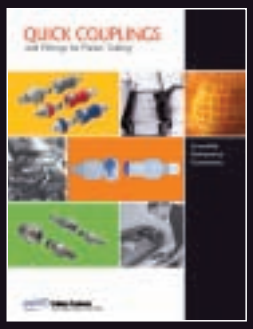


Remember, standard catalog items generally have the advantage of quick availability and many times, lower cost, with no initial investment of time or money. However, depending on your volumes and technical requirements, it may make sense to work with our Application Engineering Team to design a unique solution tailored for your needs.

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

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

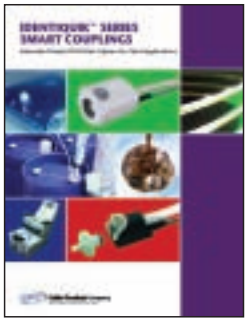
On-line Catalogs and Literature



Industrial

Bioprocessing

Medical Device



Smart Technology

Food, Beverage & Water

Colder Products Company
Quick Couplings & Fittings for Plastic Tubing

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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.

Colder 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.

WARNING: Pressure, temperature, chemical type and concentration, 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.

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