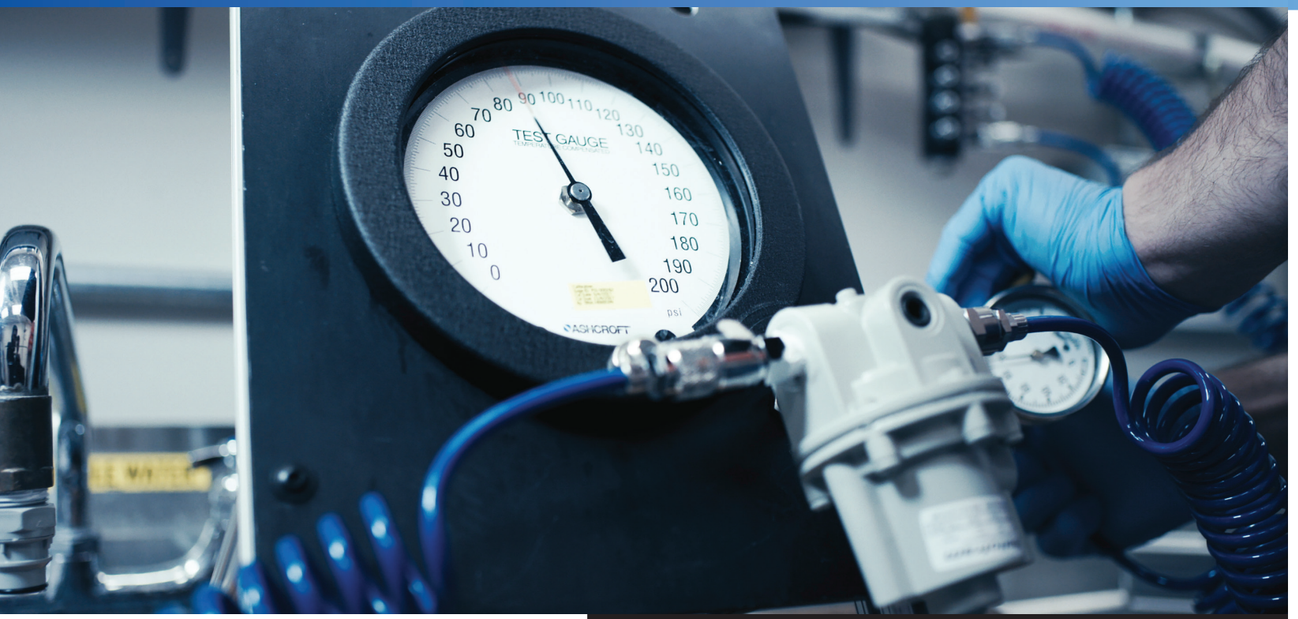
CPC®

A DOVER COMPANY

CONNECTION SOLUTIONS FOR

LIQUID COOLING



QUALITY

CPC works with customers to meet expectations and deliver quality products that can be relied upon. Employees work with quality systems and collaborate with suppliers and the CPC distribution network to serve customers' needs. CPC measures and continually improves our standards of product quality, support services and overall customer and employee satisfaction. CPC's Quality System conforms to ISO 9001:2008 and ISO 13485 standards.

TESTING

We want you to be absolutely confident in our liquid cooling connectors. That's why CPC has developed rigorous testing protocols which are followed throughout the development and manufacturing process including: helium mass spectrometer leak testing, bubble leak testing, pressure decay testing and hydrostatic leak testing – among others. It starts with materials testing, followed by prototype and product testing, and torture testing manufactured couplings to failure. Validation reports are available. Ultimately, you can rest easy knowing that CPC products will perform to their specifications.

EVERIS® QDs DESIGNED AND BUILT FOR THERMAL MANAGEMENT

CPC designs and manufactures Everis® quick disconnect couplings (QDs) to specifically meet the demands for high performance in liquid cooling. Everis quick release couplings from CPC are designed to optimize flow while offering excellent durability and ease of use. Everis QD's are compatible with a variety of coolants. Most importantly, Everis quick disconnects' patented non-spill design is ideal for long-term, connected use. Everis QD's rugged reliability is needed for sensitive and critical liquid cooling of electronics environments such as found in high performance computing, EV charging, data centers, 5G, and edge computing as well as medical electronics.

EVERIS® LQ SERIES

Purpose-built liquid cooling non-spill nickel plated brass, aluminum, and stainless steel couplings offer a secure, reliable connection and dripless disconnect.

EVERIS® PLQ SERIES

Designed to avoid galvanic corrosion and condensation issues, these robust, high-performance QDs are lightweight and dimensionally stable. They are made of polyphenylsulfone (PPSU) which is UL94 VO-rated and is compatible with most liquid cooling fluids.

EVERIS® BLQ SERIES

Engineered specifically for integrated mounting and external locking engagement, these QDs feature ultra-reliable dripless connections and disconnections.

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LEGEND

NEW NEW PRODUCT | STRAIGHT-THROUGH | SINGLE SHUT-OFF | DOUBLE SHUT-OFF | ⊗ NON-SPILL

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LEGEND NEW NEW PRODUCT STRAIGHT-THROUGH SINGLE SHUT-OFF DOUBLE SHUT-OFF NON-SPILL

EVERIS® PLQ2
SERIES CONNECTOR

Everis® PLQ2 Series quick disconnect couplings are purpose-built for liquid cooling of electronics applications and offer a high-flow capacity to optimize thermal management system performance. The Everis PLQ2 connector is lightweight, not susceptible to galvanic corrosion and is made of PPSU which is rated UL94 V0 flame retardant. With an ergonomic thumb latch, Everis PLQ2 fittings are easy to use. Everis PLQ2 quick disconnects' patented design offers reliable long-term connections and the non-spill valves provide drip-free connections and disconnections.

SPECIFICATIONS

SCAN

cpcworldwide.com/Everis-PLQ2

PRESSURE:
Vacuum to 120 psi, 8.3 bar

TEMPERATURE:
Operating: 0°F to 240°F (-17°C to 115°C)
Storage/Shipping:
-40°F to 240°F (-40°C to 115°C)

MATERIALS:
Main Components: Polyphenylsulfone (PPSU)
Valves and Thumb latch: PPSU
Valve Springs (wetted): Stainless steel
External spring: Stainless steel
Seals: EPDM
Seal Spacer: PTFE
Compliance: RoHS, REACH

COLOR:
Matte Black with Cool Blue or Warm Red

TUBING SIZES: 1/4" ID (6.4mm ID)

LUBRICANTS: Krytox® PFPE

SPILLAGE:
<0.015 cc per disconnect at 0 psi
<0.063 cc per disconnect rated at 200 psi

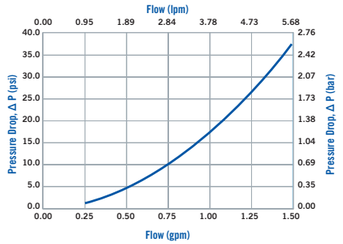
AIR INCLUSION: 0.04 cc per connect

FLOW COEFFICIENT: Cv ~ 0.4 (0.3 Kv)

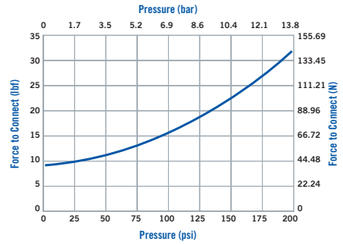
WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of CPC's products in their own application conditions.

FEATURES	BENEFITS
Made of high-performance PPSU material	Lightweight, durable and chemically compatible with widely used liquid cooling fluids; UL94 V0 flame retardant
Non-spill valve design	Disconnect under pressure with no spills
High flow to size ratio with low pressure drop	Increased cooling efficiency in small spaces
Ergonomic body and latch design	Simple, intuitive one-handed operation
Audible click upon connection	Provides connection assurance
Robust product testing	High durability and reliability in long-use applications
Color coding	Instant visual identification of cooling lines
Shrouded latch protection	Prevention from accidental disconnect

PLQ2 WATER FLOW



PLQ2 FORCE TO CONNECT



These graphs are intended to give you a general idea of the performance capabilities of each product line. Contact CPC for flow of a particular coupling combination.

EVERIS® PLQ4
SERIES CONNECTOR

Everis® PLQ4 Series quick disconnect couplings are purpose-built for liquid cooling of electronics applications and offer a high-flow capacity to optimize thermal management system performance. Made of PPSU, a high-performance, engineered thermoplastic, Everis PLQ4 connectors are lightweight, and not susceptible to galvanic corrosion. With an ergonomic thumb latch, Everis PLQ4 are easy to use. The couplings' patented design offers reliable long-term connections and the non-spill valves provide drip-free connections and disconnections to protect sensitive equipment.

SPECIFICATIONS

SCAN

cpcworldwide.com/Everis-PLQ4

PRESSURE:
Vacuum to 120 psi, 8.3 bar

TEMPERATURE:
Operating: 0°F to 240°F (-17°C to 115°C)
Storage/Shipping:
-40°F to 240°F (-40°C to 115°C)

MATERIALS:
Main Components: Polyphenylsulfone (PPSU)
Valves and Thumb latch: PPSU
Valve Springs (wetted): Stainless steel
External spring: Stainless steel
Seals: EPDM
Seal Spacer: PTFE
Compliance: RoHS, REACH

COLOR:
Matte Black with Cool Blue or Warm Red

TUBING SIZES:
1/4" to 3/8" ID (6.4mm to 9.5mm ID)

LUBRICANTS: Krytox® PFPE

SPILLAGE:
<0.025 cc per disconnect at 0 psi
<0.055 cc per disconnect rated at 120 psi

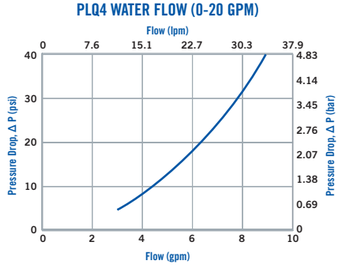
AIR INCLUSION: 0.20 cc per connect

FLOW COEFFICIENT: Cv ~ 1.4 (1.2Kv)

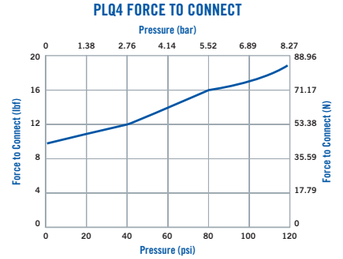
WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of CPC's products in their own application conditions.

FEATURES	BENEFITS
Made of high-performance PPSU material	Lightweight, durable and chemically compatible with widely used liquid cooling fluids; UL94 V0 flame retardant
Non-spill valve	Disconnect under pressure with no spills
High flow to size ratio with low pressure drop	Increased cooling efficiency in small spaces
Ergonomic body and latch design	Simple, intuitive one-handed operation
Audible click upon connection	Provides connection assurance
Robust product testing	High durability and reliability in long-use applications
Color coding	Instant visual identification of cooling lines
Shrouded latch protection	Prevention from accidental disconnect

PLQ4 WATER FLOW (0-20 GPM)



PLQ4 FORCE TO CONNECT



These graphs are intended to give you a general idea of the performance capabilities of each product line. Contact CPC for flow of a particular coupling combination.

EVERIS® LQ2
SERIES CONNECTOR

Everis® LQ2 Series quick disconnect couplings with 1/8" flow are designed for liquid cooling applications. With a small form factor for tight spaces, Everis LQ2 connectors offer a high-flow capacity to optimize system performance. The couplings' patented design offers reliable long-term connections and provides drip-free connections and disconnections to protect sensitive equipment. EPDM, FVMQ and FKM seals are standard options for compatibility with water, glycol and dielectric coolants. For other material and termination options, see your regional CPC sales representative.

SPECIFICATIONS

PRESSURE: Vacuum to 200 psi, 13.8 bar

TEMPERATURE:
Operating*: 0°F to 240°F (-17°C to 115°C)
Storage/Shipping:
-40°F to 240°F (-40°C to 115°C)

MAXIMUM FLOW AT DISCONNECT:
1.00 gal/min at 0 – 100 psi
0.25 gal/min at 101 – 200 psi

MATERIALS:
Main Components: Nickel-chrome plated brass
Valves and Thumb latch: Polysulfone
Valve Springs (wetted): Stainless steel
External spring: Stainless steel
Seals: EPDM standard (FKM, FVMQ options)
Compliance: RoHS, REACH

COLOR: Chrome with Cool Blue or Warm Red

TUBING SIZES: 1/4" ID (6.4mm ID)

LUBRICANTS: Krytox® PFPE

SPILLAGE:
<0.015 cc per disconnect at 0 psi
<0.063 cc per disconnect rated at 200 psi

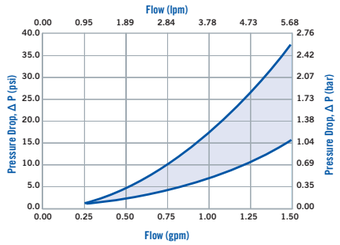
AIR INCLUSION: <0.04 cc per connect

FLOW COEFFICIENT: Cv ~0.37 (0.3 Kv)

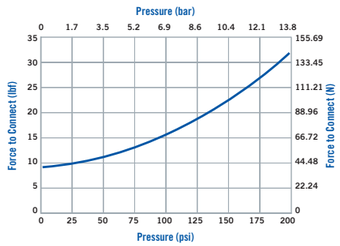
*FVMQ seal option extends operating temperature to -40°F (-40°C)
WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of CPC's products in their own application conditions.

FEATURES	BENEFITS
Non-spill valve	Disconnect under pressure with no spills
Redundant multi-lobed seals	Extra protection from leak-causing contaminants and debris
High flow capacity with low pressure drop	Efficient, cost-effective cooling
EPDM, FKM or FVMQ seals	Compatibility with common coolants (e.g. glycol/water, mineral oil) and application temperatures
Ergonomic body and latch design	Simple, intuitive one-handed operation
Audible click	Connection assurance
Color coding	Instant visual identification of cooling lines
Low profile	Meets size requirements for space-constrained electronics
Swivel connection	Allows user to orient latch or tube to facilitate installation and maintenance
Single-piece options for insert	Space saving

LQ2 WATER FLOW



LQ2 FORCE TO CONNECT



These graphs are intended to give you a general idea of the performance capabilities of each product line. Contact CPC for flow of a particular coupling combination.

EVERIS® LQ2 SERIES DIMENSIONS

COUPLING BODIES - Nickel-chrome plated brass

TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	HEX	A	B	C	D
IN-LINE LOCKING HOSE BARB	1/4" ID	6.4mm ID	LQ2D1704LRED		0.82 (20.9)	2.09 (53.1)	1.34 (34.0)	
			LQ2D1704LBLU		0.82 (20.9)	2.09 (53.1)	1.34 (34.0)	
IN-LINE STRAIGHT THREAD PORT SAE	1/4 SAE-4: 7/16-20[1]		LQ2D3004RED	9/16"	0.82 (20.9)	1.72 (43.6)	1.34 (34.0)	
			LQ2D3004BLU	9/16"	0.82 (20.9)	1.72 (43.6)	1.34 (34.0)	
ELBOW LOCKING HOSE BARB	1/4" ID	6.4mm ID	LQ2D3304LRED		0.79 (20.1)	1.64 (41.5)	1.64 (41.5)	1.03 (26.2)
			LQ2D3304LBLU		0.79 (20.1)	1.64 (41.5)	1.64 (41.5)	1.03 (26.2)
IN-LINE THREAD G / BSPP	G1/8[2]		LQ2D3102RED	15mm	0.82 (20.9)	1.67 (42.5)	1.39 (35.3)	
			LQ2D3102BLU	15mm	0.82 (20.9)	1.67 (42.5)	1.39 (35.3)	

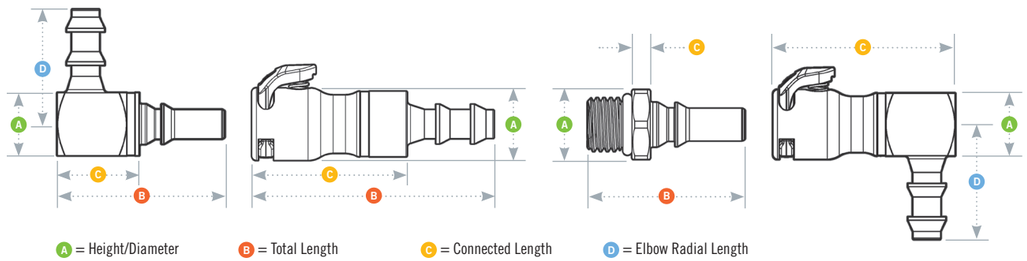
COUPLING INSERTS - Nickel-chrome plated brass

TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	HEX	A	B	C	D
IN-LINE LOCKING HOSE BARB	1/4" ID	6.4mm ID	LQ2D2204LRED		0.56 (14.3)	1.96 (49.8)	0.44 (11.2)	
			LQ2D2204LBLU		0.56 (14.3)	1.96 (49.8)	0.44 (11.2)	
IN-LINE STRAIGHT THREAD SAE	1/4 SAE-4: 7/16-20[1,3]		LQ2D4604RED	9/16"	0.56 (14.3)	1.28 (32.4)	0.15 (3.8)	
			LQ2D4604BLU	9/16"	0.56 (14.3)	1.28 (32.4)	0.15 (3.8)	
ELBOW LOCKING HOSE BARB	1/4" ID	6.4mm ID	LQ2D2304LRED		0.56 (14.3)	1.51 (38.2)	0.74 (18.7)	1.03 (26.2)
			LQ2D2304LBLU		0.56 (14.3)	1.51 (38.2)	0.74 (18.7)	1.03 (26.2)
IN-LINE STRAIGHT THREAD G / BSPP	G1/8[2,3]		LQ2D4702RED	15mm	0.59 (15.0)	1.20 (30.5)	0.15 (3.8)	
			LQ2D4702BLU	15mm	0.59 (15.0)	1.20 (30.5)	0.15 (3.8)	

All measurements are in inches (millimeters) unless otherwise noted.
For FKM seal option, add V suffix to part number. Example: LQ2D3004REDV
For FVMQ seal option, add FLS suffix to part number. Example: LQ2D3004REDFLS

[1]All SAE terminations are compatible with SAE J1926-1 ports.
[2]All G (BSPP) terminations are compatible with ISO 1179-1 ports.
[3]One-piece design

PRODUCT DIMENSIONS



A = Height/Diameter B = Total Length C = Connected Length D = Elbow Radial Length

SCAN

cpcworldwide.com/Everis-LQ2

DID YOU KNOW

"Spillage" can be easily misconstrued. Depending upon flow size, a typical QD will emit less than 0.02 cc of fluid, which often equates to a wetted surface on the face of the connector.

EVERIS® LQ4
SERIES CONNECTOR

Everis® LQ4 Series quick disconnect couplings

with 1/4" flow offer a relative high-flow capacity to optimize system performance. The couplings' patented design offers reliable long-term connections and provides drip-free connections and disconnections to protect sensitive equipment. EPDM, FVMQ and FKM seals are standard options for compatibility with water, glycol or dielectric coolants. For other material and termination options see your regional CPC sales representative.

SPECIFICATIONS

PRESSURE: Vacuum to 120 psi, 8.3 bar

TEMPERATURE:
Operating*: 0°F to 240°F (-17°C to 115°C)
Storage/Shipping:
-40°F to 240°F (-40°C to 115°C)

MAXIMUM FLOW AT DISCONNECT:
3.0 gal/min, 11.3L/min at 0 – 120 psi

MATERIALS:
Main Components:
Nickel-chrome plated brass
Valves and Thumb latch: Polysulfone
Valve Springs (wetted): Stainless steel
External spring: Stainless steel
Seals: EPDM standard (FKM, FVMQ options)
Compliance: RoHS, REACH

COLOR: Chrome with Cool Blue or Warm Red

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

LUBRICANTS: Krytox® PFPE

SPILLAGE:
0.025 cc per disconnect rated at 0 psi
0.055 cc per disconnect rated at 120 psi

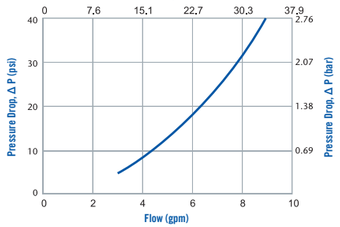
AIR INCLUSION: 0.020 cc per connect

FLOW COEFFICIENT: Cv ~1.4 (1.2 Kv)

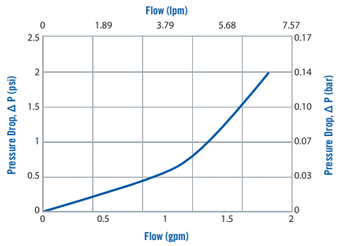
*FVMQ seal option extends operating temperature to -40°F (-40°C)
WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of CPC's products in their own application conditions.

FEATURES	BENEFITS
Non-spill valve	Disconnect under pressure with no spills
Redundant multi-lobed seals	Extra protection from leak-causing contaminants and debris
High flow capacity with low pressure drop	Efficient, cost-effective cooling system
EPDM, FKM or FVMQ seals	Compatibility with common coolants (e.g. glycol/water, mineral oil) and application temperatures
Ergonomic body and latch design	Simple, intuitive one-handed operation
Audible click	Connection assurance
Color coding	Instant visual identification of cooling lines
Low profile	Meets size requirements for space-constrained electronics
Swivel connection	Allows user to orient latch or tube to facilitate installation and maintenance
Single-piece options for insert	Space saving

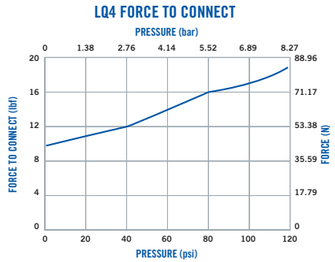
LQ4 WATER FLOW (0-10 GPM)



LQ4 WATER FLOW (0-2 GPM)



LQ4 FORCE TO CONNECT



These graphs are intended to give you a general idea of the performance capabilities of each product line. Contact CPC for flow of a particular coupling combination.

SCAN

cpcworldwide.com/Everis-LQ4

EVERIS® LQ4 SERIES DIMENSIONS

COUPLING BODIES - Nickel-chrome plated brass

TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	HEX	A	B	C
IN-LINE LOCKING HOSE BARB	1/4" ID	6.4mm ID	LQ4D17004LRED		0.98 (24.8)	2.60 (65.9)	1.85 (46.9)
	1/4" ID	6.4mm ID	LQ4D17004LBLU		0.98 (24.8)	2.60 (65.9)	1.85 (46.9)
	3/8" ID	9.5mm ID	LQ4D17006LRED		0.98 (24.8)	2.69 (68.2)	1.81 (46.0)
	3/8" ID	9.5mm ID	LQ4D17006LBLU		0.98 (24.8)	2.69 (68.2)	1.81 (46.0)
IN-LINE HOSE BARB	1/4" ID	6.4mm ID	LQ4D17004RED		0.98 (24.8)	2.50 (63.4)	1.85 (46.9)
	1/4" ID	6.4mm ID	LQ4D17004BLU		0.98 (24.8)	2.50 (63.4)	1.85 (46.9)
	3/8" ID	9.5mm ID	LQ4D17006RED		0.98 (24.8)	2.50 (63.4)	1.85 (46.9)
	3/8" ID	9.5mm ID	LQ4D17006BLU		0.98 (24.8)	2.50 (63.4)	1.85 (46.9)
IN-LINE STRAIGHT THREAD SAE	1/4 SAE-4: 7/16-20[1]		LQ4D30004RED	13/16"	0.98 (24.8)	2.21 (56.0)	1.85 (46.9)
	1/4 SAE-4: 7/16-20[1]		LQ4D30004BLU	13/16"	0.98 (24.8)	2.21 (56.0)	1.85 (46.9)
	3/8 SAE-6: 9/16-18[1]		LQ4D30006RED	13/16"	0.98 (24.8)	2.24 (56.8)	1.85 (46.9)
	3/8 SAE-6: 9/16-18[1]		LQ4D30006BLU	13/16"	0.98 (24.8)	2.24 (56.8)	1.85 (46.9)
IN-LINE PIPE THREAD	1/4" NPT		LQ4D10004RED	13/16"	0.98 (24.8)	2.35 (59.6)	1.85 (46.9)
	1/4" NPT		LQ4D10004BLU	13/16"	0.98 (24.8)	2.35 (59.6)	1.85 (46.9)
	3/8" NPT		LQ4D10006RED	13/16"	0.98 (24.8)	2.35 (59.6)	1.85 (46.9)
	3/8" NPT		LQ4D10006BLU	13/16"	0.98 (24.8)	2.35 (59.6)	1.85 (46.9)
IN-LINE PTF	1/4" ID x 3/8" OD		LQ4D13006RED	13/16"	0.98 (24.8)	2.50 (63.4)	1.85 (46.9)
	1/4" ID x 3/8" OD		LQ4D13006BLU	13/16"	0.98 (24.8)	2.50 (63.4)	1.85 (46.9)
IN-LINE THREAD G / BSPP	G1/4[2]		LQ4D31004RED	20mm	0.98 (24.8)	2.29 (58.0)	1.89 (47.9)
	G1/4[2]		LQ4D31004BLU	20mm	0.98 (24.8)	2.29 (58.0)	1.89 (47.9)
	G3/8[2]		LQ4D31006RED	22mm	0.98 (24.8)	2.29 (58.0)	1.89 (47.9)
	G3/8[2]		LQ4D31006BLU	22mm	0.98 (24.8)	2.29 (58.0)	1.89 (47.9)

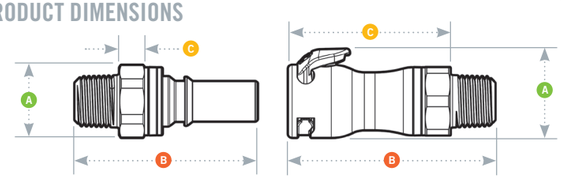
COUPLING INSERTS - Nickel-chrome plated brass

TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	HEX	A	B	C
IN-LINE LOCKING HOSE BARB	1/4" ID	6.4mm ID	LQ4D22004LRED		0.80 (20.3)	2.44 (62.1)	0.63 (16.0)
	1/4" ID	6.4mm ID	LQ4D22004LBLU		0.80 (20.3)	2.44 (62.1)	0.63 (16.0)
	3/8" ID	9.5mm ID	LQ4D22006LRED		0.80 (20.3)	2.53 (64.4)	0.59 (15.1)
	3/8" ID	9.5mm ID	LQ4D22006LBLU		0.80 (20.3)	2.53 (64.4)	0.59 (15.1)
IN-LINE HOSE BARB	1/4" ID	6.4mm ID	LQ4D22004RED		0.80 (20.3)	2.34 (59.5)	0.63 (16.0)
	1/4" ID	6.4mm ID	LQ4D22004BLU		0.80 (20.3)	2.34 (59.5)	0.63 (16.0)
	3/8" ID	9.5mm ID	LQ4D22006RED		0.80 (20.3)	2.34 (59.5)	0.63 (16.0)
	3/8" ID	9.5mm ID	LQ4D22006BLU		0.80 (20.3)	2.34 (59.5)	0.63 (16.0)
IN-LINE STRAIGHT THREAD SAE	1/4 SAE-4: 7/16-20[1]		LQ4D46004RED	13/16"	0.88 (22.4)	2.05 (52.2)	0.63 (16.0)
	1/4 SAE-4: 7/16-20[1]		LQ4D46004BLU	13/16"	0.88 (22.4)	2.05 (52.2)	0.63 (16.0)
	3/8 SAE-6: 9/16-18[1,3]		LQ4D46006RED	11/16"	0.75 (19.1)	1.65 (41.8)	0.19 (4.8)
	3/8 SAE-6: 9/16-18[1,3]		LQ4D46006BLU	11/16"	0.75 (19.1)	1.65 (41.8)	0.19 (4.8)
IN-LINE PIPE THREAD	1/4" NPT		LQ4D24004RED	13/16"	0.88 (22.4)	2.19 (55.7)	0.63 (16.0)
	1/4" NPT		LQ4D24004BLU	13/16"	0.88 (22.4)	2.19 (55.7)	0.63 (16.0)
	3/8" NPT		LQ4D24006RED	13/16"	0.88 (22.4)	2.19 (55.7)	0.63 (16.0)
	3/8" NPT		LQ4D24006BLU	13/16"	0.88 (22.4)	2.19 (55.7)	0.63 (16.0)
IN-LINE PTF	1/4" ID x 3/8" OD		LQ4D20006RED	13/16"	0.88 (22.4)	2.34 (59.5)	0.63 (16.0)
	1/4" ID x 3/8" OD		LQ4D20006BLU	13/16"	0.88 (22.4)	2.34 (59.5)	0.63 (16.0)
IN-LINE STRAIGHT THREAD G / BSPP	G1/4[2]		LQ4D47004RED	20mm	0.85 (21.6)	2.13 (54.2)	0.67 (17.0)
	G1/4[2]		LQ4D47004BLU	20mm	0.85 (21.6)	2.13 (54.2)	0.67 (17.0)
	G3/8[2,3]		LQ4D47006RED	22mm	0.93 (23.6)	1.66 (42.0)	0.19 (4.8)
	G3/8[2,3]		LQ4D47006BLU	22mm	0.93 (23.6)	1.66 (42.0)	0.19 (4.8)

For FKM seal option, add V suffix to part number. Example: LQ4D30006BLUV
For FVMQ seal option, add FLS suffix to part number. Example: LQ4D3000B6LUFLS

[1]All SAE terminations are compatible with SAE J1926-1 ports.
[2]All G (BSPP) terminations are compatible with ISO 1179-1 ports.
[3]One-piece design

PRODUCT DIMENSIONS



A = Height/Diameter
B = Total Length
C = Connected Length

All measurements are in inches (millimeters) unless otherwise noted.

EVERIS® LQ6
SERIES CONNECTOR

Everis® LQ6 Series quick disconnect couplings feature 3/8" flow for liquid cooling of electronics applications. Everis LQ6 connectors offer a high-flow capacity to optimize liquid cooling system performance. The couplings' patented design offers reliable long-term connections and the non-spill valves provide drip-free connections and disconnections to protect sensitive equipment. FKM, FVMQ and EPDM seals are standard options for compatibility with dielectric or glycol/water coolants. For other material and termination options see your regional CPC sales representative.

SPECIFICATIONS

PRESSURE: Vacuum to 120 psi, 8.3 bar

TEMPERATURE:
Operating*: 0°F to 240°F (-17°C to 115°C)
Storage/Shipping:
-40°F to 240°F (-40°C to 115°C)

MAXIMUM FLOW AT DISCONNECT:
5.0 gal/min, 18.9L/min at 0 – 120 psi

MATERIALS:
Main Components:
Nickel-chrome plated brass
Valves and Thumb latch: Polysulfone
Valve Springs (wetted): Stainless steel
External spring: Stainless steel
Seals: EPDM standard (FKM, FVMQ options)
Compliance: RoHS, REACH

COLOR: Chrome with Cool Blue or Warm Red

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

LUBRICANTS: Krytox® PFPE

SPILLAGE:
0.03 cc per disconnect rated at 0 psi
0.03 cc per disconnect rated at 120 psi

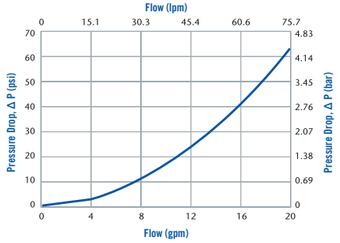
AIR INCLUSION: 0.33 cc per connect

FLOW COEFFICIENT: Cv ~2.2 (1.9 Kv)

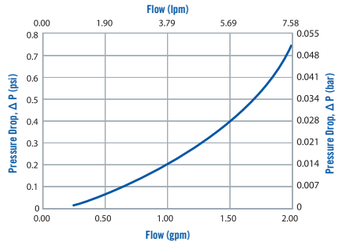
*FVMQ seal option extends operating temperature to -40°F (-40°C)
WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of CPC's products in their own application conditions.

FEATURES	BENEFITS
Non-spill valve	Disconnect under pressure with no spills
Redundant multi-lobed seals	Extra protection from leak-causing contaminants and debris
High flow capacity with low pressure drop	Efficient, cost-effective cooling system
EPDM, FKM or FVMQ seals	Compatibility with common coolants (e.g. glycol/water, mineral oil) and application temperatures
Ergonomic body and latch design	Simple, intuitive one-handed operation
Audible click	Connection assurance
Color coding	Instant visual identification of cooling lines
Low profile	Meets size requirements for space-constrained electronics
Swivel connection	Allows user to orient latch or tube to facilitate installation and maintenance
Single-piece options for insert	Space saving

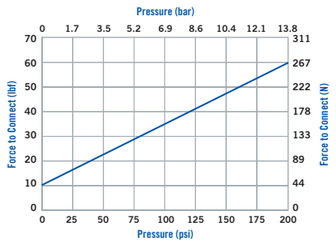
LQ6 WATER FLOW (0-20 GPM)



LQ6 WATER FLOW (0-2 GPM)



LQ6 FORCE TO CONNECT



These graphs are intended to give you a general idea of the performance capabilities of each product line. Contact CPC for flow of a particular coupling combination.

SCAN

cpcworldwide.com/Everis-LQ6

EVERIS® LQ6 SERIES DIMENSIONS

COUPLING BODIES - Nickel-chrome plated brass

TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	HEX	A	B	C
IN-LINE LOCKING HOSE BARB	3/8" ID	9.5mm ID	LQ6D17006LRED		1.19 (30.1)	2.96 (75.1)	2.08 (52.8)
	3/8" ID	9.5mm ID	LQ6D17006LBLU		1.19 (30.1)	2.96 (75.1)	2.08 (52.8)
	1/2" ID	12.7mm ID	LQ6D17008LRED		1.19 (30.1)	3.08 (78.2)	2.08 (52.8)
	1/2" ID	12.7mm ID	LQ6D17008LBLU		1.19 (30.1)	3.08 (78.2)	2.08 (52.8)
IN-LINE HOSE BARB	3/8" ID	9.5mm ID	LQ6D17006RED		1.19 (30.1)	2.73 (69.3)	2.08 (52.8)
	3/8" ID	9.5mm ID	LQ6D17006BLU		1.19 (30.1)	2.73 (69.3)	2.08 (52.8)
	1/2" ID	12.7mm ID	LQ6D17008RED		1.19 (30.1)	2.73 (69.3)	2.08 (52.8)
	1/2" ID	12.7mm ID	LQ6D17008BLU		1.19 (30.1)	2.73 (69.3)	2.08 (52.8)
IN-LINE STRAIGHT THREAD PORT SAE	3/8 SAE-6: 9/16-18[1]		LQ6D30006RED	1"	1.19 (30.1)	2.47 (62.7)	2.08 (52.8)
	3/8 SAE-6: 9/16-18[1]		LQ6D30006BLU	1"	1.19 (30.1)	2.47 (62.7)	2.08 (52.8)
	1/2 SAE-8: 3/4-16[1]		LQ6D30008RED	1"	1.19 (30.1)	2.52 (64.0)	2.08 (52.9)
	1/2 SAE-8: 3/4-16[1]		LQ6D30008BLU	1"	1.19 (30.1)	2.52 (64.0)	2.08 (52.9)
IN-LINE PIPE THREAD	3/8" NPT		LQ6D10006RED	1"	1.19 (30.1)	2.58 (65.5)	2.08 (52.8)
	3/8" NPT		LQ6D10006BLU	1"	1.19 (30.1)	2.58 (65.5)	2.08 (52.8)
IN-LINE PTF	3/8" ID x 1/2" OD		LQ6D13008RED	1"	1.19 (30.1)	2.91 (73.9)	2.09 (53.0)
	3/8" ID x 1/2" OD		LQ6D13008BLU	1"	1.19 (30.1)	2.91 (73.9)	2.09 (53.0)
IN-LINE THREAD G / BSPP	G3/8[2]		LQ6D31006RED	26mm	1.19 (30.1)	2.59 (67.3)	2.15 (54.6)
	G3/8[2]		LQ6D31006BLU	26mm	1.19 (30.1)	2.59 (67.3)	2.15 (54.6)
	G1/2[2]		LQ6D31008RED	26mm	1.19 (30.1)	2.59 (67.3)	2.15 (54.6)
	G1/2[2]		LQ6D31008BLU	26mm	1.19 (30.1)	2.59 (67.3)	2.15 (54.6)

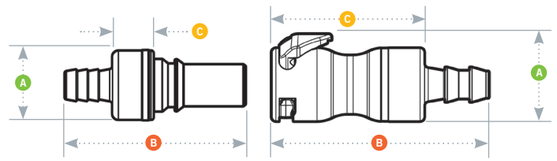
COUPLING INSERTS - Nickel-chrome plated brass

TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	HEX	A	B	C
IN-LINE LOCKING HOSE BARB	3/8" ID	9.5mm ID	LQ6D22006LRED		1.0 (25.3)	2.79 (70.7)	0.65 (16.4)
	3/8" ID	9.5mm ID	LQ6D22006LBLU		1.0 (25.3)	2.79 (70.7)	0.65 (16.4)
	1/2" ID	12.7mm ID	LQ6D22008LRED		1.0 (25.3)	2.91 (73.9)	0.65 (16.4)
	1/2" ID	12.7mm ID	LQ6D22008LBLU		1.0 (25.3)	2.91 (73.9)	0.65 (16.4)
IN-LINE HOSE BARB	3/8" ID	9.5mm ID	LQ6D22006RED		1.0 (25.3)	2.56 (65.0)	0.65 (16.4)
	3/8" ID	9.5mm ID	LQ6D22006BLU		1.0 (25.3)	2.56 (65.0)	0.65 (16.4)
	1/2" ID	12.7mm ID	LQ6D22008RED		1.0 (25.3)	2.56 (65.0)	0.65 (16.4)
	1/2" ID	12.7mm ID	LQ6D22008BLU		1.0 (25.3)	2.56 (65.0)	0.65 (16.4)
IN-LINE STRAIGHT THREAD PORT SAE	3/8 SAE-6: 9/16-18[1]		LQ6D46006RED	1"	1.10 (27.9)	2.30 (58.4)	0.65 (16.4)
	3/8 SAE-6: 9/16-18[1]		LQ6D46006BLU	1"	1.10 (27.9)	2.30 (58.4)	0.65 (16.4)
	1/2 SAE-8: 3/4-16[1,3]		LQ6D46008RED	7/8"	1.10 (27.9)	1.95 (49.6)	0.25 (6.4)
	1/2 SAE-8: 3/4-16[1,3]		LQ6D46008BLU	7/8"	1.10 (27.9)	1.95 (49.6)	0.25 (6.4)
IN-LINE PIPE THREAD	3/8" NPT		LQ6D24006RED	1"	1.10 (27.9)	2.41 (61.2)	0.65 (16.4)
	3/8" NPT		LQ6D24006BLU	1"	1.10 (27.9)	2.41 (61.2)	0.65 (16.4)
IN-LINE PTF	3/8" ID x 1/2" OD		LQ6D20008RED	1"	1.10 (27.9)	2.74 (69.6)	0.65 (16.6)
	3/8" ID x 1/2" OD		LQ6D20008BLU	1"	1.10 (27.9)	2.74 (69.6)	0.65 (16.6)
IN-LINE THREAD G / BSPP	G3/8[2]		LQ6D47006RED	26mm	1.12 (28.4)	2.42 (61.5)	0.72 (18.2)
	G3/8[2]		LQ6D47006BLU	26mm	1.12 (28.4)	2.42 (61.5)	0.72 (18.2)
	G1/2[2,3]		LQ6D47008RED	26mm	1.12 (28.4)	2.04 (51.8)	0.28 (7.0)
	G1/2[2,3]		LQ6D47008BLU	26mm	1.12 (28.4)	2.04 (51.8)	0.28 (7.0)

For FKM seal option, add V suffix to part number. Example: LQ6D17006BLUV
For FVMQ seal option, add FLS suffix to part number. Example: LQ6D17006BLUFLS

[1]All SAE terminations are compatible with SAE J1926-1 ports.
[2]All G (BSPP) terminations are compatible with ISO 1179-1 ports.
[3]One-piece design

PRODUCT DIMENSIONS



A = Height/Diameter
B = Total Length
C = Connected Length

All measurements are in inches (millimeters) unless otherwise noted.

EVERIS® LQ8
SERIES CONNECTOR

Everis® LQ8 Series quick disconnect couplings feature 1/2" flow for liquid cooling of electronics applications. Specifically designed for thermal management applications, Everis LQ8 connectors offer a high-flow capacity to optimize liquid cooling system performance. They provide ultra-reliable, dripless connections and disconnections for ease of use and peace of mind given proximity to sensitive or valuable equipment components. LQ8 quick disconnects (QDs) use a patented design which offers reliable long-term connections. EPDM seals are a standard for compatibility with glycol/water coolants. For other material and termination options contact CPC; sales representatives and applications engineers are available to assist with any questions you may have.

SPECIFICATIONS

PRESSURE: Vacuum to 120 psi, 8.3 bar

TEMPERATURE:
Operating: 0°F to 240°F (-17°C to 115°C)
Storage/Shipping:
-40°F to 240°F (-40°C to 115°C)

MATERIALS:
Main Components: Nickel-chrome plated brass
Valves and thumb latch: Polyphenylsulfone (PPSU)
Valve Springs (wetted): Stainless steel
External spring: Stainless steel
Seals: EPDM
Compliance: RoHS, REACH

COLOR: Chrome with Black

TUBING SIZES: 5/8" ID (15.9 mm ID)

LUBRICANTS: Krytox® PFPE

FORCE TO CONNECT: 21 lbs. typical at 0 psi

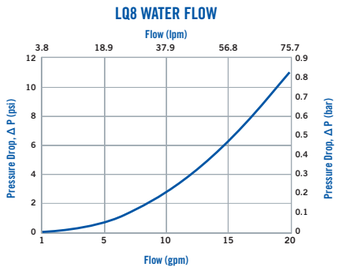
SPILLAGE:
0.02 cc per disconnect rated at 0 psi
0.07 cc per disconnect rated at 60 psi

AIR INCLUSION: 0.60 cc per connect

FLOW COEFFICIENT: Cv ~ 6.0 (5.2 Kv)

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

FEATURES	BENEFITS
Non-spill valve	Disconnect under pressure with no spills
Redundant, multi-lobed seals	Extra protection from leak-causing contaminants and debris
High flow capacity with low pressure drop	Efficient, cost-effective cooling
EPDM seals	Compatibility with common coolants (e.g., glycol/water)
Ergonomic body and latch design	Simple, intuitive, one-handed operation
Audible click	Connection assurance
Low profile	Meets size requirements for space-constrained electronics applications
Single-piece options for insert and body	Space saving



These graphs are intended to give you a general idea of the performance capabilities of each product line. Contact CPC for flow of a particular coupling combination.

DID YOU KNOW

Not all elastomers are compatible with all fluids used in liquid cooling. And low temperature seals may be needed for frigid environments.

SCAN

cpcworldwide.com/Everis-LQ8

EVERIS® LQ8 SERIES DIMENSIONS

COUPLING BODIES - Nickel-chrome plated brass

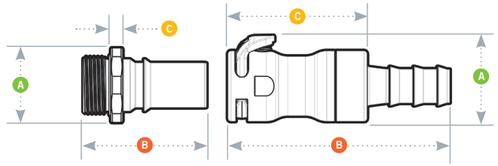
TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	HEX	A	B	C
IN-LINE LOCKING HOSE BARB	5/8" ID	15.9 mm ID	LQ8D17010L		1.58 (40.1)	4.25 (108.0)	2.73 (69.3)
IN-LINE STRAIGHT THREAD SAE	3/4 SAE-12: 1-1/16-12[1,3]		LQ8D30012	1 - 1/4"	1.58 (40.1)	2.58 (65.6)	2.15 (54.6)
IN-LINE STRAIGHT THREAD G / BSPP	G 3/4[2]		LQ8D31012		1.58 (40.1)	3.30 (83.8)	2.80 (71.1)

COUPLING INSERTS - Nickel-chrome plated brass

TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	HEX	A	B	C
IN-LINE LOCKING HOSE BARB	5/8" ID	15.9 mm ID	LQ8D22010L		1.30 (33.0)	4.00 (101.6)	0.80 (20.4)
IN-LINE STRAIGHT THREAD SAE	3/4 SAE-12: 1-1/16-12[1,3]		LQ8D46012	1 - 1/4"	1.30 (33.0)	2.40 (61.0)	0.22 (5.6)
IN-LINE STRAIGHT THREAD G / BSPP	G 3/4[2,3]		LQ8D47012	34mm	1.40 (35.6)	2.40 (61.0)	0.22 (5.6)

All measurements are in inches (millimeters) unless otherwise noted.
[1]All SAE terminations are compatible with SAE J1926-1 ports.
[2]All G (BSPP) terminations are compatible with ISO 1179-1 ports.
[3]One-piece design

PRODUCT DIMENSIONS



A = Height/Diameter
B = Total Length
C = Connected Length

cpcworldwide.com/LC-Chem-Comp-Guide

EVERIS® BLQ2
SERIES CONNECTOR

Everis® BLQ2 Series quick disconnect couplings provide ultra-reliable, dripless connections and disconnections that protect valuable electronics. Designed specifically for rack mounted liquid cooling applications, the Everis BLQ2 utilizes patented technology that eliminates drips and is able to withstand long-term connection.

SPECIFICATIONS

PRESSURE:
Vacuum to 200 psi, 13.8 bar

TEMPERATURE:
Operating: 0°F to 240°F (-17°C to 115°C)
Storage/Shipping:
-40°F to 240°F (-40°C to 115°C)

MAXIMUM FLOW AT DISCONNECT:
1.00 gal/min at 0 - 100 psi
.025 gal/min at 101 - 200 psi

MATERIALS:
Main Components:
Nickel-chrome plated brass
Valves: Polysulfone
Valve Springs (wetted): Stainless steel
Seals: EPDM
Compliance: RoHS, REACH

COLOR: Chrome

THREAD SIZES: 1/4" SAE-4

LUBRICANTS: Krytox® PFPE

SPILLAGE:
<0.015 cc per disconnect at 0 psi;
<0.063 cc per disconnect at 200 psi

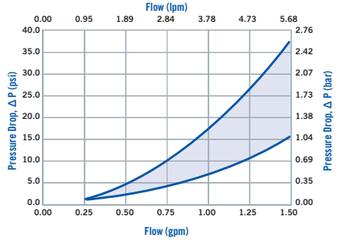
AIR INCLUSION: <0.04 cc per connect

FLOW COEFFICIENT: Cv ~ 0.4 (0.3 Kv)

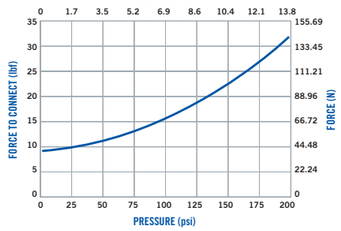
WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of CPC's products in their own application conditions.

FEATURES	BENEFITS
Non-spill valve	Disconnect under pressure with no spills
Redundant multi-lobed seals	Extra protection from leak-causing contaminants and debris
Innovative valve design	Enables extended periods in connected state
Ruggedness	Able to withstand long-term, repeated use
Axial engagement tolerance	Allows full flow even when not fully engaged
Single-piece options for body & insert	Space saving

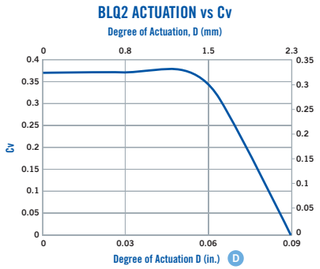
BLQ2 WATER FLOW



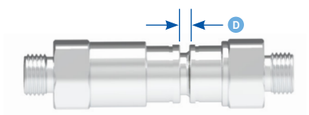
BLQ2 FORCE TO CONNECT



BLQ2 ACTUATION vs Cv



ACTUATION LENGTH



These graphs are intended to give you a general idea of the performance capabilities of each product line. Contact CPC for flow of a particular coupling combination.

EVERIS® BLQ2 SERIES DIMENSIONS

COUPLING BODIES - Nickel-chrome plated brass

TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	HEX	A	B	C
IN-LINE STRAIGHT THREAD SAE	1/4 SAE-4: 7/16-20[1,2]	N/A	BLQ2D3004	9/16"	0.62 (15.7)	1.31 (33.3)	0.95 (24.1)

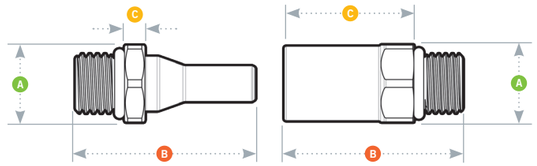
COUPLING INSERTS - Nickel-chrome plated brass

TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	HEX	A	B	C
IN-LINE STRAIGHT THREAD SAE	1/4 SAE-4: 7/16-20[1,2]	N/A	BLQ2D4604	9/16"	0.62 (15.7)	1.32 (33.3)	0.15 (3.8)

All measurements are in inches (millimeters) unless otherwise noted.
[1]All SAE terminations are compatible with SAE J1926-1 ports
[2]One-piece design

SCAN
cpcworldwide.com/Everis-BLQ2

PRODUCT DIMENSIONS



A = Height/Diameter B = Total Length C = Connected Length

Everis® QD Reliability
QDs designed for long-term, connected use with non-spill valves for dripless connection and disconnection.

CPC

EVERIS® BLQ4
SERIES CONNECTOR

Everis® BLQ4 Series quick disconnect couplings provide ultra-reliable, dripless connections and disconnections that protect valuable electronics. Designed specifically for rack mounted liquid cooling applications, Everis BLQ4 utilizes patented technology that eliminates drips and is designed for long-term connected use.

SPECIFICATIONS

PRESSURE:
Vacuum to 120 psi, 8.3 bar

TEMPERATURE:
Operating: 0°F to 240°F (-17°C to 115°C)
Storage/Shipping:
-40°F to 240°F (-40°C to 115°C)

MAXIMUM FLOW AT DISCONNECT:
3.0 gal/min, 11.3L/min

ENGAGEMENT TOLERANCE:
Coupling must be within 1/8" (3mm) of fully engaged to achieve maximum flow.

MATERIALS:
Main Components:
Nickel-chrome plated brass
Valves: Polysulfone
Valve Springs (wetted): Stainless steel
Seals: EPDM
Compliance: RoHS, REACH

THREAD SIZES:
Insert: G 1/4, G 3/8, SAE-4, SAE-6
Body: G 1/4, G 3/8, SAE-4, SAE-6, SAE-8

LUBRICANTS: Krytox® PFPE

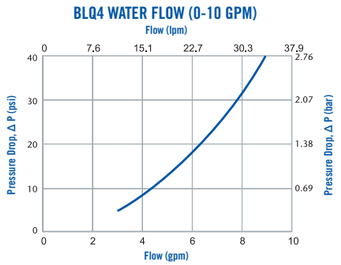
SPILLAGE:
<0.025 cc per disconnect at 0 psi;
<0.055 cc per disconnect at 120 psi

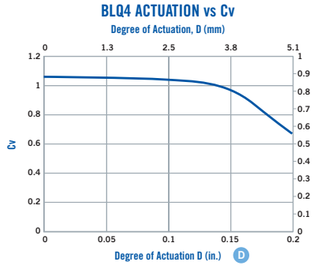
AIR INCLUSION: 0.20 cc per connect

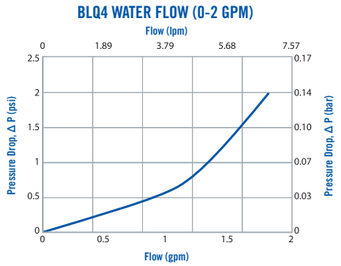
FLOW COEFFICIENT: Cv ~1.4 (1.2 Kv)

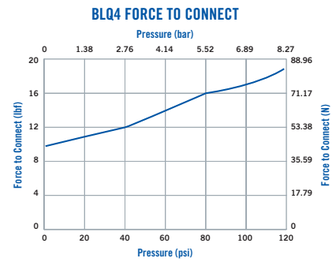
WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of CPC's products in their own application conditions.

FEATURES	BENEFITS
Non-spill valves	Disconnect under pressure with no spills
Redundant seals	Extra protection from leak-causing contaminants and debris
Innovative valve design	Enables extended periods in connected state
Rugged construction	Able to withstand long-term, repeated use
Axial engagement tolerance	Allows full flow even when not fully engaged
Single-piece options for body & insert	Space saving









These graphs are intended to give you a general idea of the performance capabilities of each product line. Contact CPC for flow of a particular coupling combination.

EVERIS® BLQ4 SERIES DIMENSIONS

COUPLING BODIES - Nickel-chrome plated brass

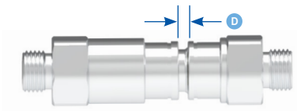
TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	HEX	A	B	C
IN-LINE STRAIGHT THREAD SAE	1/4 SAE-4: 7/16-20[1]	N/A	BLQ4D30004	22mm	0.93 (23.6)	2.05 (52.1)	1.64 (41.7)
	3/8 SAE-6: 9/16-18[1]	N/A	BLQ4D30006	22mm	0.93 (23.6)	2.05 (52.1)	1.64 (41.7)
	1/2 SAE-8: 3/4-16[1,3]	N/A	BLQ4D30008	22mm	0.90 (22.9)	1.60 (40.6)	1.16 (29.5)
IN-LINE STRAIGHT THREAD G / BSPP	G 1/4 (BSPP)[2]	N/A	BLQ4D31004	22mm	0.93 (23.6)	2.11 (53.6)	1.70 (43.2)
	G 3/8 (BSPP)[2]	N/A	BLQ4D31006	22mm	0.93 (23.6)	2.11 (53.6)	1.70 (43.2)

COUPLING INSERTS - Nickel-chrome plated brass

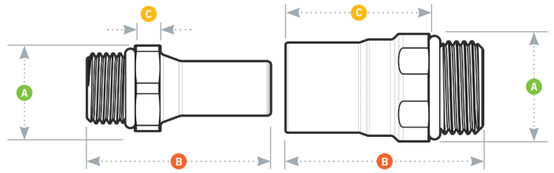
TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	HEX	A	B	C
IN-LINE STRAIGHT THREAD SAE	1/4 SAE-4: 7/16-20[1]	N/A	BLQ4D46004	22mm	0.93 (23.6)	1.99 (50.5)	0.69 (17.5)
	3/8 SAE-6: 9/16-18[1,3]	N/A	BLQ4D46006	22mm	0.75 (19.1)	1.49 (37.8)	0.19 (4.8)
IN-LINE STRAIGHT THREAD G / BSPP	G 1/4 (BSPP)[2]	N/A	BLQ4D47004	22mm	0.93 (23.6)	2.05 (52.1)	0.75 (19.1)
	G 3/8 (BSPP)[2,3]	N/A	BLQ4D47006	22mm	0.93 (23.6)	1.49 (37.8)	0.19 (4.8)

All measurements are in inches (millimeters) unless otherwise noted. Tubing must meet stated inside and outside diameters.:
[1]All SAE terminations are compatible with SAE J1926-1 ports.
[2]All G (BSPP) terminations are compatible with ISO 1179-1 ports.
[3]One-piece design.

ACTUATION LENGTH



PRODUCT DIMENSIONS



A = Height/Diameter B = Total Length C = Connected Length

SCAN

cpcworldwide.com/
Everis-BLQ4

EVERIS® BLQ6
SERIES CONNECTOR

Everis® BLQ6 Series quick disconnect couplings Ultra-reliable, no-drip connections for thermal management to help protect valuable electronic systems. Designed specifically for blind mate liquid cooling applications, the BLQ6 Series uses patented technology that eliminates drips and is specifically designed to withstand long-term connection. An optional accessory kit is available for panel mount connections.

SPECIFICATIONS

PRESSURE: Vacuum to 120 psi, 8.3 bar

TEMPERATURE:
Operating: 0°F to 240°F (-17°C to 115°C)
Storage/Shipping:
-40°F to 240°F (-40°C to 115°C)

MAXIMUM FLOW AT DISCONNECT:
3.0 gal/min, 11.3L/min

ENGAGEMENT TOLERANCE:
Coupling must be within 1/8" of fully engaged to achieve maximum flow.

MATERIALS:
Main Components: Anodized Aluminum
Valves: Polysulfone
Valve Springs (wetted): Stainless steel
Seals: EPDM
Panel Mount Kit: Stainless steel
Compliance: RoHS, REACH

THREAD SIZES:
Insert: SAE-6, G 1/2
Body: SAE-6, G 1/2

LUBRICANTS: Krytox® PFPE

SPILLAGE:
<0.03 cc per disconnect at 0 psi;
<0.03 cc per disconnect at 120 psi

AIR INCLUSION: <0.022 cc per connect

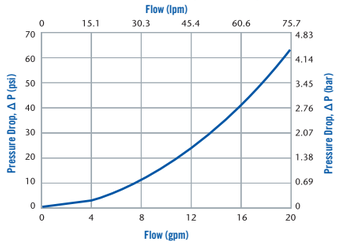
FLOW COEFFICIENT: Cv ~ 2.2 (1.90 Kv)

AXIAL MISALIGNMENT: 1 mm max

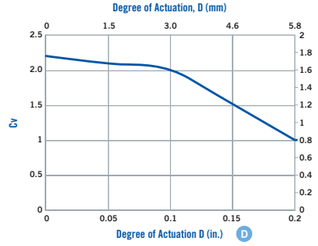
WARNING: Pressure, temperature, chemicals and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of CPC)'s products in their own application conditions.

FEATURES	BENEFITS
Non-spill valve	Disconnect under pressure with no spills
Redundant seals	Extra protection from leak-causing contaminants and debris
Innovative valve design	Provides reliability for extended periods of operation
Rugged anodized aluminum	Able to withstand long-term, ongoing and repeated use
Axial engagement tolerance	Allows full flow even when not fully engaged
Optional panel mount kit	Enables either the body, insert or both to be panel mounted

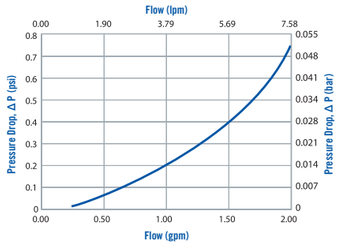
BLQ6 WATER FLOW (0-20 GPM)



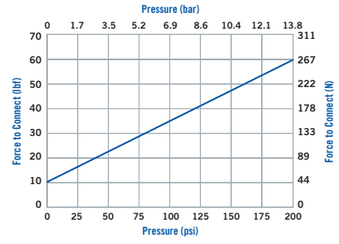
BLQ6 ACTUATION vs Cv



BLQ6 WATER FLOW (0-2 GPM)



BLQ6 FORCE TO CONNECT



These graphs are intended to give you a general idea of the performance capabilities of each product line. Contact CPC for flow of a particular coupling combination.

EVERIS® BLQ6 SERIES DIMENSIONS

COUPLING BODIES - Nickel-chrome plated brass

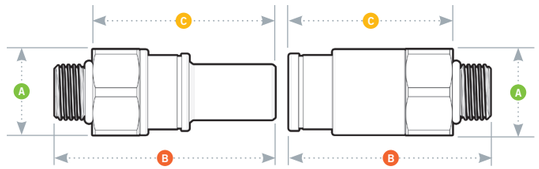
TERMINATION	TUBING/THREAD SIZE	METRIC EQ	SHUTOFF	HEX	A	B	C
IN-LINE STRAIGHT THREAD SAE	3/8 SAE-6: 9/16-18[1]	N/A	BLQ6D30006	7/8"	0.96 (24.4)	2.08 (52.7)	1.68 (42.8)
IN-LINE STRAIGHT THREAD G / BSPP	G 1/2[2]	N/A	BLQ6D31008	26mm	1.12 (28.4)	2.26 (57.5)	1.76 (44.7)

COUPLING INSERTS - Nickel-chrome plated brass

TERMINATION	TUBING/THREAD SIZE	METRIC EQ	SHUTOFF	HEX	A	B	C
IN-LINE STRAIGHT THREAD PORT SAE	3/8 SAE-6: 9/16-18[1]	N/A	BLQ6D46006	7/8"	0.96 (24.4)	2.27 (57.7)	0.99 (25.2)
IN-LINE STRAIGHT THREAD G / BSPP	G 1/2[2,3]	N/A	BLQ6D47008	26mm	1.12 (28.4)	2.00 (50.9)	0.70 (17.8)

All measurements are in inches (millimeters) unless otherwise noted.
[1]All SAE terminations are compatible with SAE J1926-1 ports.
[2]All G (BSPP) terminations are compatible with ISO 1179-1 ports.
[3]One-piece design

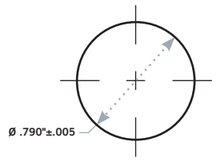
PRODUCT DIMENSIONS



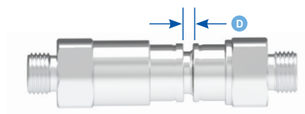
A = Height/Diameter B = Total Length C = Connected Length

PANEL DIMENSIONS

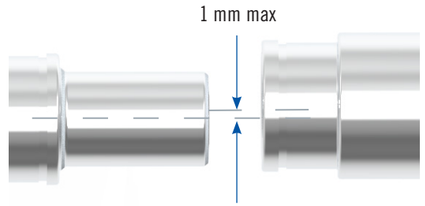
	PANEL OPENING	PANEL THICKNESS MAX.–MIN.
	see drawing	0.075 -0.175"



ACTUATION LENGTH

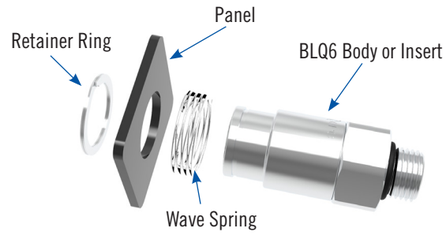


RADIAL TOLERANCE



PANEL MOUNT KIT (P/N BLQ6PMKIT)

Kit includes wave spring and retainer ring only.



SCAN

cpcworldwide.com/Everis-BLQ6

Optimize system design and maintenance with effective connections

CPC designs and manufactures EVERIS® quick disconnect couplings to specifically meet the requirements for high performance and reliability in liquid cooling thermal management. For liquid cooling applications that are frequently serviced, require more price competitive components, and/or where robustness and performance requirements of the liquid cooling system are not highly demanding, general-purpose couplings and connectors may fit the bill. CPC general purpose connectors are versatile and engineered to fit a broad range of fluid handling applications. These multifunctional couplings offer a diverse set of options including terminations, configurations, sizes, and materials. With decades of experience in delivering connection technology, CPC engineers have built a portfolio of general-purpose couplings and connectors that satisfy the needs of system designers around the world.

- Thumb latch with an audible “CPC Click” for connection assurance
- Precise hose barbs to improve the seal and grip for various grades of tubing
- Non-spill technology to enhance equipment modularity and serviceability

GENERAL PURPOSE

Couplings and Connectors

HFC35 & 57
SERIES CONNECTORS

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

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

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

SPECIFICATIONS

PRESSURE:
Vacuum to 125 psi, 8.6 bar

TEMPERATURE:
-40°F to 280°F (-40°C to 138°C)

MATERIALS:
Main components and valves:
HFC35 - Polysulfone
HFC57 - UV-resistant polysulfone

THUMB LATCH:
HFC35 - Polysulfone
HFC57 - UV-resistant polysulfone
Valve spring: 316 stainless steel
External springs: 316 stainless steel
O-rings: EPDM
Panel mount gasket: EPDM
Female GHT gasket: FDA EPDM

COLORS:
HCF35 - Natural white, dark gray latch
HCF57 - Black, black latch

TUBING SIZES:
3/8" to 3/4" ID, 9.5mm to 19.0mm ID

WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of CPC products in their own application conditions. Use the graphs on the following page as a guide. For compression termination specifications: 3/8" OD or 1/2" OD, +0.010/-0.000

FEATURES		BENEFITS
Polysulfone (HFC35)	→	Physically strong and autoclavable
UV Polysulfone (HFC57)	→	Physically strong and UV resistant
High efficiency valve	→	More flow and less spillage in a compact size
Ergonomic design	→	Easy to grip, simple to operate
Compatible	→	Mates with HFC12 couplings

DID YOU KNOW

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

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

SCAN

cpcworldwide.com/HFC35-57

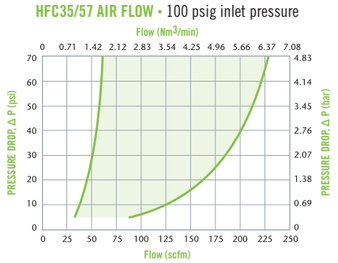
NSF

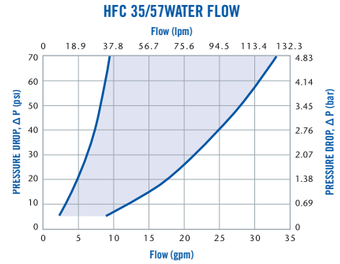
Also available in NSF listed versions for food-based applications, please visit our website for part number information.

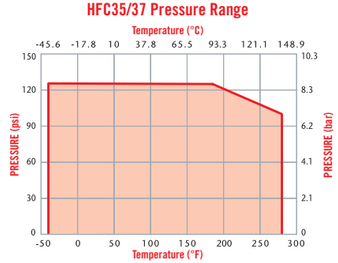
CPC

WHEN TO CONSIDER A CUSTOM PROJECT:

- A quick disconnect will add value to product, make it easier to use and more reliable
- Your specification cannot be met by an existing standard CPC product
- Unique requirements, budgets or timing warrant a conversation with CPC







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

HFC35 SERIES DIMENSIONS

COUPLING BODIES - Polysulfone

TERMINATION	TUBING/THREAD SIZE	METRIC EQ	STRAIGHT THRU	SHUTOFF	A	B
IN-LINE PIPE THREAD	3/8" NPT		HFC10635	HFCD10635	1.44 (36.6)	2.73 (69.3)
	3/8" BSPT		HFC10635BSPT	HFCD10635BSPT	1.44 (36.6)	2.73 (69.3)
	1/2" NPT		HFC10835	HFCD10835	1.44 (36.6)	2.88 (73.2)
	1/2" BSPT		HFC10835BSPT	HFCD10835BSPT	1.44 (36.6)	2.88 (73.2)
	3/4" NPT		HFC101235	HFCD101235	1.44 (36.6)	3.12 (79.2)
	3/4" BSPT		HFC101235BSPT	HFCD101235BSPT	1.44 (36.6)	3.12 (79.2)
	3/4" GHT		HFC101235GHT	HFCD101235GHT	1.44 (36.6)	2.94 (74.7)
IN-LINE PIPE THREAD (FEMALE)	3/4" GHT		HFC191235GHT	HFCD191235GHT	1.44 (36.6)	2.70 (68.6)
	3/4" BSPP		HFC191235BSPP	HFCD191235BSPP	1.44 (36.6)	2.70 (68.6)
BULKHEAD PANEL MOUNT HOSE BARB	3/8" ID	9.5mm ID	HFC16635	HFCD16635	1.44 (36.6)	2.82 (71.6)
	1/2" ID	12.7mm ID	HFC16835	HFCD16835	1.44 (36.6)	2.82 (71.6)
	5/8" ID	15.9mm ID	HFC161035	HFCD161035	1.44 (36.6)	2.94 (74.7)
	3/4" ID	19.0mm ID		HFCD161235	1.44 (36.6)	2.94 (74.7)
IN-LINE HOSE BARB	3/8" ID	9.5mm ID	HFC17635	HFCD17635	1.44 (36.6)	2.82 (71.6)
	1/2" ID	12.7mm ID	HFC17835	HFCD17835	1.44 (36.6)	2.82 (71.6)
	5/8" ID	15.9mm ID	HFC171035	HFCD171035	1.44 (36.6)	2.94 (74.7)
	3/4" ID	19.0mm ID	HFC171235	HFCD171235	1.44 (36.6)	2.94 (74.7)

COUPLING INSERTS - Polysulfone

TERMINATION	TUBING/ THREAD SIZE	METRIC EQ	STRAIGHT THRU	SHUTOFF	A	B	D
IN-LINE PIPE THREAD (NON-VALVED SHOWN)	3/8" NPT		HFC24635	HFCD24635	1.16 (29.5)	1.82/1.94 (46.2/49.3)	
	3/8" BSPT		HFC24635BSPT	HFCD24635BSPT	1.16 (29.5)	1.97/2.09 (50.0/53.1)	
	1/2" NPT		HFC24835	HFCD24835	1.16 (29.5)	1.97/2.09 (50.0/53.1)	
	1/2" BSPT		HFC24835BSPT	HFCD24835BSPT	1.16 (29.5)	1.17/2.09 (29.7/53.1)	
	3/4" NPT		HFC241235	HFCD241235	1.23 (31.2)	2.22/2.34 (56.4/59.4)	
	3/4" BSPT		HFC241235GHT	HFCD241235BSPT	1.23 (31.2)	2.21/2.33 (56.1/59.2)	
	3/4" GHT		HFC241235GHT	HFCD241235GHT	1.23 (31.2)	2.03/2.15 (51.6/54.6)	
IN-LINE PIPE THREAD (FEMALE) (NON-VALVED SHOWN)	3/4" GHT		HFC261235GHT	HFCD261235GHT	1.37 (34.8)	1.79/1.91 (45.5/48.5)	
	3/4" BSPP		HFC261235BSPP	HFCD261235BSPP	1.37 (34.8)	1.79/1.91 (45.5/48.5)	
IN-LINE HOSE BARB (NON-VALVED SHOWN)	3/8" ID	9.5mm ID	HFC22635	HFCD22635	1 (25.4)	1.91/2.03 (48.5/51.6)	
	1/2" ID	12.7mm ID	HFC22835	HFCD22835	1 (25.4)	1.91/2.03 (48.5/51.6)	
	5/8" ID	15.9mm ID	HFC221035	HFCD221035	1 (25.4)	2.03/2.15 (51.6/54.6)	
	3/4" ID	19.0mm ID	HFC221235	HFCD221235	1 (25.4)	2.03/2.15 (51.6/54.6)	
ELBOW HOSE BARB (NON-VALVED SHOWN)	3/8" ID	9.5mm ID	HFC23635	HFCD23635	1 (25.4)	1.92/2.04 (48.8/51.8)	0.93 (23.6)
	1/2" ID	12.7mm ID	HFC23835	HFCD23835	1 (25.4)	1.96/2.08 (49.8/52.8)	0.93 (23.6)

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

HFC35 & HFC57 ACCESSORIES

DESCRIPTION	MATERIAL	PART NO.
PANEL MOUNT GASKET REPLACEMENT: FOR SEALING PANEL MOUNT BODIES LISTED ABOVE	EPDM	621200
GHT GASKET REPLACEMENT: FOR SEALING FEMALE THREADS	FDA EPDM	2339400

HFC57 SERIES DIMENSIONS

COUPLING BODIES - UV Polysulfone

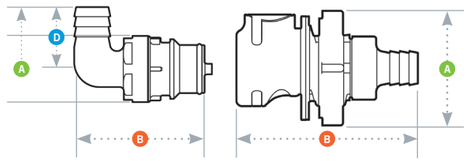
TERMINATION	TUBING/THREAD SIZE	METRIC EQ	STRAIGHT THRU	SHUTOFF	A	B
IN-LINE PIPE THREAD	3/8" BSPT			HFCD10657BSPT	1.44 (36.6)	2.73 (69.3)
	1/2" NPT		HFC10857	HFCD10857	1.44 (36.6)	2.88 (73.2)
	1/2" BSPT			HFCD10857BSPT	1.44 (36.6)	2.88 (73.2)
	3/4" BSPT			HFCD101257GHT	1.44 (36.6)	3.12 (79.2)
	3/4" GHT		HFC101257GHT	HFCD101257GHT	1.44 (36.6)	2.94 (74.7)
IN-LINE PIPE THREAD (FEMALE)	3/4" GHT		HFC191257GHT	HFCD191257GHT	1.44 (36.6)	2.70 (68.6)
BULKHEAD PANEL MOUNT HOSE BARB	3/8" ID	9.5mm ID		HFCD16657	1.82 (46.2)	2.82 (71.6)
	1/2" ID	12.7mm ID		HFCD16857	1.82 (46.2)	2.82 (71.6)
	5/8" ID	15.9mm ID		HFCD161057	1.82 (46.2)	2.94 (74.7)
	3/4" ID	19.0mm ID		HFCD161257	1.82 (46.2)	2.94 (74.7)
IN-LINE HOSE BARB	3/8" ID	9.5mm ID	HFC17657	HFCD17657	1.44 (36.6)	2.82 (71.6)
	1/2" ID	12.7mm ID	HFC17857	HFCD17857	1.44 (36.6)	2.82 (71.6)
	5/8" ID	15.9mm ID		HFCD171057	1.44 (36.6)	2.94 (74.7)
	3/4" ID	19.0mm ID	HFC171257	HFCD171257	1.44 (36.6)	2.94 (74.7)

COUPLING INSERTS - UV Polysulfone

TERMINATION	TUBING/THREAD SIZE	METRIC EQ	STRAIGHT THRU	SHUTOFF	A	B
IN-LINE PIPE THREAD	3/8" BSPT		HFC24657BSPT	HFCD24657BSPT	1.16 (29.5)	1.84/1.96 (46.7/49.8)
	1/2" BSPT		HFC24857BSPT	HFCD24857BSPT	1.16 (29.5)	1.99/2.07 (50.6/52.6)
	1/2" NPT		HFC24857	HFCD24857	1.16 (29.5)	1.95/2.11 (49.5/53.6)
	3/4" BSPT		HFC241257BSPT	HFCD241257BSPT	1.23 (31.2)	2.19/2.31 (55.6/58.7)
	3/4" GHT		HFC241257GHT	HFCD241257GHT	1.16 (29.5)	2.15/2.27 (54.6/57.7)
IN-LINE PIPE THREAD (FEMALE) (NON-VALVED SHOWN)	3/4" GHT		HFC261257GHT	HFCD261257GHT	1.37 (34.8)	1.79/1.91 (45.5/48.5)
IN-LINE HOSE BARB (NON-VALVED SHOWN)	3/8" ID	9.5mm ID	HFC22657	HFCD22657	1 (25.4)	1.91/2.03 (48.5/51.6)
	1/2" ID	12.7mm ID	HFC22857	HFCD22857	1 (25.4)	1.91/2.03 (48.5/51.6)
	5/8" ID	15.9mm ID		HFCD221057	1 (25.4)	2.03/2.15 (51.6/54.6)
	3/4" ID	19.0mm ID	HFC221257	HFCD221257	1 (25.4)	2.03/2.15 (51.6/54.6)

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

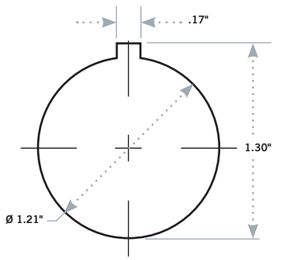
PRODUCT DIMENSIONS



A = Height/Diameter
B = Total Length
D = Elbow Radial Length

PANEL DIMENSIONS

	PANEL OPENING	PANEL THICKNESS MAX.–MIN.
COUPLING BODIES	see drawing	0.25– 0.03



Gasket Thickness: .06"
Mounting Hole: 1.21" diameter
Coupling Spacing: 1.92" minimum

NS4
SERIES CONNECTOR

NS4 Series couplings feature non-spill valves in a compact size, at a great price. Use the NS4 when even a few drops pose problems regarding media cost or environmental regulations. These innovative couplings are lightweight, chemically resistant and easy to use. The non-spill design effectively eliminates spills and minimizes downtime. NS4 coulings are also available with optional RFID (Radio Frequency Identification) capability.

SPECIFICATIONS

PRESSURE:
Vacuum to 120 psi, 8.3 bar

TEMPERATURE:
32°F to 160°F (0°C to 71°C)

MATERIALS:
Main components and valves:
Glass-filled polypropylene with TPV* overmold, ABS with TPE* soft-touch overmold
Thumb latch: Glass-filled polypropylene, ABS
Valve spring: 316 stainless steel
External spring: 316 stainless steel
O-rings: EPDM

COLOR:
Polypropylene: Gray with dark gray overmold standard; gray with red or blue overmold available†
ABS: White with teal overmold

TUBING SIZES:
1/8" to 3/8" ID, 3.2mm to 9.5mm ID

LUBRICANTS: Krytox® PFPE (inert)

SPILLAGE:
<0.10 cc per disconnect at all rated pressures

INCLUSION: 0.26 cc per connect

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

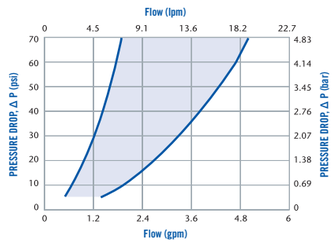
*The overmold material TPV (themoplastic vulcanizate) is used with the NS4 polypropylene couplings. TPV is an alloy of polypropylene thermoplastic and fully vulcanized EPDM rubber. TPV is typically resistant to water, acids and bases. The overmold material TPE (thermoplastic elastomer) is used with the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

†NOTE: Standard product is gray; color options require a minimum

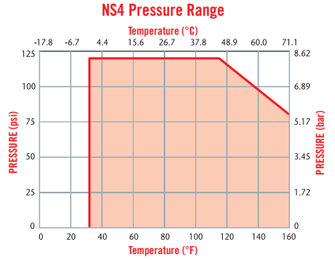
FEATURES	BENEFITS
Non-spill design	Disconnect under pressure with no spills
Color coding	Instant visual differentiation of media lines
Glass-filled polypropylene	Durable and compatible with many chemicals
Medical-grade ABS	Gamma sterilizable

RFID

NS4 WATER FLOW



NS4 Pressure Range



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

SCAN

cpcworldwide.com/NS4

NS4 SERIES DIMENSIONS

COUPLING BODIES - Polypropylene/ABS

TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	ABS SHUTOFF	POLYPROPYLENE SHUTOFF	A	B
IN-LINE PIPE THREAD	1/4" NPT		NS4D1000406	NS4D10004	1.05 (26.7)	2.31 (58.7)
	1/4" BSPT			NS4D10004BSPT	1.05 (26.7)	2.29 (58.2)
IN-LINE FERRULESS POLYTUBE FITTING, PTF†	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	NS4D1300606	NS4D13004	1.05 (26.7)	2.32 (58.9)
	3/8" OD, 1/4" ID	9.5mm OD, 6.4mm ID		NS4D13006	1.05 (26.7)	2.45 (62.2)
IN-LINE HOSE BARB	1/8" ID*	3.2mm ID*	NS4D1700206	NS4D17002	1.05 (26.7)	2.09 (53.1)
	1/4" ID	6.4mm ID	NS4D1700406	NS4D17004	1.05 (26.7)	2.34 (59.4)
	3/8" ID	9.5mm ID	NS4D1700606	NS4D17006	1.05 (26.7)	2.34 (59.4)
IN-LINE HOSE BARB (RS-232 INTERFACE)	1/8" ID	3.2mm ID		iNS4DR1700200	2.15 (54.6)	3.49 (88.6)
	1/4" ID	6.4mm ID		iNS4DR1700400	2.15 (54.6)	3.49 (88.6)
	3/8" ID	9.5mm ID		iNS4DR1700600	2.15 (54.6)	3.49 (88.6)
IN-LINE HOSE BARB (USB INTERFACE)	1/4" ID	6.4mm ID		iNS4DR1700201	2.15 (54.6)	3.4 (86.4)
	3/8" ID	9.5mm ID		iNS4DR1700401	2.15 (54.6)	3.4 (86.4)
	1/2" ID	12.7mm ID		iNS4DR1700601	2.15 (54.6)	3.4 (86.4)

COUPLING INSERTS - Polypropylene/ABS

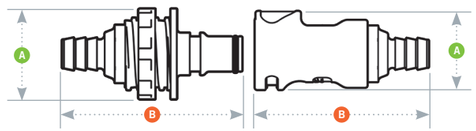
TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	ABS SHUTOFF	POLYPROPYLENE SHUTOFF	A	B
IN-LINE PIPE THREAD	1/4" NPT		NS4D2400406	NS4D24004	0.96 (24.4)	1.95 (49.5)
	1/4" BSPT		NS4D24004BSPT06	NS4D24004BSPT	0.96 (24.4)	1.95 (49.5)
IN-LINE FERRULESS POLYTUBE FITTING, PTF†	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID		NS4D20004	0.96 (24.4)	1.95 (49.5)
	3/8" OD, 1/4" ID	9.5mm OD, 6.4mm ID		NS4D20006	0.96 (24.4)	2.09 (53.1)
IN-LINE HOSE BARB	1/8" ID*	3.2mm ID*		NS4D22002	0.96 (24.4)	1.73 (43.9)
	1/4" ID	6.4mm ID	NS4D2200406	NS4D22004	0.96 (24.4)	1.98 (50.3)
	3/8" ID	9.5mm ID	NS4D2200606	NS4D22006	0.96 (24.4)	1.98 (50.3)
PANEL MOUNT FERRULESS POLYTUBE FITTING, PTF†	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID		NS4D40004	1.17 (29.7)	2.3 (58.4)
	3/8" OD, 1/4" ID	9.5mm OD, 6.4mm ID		NS4D40006	1.17 (29.7)	2.3 (58.4)
PANEL MOUNT HOSE BARB	1/8" ID*	3.2mm ID*	NS4D4200406	NS4D42002	1.17 (29.7)	2.07 (52.6)
	1/4" ID	6.4mm ID		NS4D42004	1.17 (29.7)	2.32 (58.9)
	3/8" ID	9.5mm ID		NS4D42006	1.17 (29.7)	2.32 (58.9)
PANEL MOUNT HOSE BARB ELBOW	1/4" ID	6.4mm ID		NS4D43004	1.19 (30.2)	2.39 (60.7)
	3/8" ID	9.5mm ID		NS4D43006	1.19 (30.2)	2.39 (60.7)
ELBOW HOSE BARB	1/4" ID	6.4mm ID		NS4D23004	0.96 (24.4)	2.04 (51.8)
	3/8" ID	9.5mm ID		NS4D23006	0.96 (24.4)	2.04 (51.8)
IN-LINE HOSE BARB (RS-232 INTERFACE)	1/4" ID	6.4mm ID		iNS4DT2200400		
	3/8" ID	9.5mm ID		iNS4DT2200600		

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

ACCESSORIES

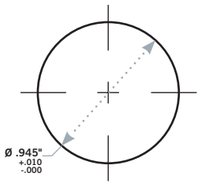
DESCRIPTION	MATERIAL	PART NO.
PANEL MOUNT GASKET REPLACEMENT: FOR SEALING PANEL MOUNT INSERTS LISTED ABOVE	EPDM	1879800
	FKM	1889500

PRODUCT DIMENSIONS



A = Height/Diameter B = Total Length

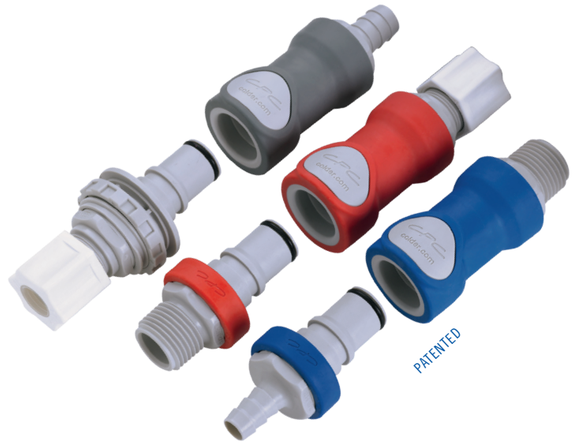
PANEL DIMENSIONS



	PANEL OPENING	PANEL THICKNESS MAX.–MIN.
COUPLING INSERTS	see drawing	0.25 – 0.03

NS6
SERIES CONNECTOR

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



SPECIFICATIONS

PRESSURE:
Vacuum to 120 psi, 8.3 bar

TEMPERATURE:
32°F to 160°F (0°C to 71°C)

MATERIALS:
Main components and valves: Glass-filled polypropylene with TPV* soft touch overmold
Thumb latch: Glass-filled polypropylene
Valve spring (wetted): 316 stainless steel
External spring: 316 stainless steel
O-rings: EPDM

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

TUBING SIZES:
3/8" and 1/2" ID, 9.5mm and 12.7mm ID

LUBRICANTS: Krytox® PFPE (inert)

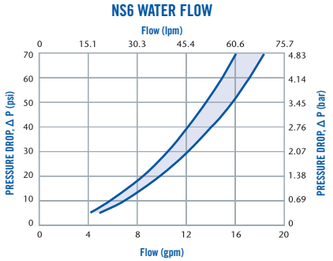
SPILLAGE:
~0.03 cc per disconnect @ 0 psi,
~0.30 cc/disconnect @ 120 psi

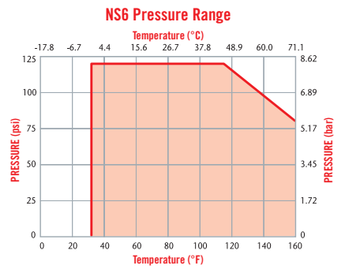
INCLUSION: 0.42 cc per connect

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

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

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
CPC thumb latch	One-hand connection and disconnection





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

SCAN

cpcworldwide.com/NS6

NS6 SERIES DIMENSIONS

COUPLING BODIES - Polypropylene

TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	A	B
IN-LINE PIPE THREAD	1/2" NPT		NS6D10008	1.31 (33.3)	3.01 (76.5)
	1/2" BSPT		NS6D10008BSPT	1.31 (33.3)	3.01 (76.5)
IN-LINE COMPRESSION	1/2" OD	12.7mm OD	NS6D13008	1.31 (33.3)	3.53 (89.7)
IN-LINE HOSE BARB	3/8" ID	9.5mm ID	NS6D17006	1.31 (33.3)	3.16 (80.3)
	1/2" ID	12.7mm ID	NS6D17008	1.31 (33.3)	3.16 (80.3)

COUPLING INSERTS - Polypropylene

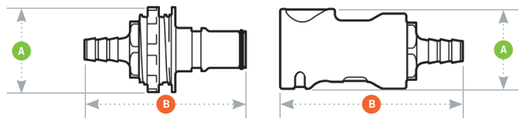
TERMINATION	TUBING/THREAD SIZE	METRIC EQ.	SHUTOFF	A	B
IN-LINE PIPE THREAD	1/2" NPT		NS6D24008	1.31 (33.3)	2.44 (62.0)
	1/2" BSPT		NS6D24008BSPT	1.31 (33.3)	2.44 (62.0)
IN-LINE COMPRESSION	1/2" OD	12.7mm OD	NS6D20008	1.31 (33.3)	3.01 (76.5)
IN-LINE HOSE BARB	3/8" ID	9.5mm ID	NS6D22006	1.31 (33.3)	2.59 (65.8)
	1/2" ID	12.7mm ID	NS6D22008	1.31 (33.3)	2.59 (65.8)
PANEL MOUNT COMPRESSION	1/2" OD	12.7mm OD	NS6D40008	1.50 (38.1)	3.32 (84.3)
PANEL MOUNT HOSE BARB	3/8" ID	9.5mm ID	NS6D42006	1.50 (38.1)	2.85 (72.4)
	1/2" ID	12.7mm ID	NS6D42008	1.50 (38.1)	2.85 (72.4)

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

ACCESSORIES

DESCRIPTION	MATERIAL	PART NO.
PANEL MOUNT GASKET REPLACEMENT: FOR SEALING PANEL MOUNT BODIES LISTED ABOVE	EPDM	1884300
	FKM	1889600

PRODUCT DIMENSIONS

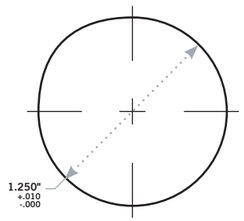


A = Height/Diameter

B = Total Length

PANEL DIMENSIONS

	PANEL OPENING	PANEL THICKNESS MAX.–MIN.
COUPLING INSERTS	see drawing	0.25 – 0.03



PLC®
SERIES CONNECTOR

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

SPECIFICATIONS

PRESSURE:
Vacuum to 120 psi, 8.3 bar

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

MATERIALS:
Main components and valves: Acetal
Thumb latch: Stainless steel
Valve spring: 316 stainless steel
External springs and pin: Stainless steel
O-rings: Buna-N

COLOR: Natural white, others available

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

JG® Tubing Specifications:

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

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

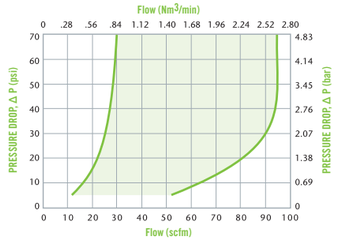
Metal tube: Brass, copper and mild steel

SCAN

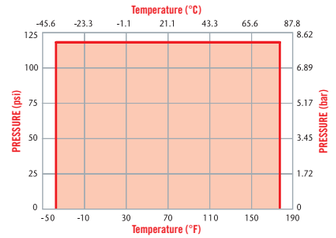
cpcworldwide.com/PLC

FEATURES		BENEFITS
CPC thumb latch	→	One-hand connection and disconnection
Integral terminations	→	Fewer leak points, shorter assemblies, faster installations
Clicks when connected	→	Assurance of a reliable connection
Compatible	→	Mates with LC and PLC12 Series couplings

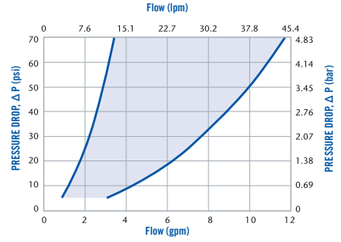
PLC AIR FLOW • 100 psig inlet pressure



PLC Pressure Range



PLC WATER FLOW



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

Metal or plastic quick disconnects?

Download the tech guide to learn about performance, weight, and compatibility considerations.

READ TECH GUIDE →

CPC

cpcworldwide.com/LC-HP-Plastic-Guide

LIQUID FLOW RATE INFORMATION FOR COUPLINGS

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

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

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

C_V VALUES

INSERTS

BODIES	PLC 20004	PLCD 20004	PLC 20006	PLCD 20006	PLC 22004	PLCD 22004	PLC 22006	PLCD 22006	PLC 24004	PLCD 24004	PLC 24006	PLCD 24006	PLC 26004
PLC10004	0.40	0.36	1.05	0.58	0.83	0.56	1.40	0.82	1.40	0.75	1.40	0.77	0.83
PLCD10004	0.36	0.31	0.73	0.48	0.66	0.41	0.82	0.50	0.80	0.45	0.77	0.45	0.81
PLC10006	0.40	0.36	1.05	0.60	0.83	0.56	1.40	0.81	1.40	0.76	1.40	0.76	0.83
PLCD10006	0.37	0.31	0.81	0.47	0.70	0.43	1.02	0.51	0.98	0.46	0.99	0.48	0.98
PLC12006	0.38	0.36	0.84	0.63	0.74	0.56	1.14	0.75	1.14	0.70	1.14	0.72	0.74
PLCD12006	0.38	0.33	0.78	0.49	0.68	0.44	0.84	0.49	0.81	0.43	0.82	0.44	0.81
PLC16004	0.38	0.37	0.87	0.54	0.95	0.51	1.00	0.70	0.95	0.64	1.00	0.66	0.95
PLCD16004	0.37	0.31	0.61	0.44	0.57	0.41	0.78	0.44	0.78	0.43	0.75	0.46	0.78
PLC16006	0.38	0.37	1.00	0.57	0.95	0.53	1.40	0.80	1.40	0.71	1.40	0.73	1.40
PLCD16006	0.38	0.32	0.71	0.49	0.63	0.42	0.89	0.51	0.96	0.45	0.92	0.49	0.97

PLC® SERIES DIMENSIONS

COUPLING BODIES - Acetal

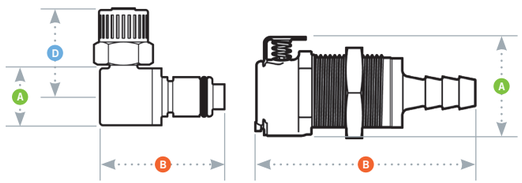





TERMINATION	TUBING/THREAD SIZE	METRIC EQ	STRAIGHT THRU	SHUTOFF	A	B
IN-LINE PIPE THREAD	1/4" NPT		PLC10004	PLCD10004	0.9 (22.9)	1.17 (29.7)
	1/4" BSPT		PLC10004BSPT	PLCD10004BSPT	0.9 (22.9)	1.15 (29.2)
	3/8" NPT		PLC10006	PLCD10006	0.9 (22.9)	1.15 (29.2)
	3/8" BSPT		PLC10006BSPT	PLCD10006BSPT	0.9 (22.9)	1.15 (29.2)
PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	1/4" OD, 0.17" ID	6.4mm OD, 4.3mm ID	PLC12004	PLCD12004	0.88 (22.4)	1.87 (47.5)
	–	8.0mm OD, 6.0mm ID	PLC120M8	PLCD120M8	0.88 (22.4)	1.95 (49.5)
	3/8" OD, 0.25" ID	9.5mm OD, 6.4mm ID	PLC12006	PLCD12006	0.88 (22.4)	1.95 (49.5)
	–	10.0mm OD, 8.0mm ID	PLC120M10	PLCD120M10	0.88 (22.4)	1.95 (49.5)
PANEL MOUNT HOSE BARB	1/4" ID	6.4mm ID	PLC16004	PLCD16004	0.88 (22.4)	1.95 (49.5)
	5/16" ID	7.9mm ID	PLC16005	PLCD16005	0.88 (22.4)	1.95 (49.5)
	3/8" ID	9.5mm ID	PLC16006	PLCD16006	0.88 (22.4)	1.95 (49.5)
PANEL MOUNT JG® PUSH-TO-CONNECT	1/4" OD	6.4mm OD	PLC11004	PLCD11004	0.88 (22.4)	1.95 (49.5)
IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	1/4" OD, 0.17" ID	6.4mm OD, 4.3mm ID	PLC13004	PLCD13004	0.94 (23.9)	1.82 (46.2)
	–	8.0mm OD, 6.0mm ID	PLC130M8	PLCD130M8	0.94 (23.9)	1.95 (49.5)
	3/8" OD, 0.25" ID	9.5mm OD, 6.4mm ID	PLC13006	PLCD13006	0.94 (23.9)	1.95 (49.5)
	–	10.0mm OD, 8.0mm ID	PLC130M10	PLCD130M10	0.94 (23.9)	1.95 (49.5)
IN-LINE HOSE BARB	1/4" ID	6.4mm ID	PLC17004	PLCD17004	0.94 (23.9)	1.80/1.95 (45.7/49.5)
	5/16" ID	7.9mm ID	PLC17005	PLCD17005	0.94 (23.9)	1.95 (49.5)
	3/8" ID	9.5mm ID	PLC17006	PLCD17006	0.94 (23.9)	1.80/1.95 (45.7/49.5)
IN-LINE JG® PUSH-TO-CONNECT	1/4" OD	6.4mm OD	PLC14004	PLCD14004	0.94 (23.9)	1.95 (49.5)
	3/8" OD	9.5mm OD	PLC14006	PLCD14006	0.94 (23.9)	2.09 (53.1)
	(See page 167 for JG accessories)					

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

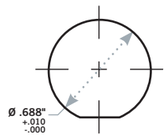
PRODUCT DIMENSIONS



A = Height/Diameter
B = Total Length
D = Elbow Radial Length

PANEL DIMENSIONS

	PANEL OPENING	PANEL THICKNESS MAX.–MIN.	PANEL NUT HEX	PANEL NUT THREAD
COUPLING BODIES	see drawing	0.50 – 0.05	13/16	11/16-24UNEF
COUPLING INSERTS	see drawing	0.30 – 0.05	13/16	11/16-24UNEF



COUPLING INSERTS - Acetal









TERMINATION	TUBING/THREAD SIZE	METRIC EQ	STRAIGHT THRU	SHUTOFF	A	B	D
IN-LINE PIPE THREAD	1/4" NPT		PLC24004	PLCD24004	0.72 (18.3)	1.25/1.66 (31.8/42.2)	
	1/4" BSPT		PLC24004BSPT	PLCD24004BSPT	0.72 (18.3)	1.53/1.66 (38.9/42.2)	
	3/8" NPT		PLC24006	PLCD24006	0.87 (22.1)	1.25/1.63 (31.8/41.4)	
	3/8" BSPT		PLC24006BSPT	PLCD24006BSPT	0.87 (22.1)	1.51/1.63 (38.4/41.4)	
PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	1/4" OD, 0.17" ID	6.4mm OD, 4.3mm ID	PLC40004	PLCD40004	0.94 (23.9)	1.78/1.91 (45.2/48.5)	
	–	8.0mm OD, 6.0mm ID	PLC400M8	PLCD400M8	0.94 (23.9)	1.91/2.03 (48.5/51.6)	
	3/8" OD, 0.25" ID	9.5mm OD, 6.4mm ID	PLC40006	PLCD40006	0.94 (23.9)	1.91/2.05 (48.5/52.1)	
	–	10.0mm OD, 8.0mm ID	PLC400M10	PLCD400M10	0.94 (23.9)	1.91/2.05 (48.5/52.1)	
PANEL MOUNT HOSE BARB	1/4" ID	6.4mm ID	PLC42004	PLCD42004	0.94 (23.9)	1.91/2.05 (48.5/52.1)	
	5/16" ID	7.9mm ID	PLC42005	PLCD42005	0.94 (23.9)	1.91/2.05 (48.5/52.1)	
	3/8" ID	9.5mm ID	PLC42006	PLCD42006	0.94 (23.9)	1.91/2.05 (48.5/52.1)	
PANEL MOUNT JG® PUSH-TO-CONNECT	1/4" OD	6.4mm OD	PLC41004	PLCD41004	0.94 (23.9)	1.91/2.05 (48.5/52.1)	
IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	1/4" OD, 017" ID	6.4mm OD, 4.3mm ID	PLC20004	PLCD20004	0.72 (18.3)	1.25/1.88 (31.8/73.2)	
	–	8.0mm OD, 6.0mm ID	PLC200M8	PLCD200M8	0.72 (18.3)	1.38/1.82 (35.1/46.2)	
	3/8" OD, 0.25" ID	9.5mm OD, 6.4mm ID	PLC20006	PLCD20006	0.72 (18.3)	1.38/1.82 (35.1/46.2)	
	–	10.0mm OD, 8.0mm ID	PLC200M10	PLCD200M10	0.72 (18.3)	1.38/1.82 (35.1/46.2)	
IN-LINE HOSE BARB	1/4" ID	6.4mm ID	PLC22004	PLCD22004	0.62 (15.7)	1.35/1.99 (34.3/50.6)	
	5/16" ID	7.9mm ID	PLC22005	PLCD22005	0.62 (15.7)	1.35/1.99 (34.3/50.6)	
	3/8" ID	9.5mm ID	PLC22006	PLCD22006	0.62 (15.7)	1.36/1.81 (34.5/46.0)	
IN-LINE JG® PUSH-TO-CONNECT	1/4" OD	6.4mm OD	PLC29004	PLCD29004	0.62 (15.7)	1.35/1.95 (34.3/49.5)	
	3/8" OD	9.5mm OD	PLC29006	PLCD29006	0.78 (19.8)	1.51/2.11 (38.4/53.6)	
ELBOW FERRULELESS POLYTUBE FITTING, PTF†	3/8" OD, 0.25" ID	9.5mm OD, 6.4mm ID	PLC21006	PLCD21006	.61/.62 (15.45/15.8)	1.22/1.35 (31.0/34.3)	0.85/0.96 (21.6/24.4)
ELBOW HOSE BARB	1/4" ID	6.4mm ID	PLC23004	PLCD23004	.67/.63 (17.0/16.0)	1.10/1.28 (27.9/32.5)	0.85/0.96 (21.6/24.4)
	3/8" ID	9.5mm ID	PLC23006	PLCD23006	.67/.63 (17.0/16.0)	1.25/1.28 (31.8/32.5)	0.90/0.96 (22.9/24.4)

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

LC
SERIES CONNECTOR

CPC's LC Series chrome-plated brass couplings are built tough and made to last in the most demanding applications. Ideal for use with higher temperature or pressure, the LC Series features a one-hand operation for swift and easy connects and disconnects.

SPECIFICATIONS

PRESSURE:
Vacuum to 250 psi, 17.3 bar

TEMPERATURE:
-40°F to 180°F (-40°C to 82°C)
(High temperature versions available with ratings to 400°F)

MATERIALS:
Main components: Chrome-plated brass
Thumb latch: Stainless steel
Valves: Acetal
Valve springs: 316 stainless steel
External springs and pin: Stainless steel
O-rings: Buna-N

FINISH: Chrome

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

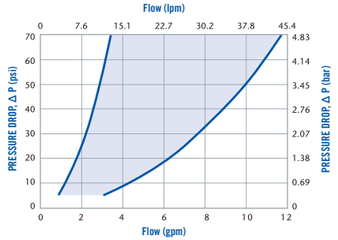
WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of CPC products in their own application conditions.

SCAN

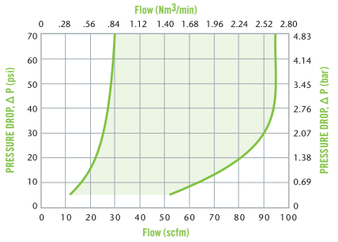
cpcworldwide.com/LC

FEATURES		BENEFITS
Brass material	→	Durable construction withstands higher pressure and temperature
Chrome plating	→	Attractive appearance
High temperature capability	→	Versions rated to 400°F (204°C)
CPC thumb latch	→	One-hand connection and disconnection
Compatible	→	LC mates with PLC Series couplings

LC WATER FLOW



LC AIR FLOW • 100 psig inlet pressure



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

DID YOU KNOW

O-ring selection is a key decision in determining which connector will perform best in your specific application. Understanding the material characteristics and how they can be affected by both the media being transferred and the environment in which the connector is being used is important.

NOTE

High temperature versions available with ratings to 400 F. Call customer service for more information.

SCAN

REQUEST A QUOTE

For complex liquid cooling systems needing multiple quick disconnects of varying sizes or for large orders, consider requesting a quote. CPC will work with you to understand your volume and schedule and associated delivery needs.

SCAN

FIND A DISTRIBUTOR

CPC has distributors all around the world. Find one in your region or country on the website or call CPC's Customer Service at 1-800-444-2474 or 651-645-0091. You can also send an email to info@cpcworldwide.com.

LIQUID FLOW RATE INFORMATION FOR COUPLINGS

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

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

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

C_V VALUES

INSERTS

BODIES	LC 20004	LCD 20004	LC 20006	LCD 20006	LC 22004	LCD 22004	LC 22006	LCD 22006	LC 24004	LCD 24004	LC 24006	LCD 24006	LC 26004
LC10004	0.40	0.36	1.05	0.58	0.83	0.56	1.40	0.82	1.40	0.75	1.40	0.77	0.83
LCD10004	0.36	0.31	0.73	0.48	0.66	0.41	0.82	0.50	0.80	0.45	0.77	0.45	0.81
LC10006	0.40	0.36	1.05	0.60	0.83	0.56	1.40	0.81	1.40	0.76	1.40	0.76	0.83
LCD10006	0.37	0.31	0.81	0.47	0.70	0.43	1.02	0.51	0.98	0.46	0.99	0.48	0.98
LC12006	0.38	0.36	0.84	0.63	0.74	0.56	1.14	0.75	1.14	0.70	1.14	0.72	0.74
LCD12006	0.38	0.33	0.78	0.49	0.68	0.44	0.84	0.49	0.81	0.43	0.82	0.44	0.81
LC16004	0.38	0.37	0.87	0.54	0.95	0.51	1.00	0.70	0.95	0.64	1.00	0.66	0.95
LCD16004	0.37	0.31	0.61	0.44	0.57	0.41	0.78	0.44	0.78	0.43	0.75	0.46	0.78
LC16006	0.38	0.37	1.00	0.57	0.95	0.53	1.40	0.80	1.40	0.71	1.40	0.73	1.40
LCD16006	0.38	0.32	0.71	0.49	0.63	0.42	0.89	0.51	0.96	0.45	0.92	0.49	0.97

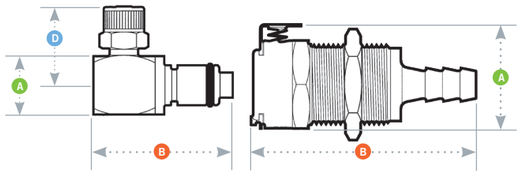
LC SERIES DIMENSIONS

COUPLING BODIES - Chrome-plated brass

TERMINATION	TUBING/THREAD SIZE	METRIC EQ	STRAIGHT THRU	SHUTOFF	A	B
IN-LINE PIPE THREAD	1/4" NPT		LC10004	LCD10004	0.88 (22.4)	1.15 (29.2)
	1/4" BSPT		LC10004BSPT	LCD10004BSPT	0.88 (22.4)	1.15 (29.2)
	3/8" NPT		LC10006	LCD10006	0.88 (22.4)	1.15 (29.2)
	3/8" BSPT		LC10006BSPT	LCD10006BSPT	0.88 (22.4)	1.15 (29.2)
PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	1/4" OD, 0.17" ID	6.4mm OD, 4.3mm ID	LC12004	LCD12004	0.88 (22.4)	1.87 (47.5)
	3/8" OD, 1/4" ID	9.5mm OD, 6.4mm ID	LC12006	LCD12006	0.88 (22.4)	2 (50.8)
PANEL MOUNT HOSE BARB	1/4" ID	6.4mm ID	LC16004	LCD16004	0.88 (22.4)	2 (50.8)
	5/16" ID	7.9mm ID	LC16005	LCD16005	0.88 (22.4)	2 (50.8)
	3/8" ID	9.5mm ID	LC16006	LCD16006	0.88 (22.4)	2 (50.8)
PANEL MOUNT MALE THREAD	1/4" NPT		LC15004	LCD15004	0.88 (22.4)	1.5 (38.1)
IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	1/4" OD, 0.17" ID	6.4mm OD, 4.3mm ID	LC13004	LCD13004	0.88 (22.4)	1.87 (47.5)
	3/8" OD, 1/4" ID	9.5mm OD, 6.4mm ID	LC13006	LCD13006	0.88 (22.4)	2 (50.8)
IN-LINE HOSE BARB	1/4" ID	6.4mm ID	LC17004	LCD17004	0.88 (22.4)	2 (50.8)
	5/16" ID	7.9mm ID	LC17005	LCD17005	0.88 (22.4)	2 (50.8)
	3/8" ID	9.5mm ID	LC17006	LCD17006		2 (50.8)

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

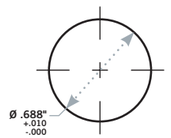
PRODUCT DIMENSIONS



A = Height/Diameter
B = Total Length
D = Elbow Radial Length

PANEL DIMENSIONS

	PANEL OPENING	PANEL THICKNESS MAX.–MIN.	PANEL NUT HEX	PANEL NUT THREAD
COUPLING BODIES	see drawing	0.50 – 0.05	13/16	11/16-24UNEF
COUPLING INSERTS	see drawing	0.090– 0.300	13/16	11/16-24UNEF



COUPLING INSERTS - Chrome-plated brass

TERMINATION	TUBING/THREAD SIZE	METRIC EQ	STRAIGHT THRU	SHUTOFF	A	B	D
IN-LINE PIPE THREAD	1/4" NPT		LC24004	LCD24004	0.72 (18.3)	1.25/1.68 (31.8/42.7)	
	1/4" BSPT		LC24004BSPT	LCD24004BSPT	0.72 (18.3)	1.25/1.68 (31.8/42.7)	
	3/8" NPT		LC24006	LCD24006	0.87 (22.1)	1.25/1.55 (31.8/39.4)	
	3/8" BSPT		LC24006BSPT	LCD24006BSPT	0.87 (22.1)	1.25/1.55 (31.8/39.4)	
IN-LINE PIPE THREAD (FEMALE)	1/4" NPT Female		LC26004	LCD26004	0.72 (18.3)	1.25/1.90 (31.8/48.3)	
	1/4" BSPP Female		LC26004BSPP	LCD26004BSPP	0.72 (18.3)	1.25/1.75 (31.8/44.5)	
PANEL MOUNT FERRULELESS POLYTUBE FITTING, PTF†	1/4" OD, 0.17" ID	6.4mm OD, 4.3mm ID	LC40004	LCD40004	0.94 (23.9)	1.83/1.98 (46.5/50.3)	
	3/8" OD, 1/4" ID	9.5mm OD, 6.4mm ID	LC40006	LCD40006	0.94 (23.9)	1.96/2.11 (47.8/53.6)	
PANEL MOUNT HOSE BARB	1/4" ID	6.4mm ID	LC42004	LCD42004	0.94 (23.9)	1.96/2.11 (47.8/53.6)	
	5/16" ID	7.9mm ID	LC42005	LCD42005	0.94 (23.9)	1.96/2.11 (47.8/53.6)	
	3/8" ID	9.5mm ID	LC42006	LCD42006	0.94 (23.9)	1.96/2.11 (47.8/53.6)	
IN-LINE FERRULELESS POLYTUBE FITTING, PTF†	1/4" OD, 0.17" ID	6.4mm OD, 4.3mm ID	LC20004	LCD20004	0.72 (18.3)	1.25/1.87 (31.8/47.5)	
	3/8" OD, 1/4" ID	9.5mm OD, 6.4mm ID	LC20006	LCD20006	0.72 (18.3)	1.38/1.83 (1.4/35.1)	
IN-LINE HOSE BARB	1/4" ID	6.4mm ID	LC22004	LCD22004	0.63 (16.0)	1.35/2.00 (34.3/50.8)	
	5/16" ID	7.9mm ID	LC22005	LCD22005	0.63 (16.0)	1.35/1.85 (34.3/47.0)	
	3/8" ID	9.5mm ID	LC22006	LCD22006	0.63 (16.0)	1.35/1.83 (34.3/35.1)	
ELBOW FERRULELESS POLYTUBE FITTING, PTF†	1/4" OD, 0.17" ID	6.4mm OD, 4.3mm ID	LC21004	LCD21004	0.63 (16.0)	1.28/1.43 (32.5/36.3)	0.83 (21.1)
	3/8" OD, 1/4" ID	9.5mm OD, 6.4mm ID	LC21006	LCD21006	0.63 (16.0)	1.28/1.43 (32.5/36.3)	0.96 (24.4)
ELBOW HOSE BARB	1/4" ID	6.4mm ID	LC23004	LCD23004	0.63/0.62	1.28/1.43 (32.5/36.3)	1.28 (32.5)
	3/8" ID	9.5mm ID	LC23006	LCD23006	0.63/0.62	1.28/1.43 (32.5/36.3)	1.28 (32.5)

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

DPC
SERIES CONNECTOR

The 1/4" flow DPC Series couplings feature a dual port connection in a contoured design that delivers ease-of-use and excellent flow in a compact size. Made from acetal thermoplastic, the DPC Series includes valved and non-valved couplings with a single plastic thumb latch. One-hand operation makes the DPC Series the choice for simple, simultaneous connections and disconnections where two fluid lines are required.

SPECIFICATIONS

PRESSURE:
Vacuum to 120 psi, 8.3 bar

TEMPERATURE:
32°F to 180°F (0°C to 82°C)

MATERIALS:
Main components: Acetal
Thumb latch: Acetal
Valve spring: 316 stainless steel
External springs: Stainless steel
O-rings: Buna-N

COLOR:
White with blue latch

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

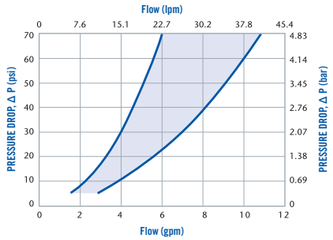
WARNING: Pressure, temperature, chemicals, and operating environment can affect the performance of couplings. It is the customer's responsibility to test the suitability of CPC's products in their own application conditions.

SCAN

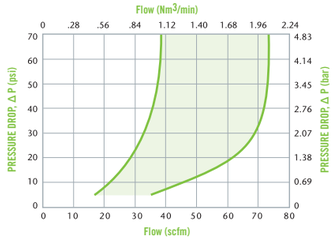
cpcworldwide.com/DPC

FEATURES	BENEFITS
Single thumb latch	Intuitive one step, two-line connection and disconnection
Insert keyed to body	Ensures correct directional flow
Compact, modular design	Attractive, high-quality appearance and configuration flexibility
Integral terminations	Fewer moving parts, shorter assemblies, faster installations

DPC WATER FLOW



DPC AIR FLOW • 100 psig inlet pressure



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

DPC SERIES DIMENSIONS

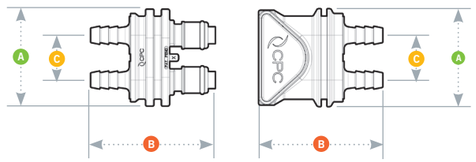
COUPLING BODIES - Acetal

TERMINATION	TUBING/ THREAD SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	C
IN-LINE HOSE BARB	1/4" ID	6.4mm ID	DPC17004	DPCD17004	1.62 (41.1)	2.09 (52.9)	0.75 (19.1)
	3/8" ID	9.5mm ID	DPC17006	DPCD17006	1.62 (41.1)	2.09 (52.9)	0.75 (19.1)

COUPLING INSERTS - Acetal

TERMINATION	TUBING/ THREAD SIZE	METRIC EQ.	STRAIGHT THRU	SHUTOFF	A	B	C
IN-LINE HOSE BARB	1/4" ID	6.4mm ID	DPC22004	DPCD22004	1.62 (41.1)	1.97/2.11 (50.0/53.6)	0.75 (19.1)
	3/8" ID	9.5mm ID	DPC22006	DPCD22006	1.62 (41.1)	1.97/2.11 (50.0/53.6)	0.75 (19.1)

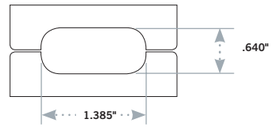
PRODUCT DIMENSIONS



A = Height/Diameter
B = Total Length
C = Center-to-center distance

PANEL DIMENSIONS

	PANEL OPENING	PANEL THICKNESS MAX. – MIN.
COUPLING BODIES	contact CPC	
COUPLING INSERTS	see drawing	0.135 – 0.132



Ask An Engineer

Contact CPC with your quick disconnect and liquid cooling application-related questions. CPC's dedicated engineers are happy to help.

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CPC QUICK DISCONNECT COUPLING BASICS

A CPC quick disconnect coupling (QD) consists of two parts, a female coupling body and a male coupling insert, or "plug," that when connected create a fluid flow path. Each of CPC's Everis QD couplings has a valve architecture with multi-lobed seals to provide redundant protection against leakage over extended periods of time. CPC's liquid cooling QD valves are designed to ensure the valve closes quickly and reliably when the coupling is disconnected after long periods in a connected state. Upon disconnection, the integrated non-spill shutoff valves automatically stop flow, preventing pressure loss. With non-spill functionality, spillage at disconnection consists of a wetted surface — which is not enough fluid to create or enable a drip. Once the QDs are connected, the flow of coolant fluid begins.

ALIGNMENT	In the case of blind mate liquid cooling connectors, how does the system hardware ensure alignment of the QDs? For example, will they be panel mounted with an external locking mechanism? The design of Everis™ blind mate quick disconnects is such that some minor misalignment is allowable and the QD will perform accordingly.
COOLANT	What is your selected fluid? The thermal properties, viscosity and corrosiveness of the fluid going through the liquid cooling system all need to be considered. Chemical compatibility of the coolant with all system and coupling subcomponent materials is particularly important.
COMPATIBILITY	What other materials will be used in the system? It is important to be aware of potential issues derived from galvanic corrosion due to fluid and material incompatibility. Be aware that system corrosion and component erosion resulting from incompatibilities can result in particles in the system which can affect both subcomponent reliability and system performance. Use of polymer materials can help to prevent these issues.
CYCLES	How many make/break cycles will the quick disconnect need to accommodate? Some applications are such that, upon connection, the QD is rarely disconnected. Other installations may experience many disconnections. Understanding anticipated cycling can influence recommendations for seals and your specification of coolant.
DIMENSION	How much room is there for the QD? Are there access needs for installation or operation surrounding the QD? Based upon cooling load and space constraints, does the application require a high flow-to-size ratio for its quick disconnects? Specifying engineers should refer to Cv or Kv graphs for accurate flow characteristics. Orifice diameter and physical size of the QD are not good indicators of performance.
FLAMMABILITY	Does the application need to pass a particular certification? Do system components need to be composed of materials that have a specific UL94-rating?
FLOWRATE	What is your required flow and desired target range for allowable pressure drop for each liquid cooling system subcomponent? Understand configuration and multiple component impacts to flow and specify pumps accordingly. Be sure to allow for the effect of shutoff valves and tubing connections in your calculations.
FORM FACTOR	What type of connector style is desired? Will you need single-handed operation as is offered with latch-style quick disconnects or will the connectors be panel mounted or affixed to a manifold?
PRESSURE	What is the maximum pressure the liquid cooling system will experience and subsequently, the pressure that your connections will need to withstand? What is the standard operating pressure? Or are you designing a low-pressure system? Engineers can refer to Cv or Kv for accurate flow information. System designers will also be concerned with pressure drop associated with each system component.
SHUTOFF OPTIONS	Do you need automatic or integral shutoff valves in your quick disconnects? Most connectors recommended for liquid cooling applications are non-spill. Other shutoff options are single or double shutoff.
SPECIAL REQUIREMENTS	What unique scenarios must the product address or possess? Sterilization, NSF listed, USP Class VI approved materials, special packaging, color coding, assemblies and keying are some examples. Custom development is available to support these needs.
SPILLAGE	What amount of fluid loss is acceptable upon each disconnection of the quick disconnect? Is the coolant a regulated or hazardous material? Depending upon flow size, a typical non-spill QD will emit a small bit of fluid, which often equates to a wetted surface on the face of the connector.
TEMPERATURE	Know your minimum and maximum temperature range. How much will temperature fluctuate, to what degree, and how often? Also consider that operating temperature will vary from shipping/storage temperature of the liquid cooling system subassemblies.
TERMINATION	How are you connecting the coupling to the rest of the system? Common termination options include locking hose barb, hose barb, and threaded terminations. Threaded terminations are available in all applicable international standards including NPT, BSPP (or G-thread), and SAE. Alternative terminations are also available upon request.
TESTING	What tests do your component manufacturers perform? What independent, subassembly or system-level tests do liquid cooling system designers need to conduct? Prior to locking a specification, ask what tests the liquid cooling connectors have been through and request copies of testing validation reports.
TOLERANCE	What mounting method and locking systems are planned for use with blind mate quick disconnects? Understand what tolerances each quick disconnect offers and how they affect flow and system performance.
TORQUE	What tools and how much force will be applied to affix the QDs to the manifold of the liquid cooling system? Will it be measurable and consistent? Many quick release couplings feature a maximum torque measurement to preserve the integrity and reliability of the assembly of the QD.
TRANSPORTATION	Will the system be delivered over land or via air transport? Self-contained or pressurized liquid cooling cargo by air can be affected by temperature and altitude. Both methods of transportation are susceptible to fluctuating environmental conditions.
TUBING	What type, material, and size of tubing are you using? Besides inside and outside diameter of the piping or tubing used, system designers need to specify the material. For tubing, this can help direct the type of hose barb that can be used (locking vs. traditional vs. custom.)
VIBRATION	Will the liquid cooling system be installed in a location with seismic activity? Or will it experience vibration during operation, such as would be common in a transit application?

CPC RESOURCES

Thermal engineers, specifiers and owners/operators of thermal management systems can learn about material properties, temperature, and chemical considerations for liquid cooling applications by browsing and downloading white papers, tech guides and brochures from the Resources and Support section of CPC's website. White papers and tech guides are available for immediate download. For example, the table at bottom is from Tech Guide 5012: "Liquid Cooling and the Chemical Compatibility Imperative."

FLUID SELECTION

Coolant fluid viscosity, specific gravity and freezing and boiling points impact system design and component selection. Thermal engineers specifying quick disconnects for liquid cooling applications often begin by evaluating their fluid selection options:

FLUID	SPECIFIC GRAVITY	THERMAL CONDUCTIVITY W/MK	SPECIFIC HEAT J/KGK	VISCOSITY CP	BOILING °F	FREEZING °F	COST
1,1,1,2-TETRAFLUOROETHANE (R-134A)	0.52	0.082	1440	0.20	-15°	-154°	$$$
MINERAL OIL	0.92	0.106	1670	6.64	392°	-15°	$$
WATER	1.00	0.580	4181	1.00	212°	32°	$
PROPYLENE GLYCOL, 50% SOLUTION	1.04	0.357	3559	5.20	223°	-49°	$$
2,3,3,3-TETRAFLUOROPROPENE R1234YF)	1.10	0.064	1382	0.16	-22°	-238°	$$$
ETHYLENE GLYCOL, 50% SOLUTION	1.13	0.402	3283	2.51	224°	-35°	$$
HYDROFLUOROETHER (HFE)	1.61	0.075	1300	0.45	93°	-189°	$$$$
FLUORINERT™ FC-72	1.68	0.057	1100	0.64	133°	-130°	$$$$
PERFLUOROPOLYETHER (PFPE)	1.70	0.090	960	0.45	392° - 500°	23°	$$$$

MATERIAL AND COOLANT COMPATIBILITY

When considering wetted components in a liquid cooling system, the following combinations are:

A = RECOMMENDED: Little or no potential for chemical reaction or corrosion.
B = GOOD OPTIONS: Minor potential for chemical reaction or corrosion, with limited affect on system performance.
F = NOT RECOMMENDED: Mild to severe chemical or corrosive reactions likely. May impede system performance.

	WATER	ETHYLENE GLYCOL	PROPYLENE GLYCOL	MINERAL OIL	REFRIGERANTS	DIELECTRICS
COMMODITY PLASTICS	A	A	B	A	F	B
ENGINEERED THERMOPLASTICS	A	A	B	A	A to F[1]	B
ELASTOMERS	A	A	A	A[2]	A to F[3]	A to F[3]
ALUMINIM	B	A	B	A	A	A
BRASS (PLATED)	A	A	B	A	A	A
COPPER	B	B	A	B	A	A
STAINLESS STEEL	A	B	B	A	A	A

[1]Thermoplastics may be engineered to enhance compatibility with specific refrigerants.
[2]Most elastomers are compatible, however EPDM is not recommended for use with mineral oil.
[3]Elastomers may be engineered to enhance compatibility with specific refrigerants and dielectric fluids.

TYPES OF LIQUID COOLING

There are two types of liquid cooling: direct and immersion. Both types of liquid cooling can use either a single-phase or a two-phase method.

DIRECT SINGLE-PHASE

A liquid cooled system is considered to be "single-phase" when the fluid used to extract heat from the electronics does not undergo a phase change; the coolant remains in liquid state throughout the cooling loop. The temperature of the fluid will vary depending upon where in the cooling circuit it is. The fluid is contained within piping or tubing and it is not in direct contact with the electronics being cooled. Pure water or a Water-Glycol mix is the common fluid in this type of system. QDs are required at the server entry and exit and also inside the cooling loop (for cold plate connections or internal manifolds inside the server blade). It is the most common loop in the market due to its effectiveness, relative ease of implementation, and overall cost-effectiveness.

DIRECT TWO-PHASE

When a coolant undergoes a phase change from liquid to gas and back to liquid within the cooling loop, it is considered direct two-phase cooling. The coolant in gas or fluid state is contained within the loop and it is not in direct contact with the system components being cooled. Dielectric fluids are used in these systems and quick disconnects are required at the server entry and exit, as well as inside the cooling loop. It is the most effective way of dissipating heat.

SINGLE PHASE IMMERSION

With immersion systems, electronics are safely submerged in dielectric fluid liquid in a sealed but readily accessible enclosure. The dielectric fluid is not conductive, allowing for the safe operation of electronics while in direct contact with the fluid. The heat from electronic components is transferred to the fluid. Pumps are often used to flow the heated fluid to a heat exchanger, where it is cooled and cycled back into the enclosure. In single-phase immersion cooling, fluid remains in its liquid phase. While very effective in heat dissipation, it requires sealed structures to prevent losses, and maintenance of the equipment can be messy.

TWO PHASE IMMERSION

Similar to single phase immersion systems, the electronic components requiring cooling are directly immersed in dielectric liquid in a sealed but readily accessible enclosure or tank. In two-phase immersion cooling however, the heat from electronic components causes the fluid to boil, producing vapor that rises from the liquid. The vapor then condenses on a heat exchanger (condenser) within the tank returning it to a liquid state which is returned to the tank. There is an exponential increase in heat transfer efficiency.

Talk to a CPC distributor or click on the QR Code to view our video on the benefits of partnering with us for your custom solution.

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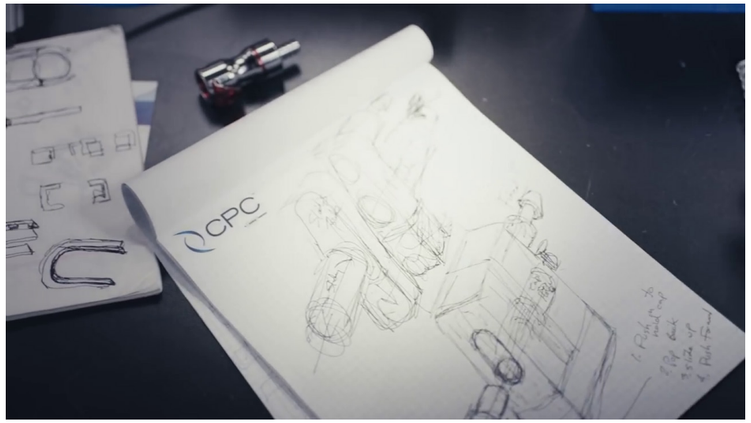
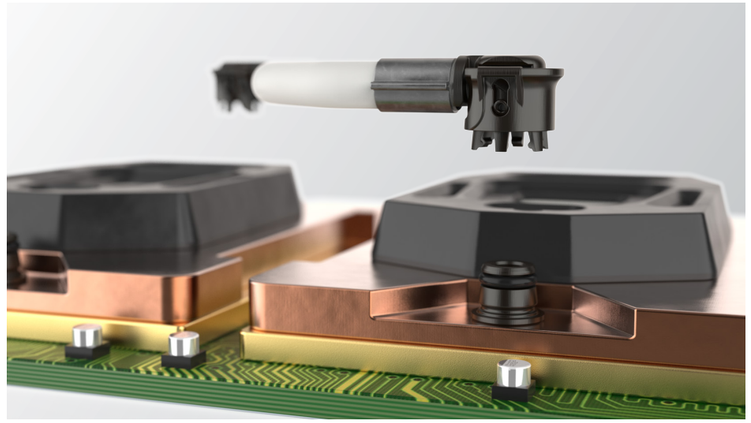


CUSTOM PROJECT CAPABILITIES

Drawing upon our established skills in innovation, we can engineer a custom-made connector for your application. Count on us to deliver the fluid handling expertise essential for your unique project requirements.

INNOVATION AND EXPERTISE PUT TO WORK FOR YOU

CPC believes in collaboration. Our engineers, working closely with your team, help solve challenging design or technical issues and help you get to market faster. Work with a company that has over 40 years' experience working with thousands of fluid management scenarios. Our highly knowledgeable experts help identify your challenges and optimize connector solutions for you to consider. Trust us to develop reliable connections for your liquid cooling application. Collaborating early in your design process empowers you to find the ideal connector perfectly suited for your needs.



CONSIDER A CUSTOM PROJECT

- When a new design would add value to a system making it easier to use, more reliable or more efficient
- When a specification cannot be met by an existing standard CPC product
- When a project has unique requirements such as space, performance, compatibility, budget, or scheduling challenges

Our Custom Engineering team supports a wide range of customer needs—from simple and minor modifications to fully customized components or assemblies. We're ready to meet your thermal management needs and fluid handing requirements.

CONTACT US

When in doubt, just ask. With such a variety of liquid cooling system types and the necessity for finely tuned thermal management performance where every component may have an impact, it can get confusing. CPC has layers of support to help solve challenging design or technical issues and help you get to market faster. Just ask. Call CPC's Customer Service at 1-800-444-2474 or 651-645-0091. You can also send an email to info@cpcworldwide.com.

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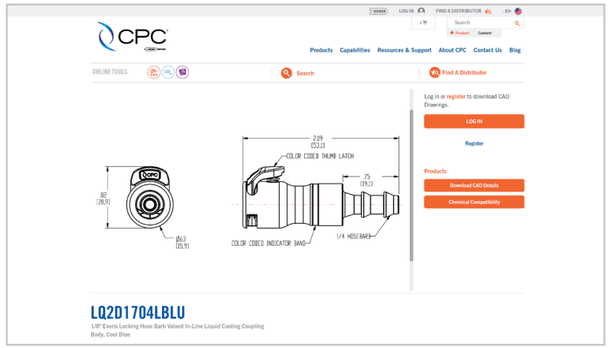

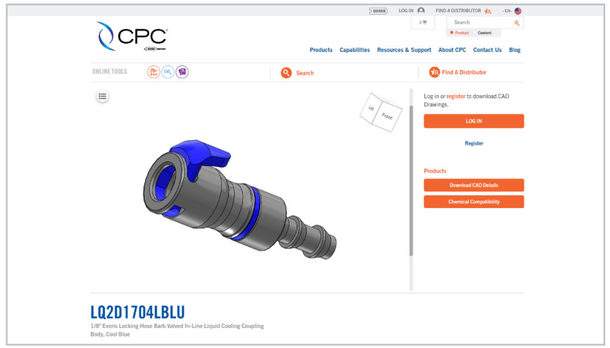

DOWNLOAD SPEC SHEETS

You can research product characteristics, use the product specifier and find mating parts on the website. Register and login to cpcworldwide.com to download spec sheets with detailed product information.

DOWNLOAD CAD DRAWINGS

Once you've become a registered user on the CPC website, it's simple to download CAD files. Examine detail and compare products. Download CAD files instantly to drop into your assembly in your preferred file format. Downloads are available in a huge variety of file formats so you can easily design the CPC quick disconnects into your specific application even without a sample yet in hand.

ORDER PRODUCT SAMPLES

There is nothing like holding a product and seeing how smoothly and intuitively it works. Many quick disconnects are available in small quantities from the website. Purchase CPC's liquid cooling connectors conveniently and securely online using a credit card on each product page. If you don't see your desired QD available as a "single," just contact CPC customer service at 1-800-444-2474 or 651-645-0091 or e-mail your request to info@cpcworldwide.com. Contact us if you need a sample for testing or prototyping.

Register on the website to access CAD files for download:

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https://www.cpcworldwide.com/CPC-Login

WE'RE HERE TO HELP

FOLLOW

Learn about upcoming liquid cooling training, webinars and trade shows. Get access to complimentary event registrations where CPC engineers present their latest research or recommendations.

WATCH

CPC's YouTube channel features a liquid cooling playlist. Learn about trends from recorded interview conversations. Get information on new products from CPC experts.

CONTACT

If you need additional information about our liquid cooling quick connects or how we can help you research and identify the fluid handling connector solutions for your application, just contact us at 1-800-444-2474 or 651-645-0091 or e-mail your request to info@cpcworldwide.com. Our sales team, distributors and/or applications engineers can collaborate with you to specify, integrate, and deploy reliable thermal management QDs from CPC to meet your liquid cooling fluid management needs.

Get started by "Asking An Engineer."

Contact CPC with your quick disconnect and liquid cooling application-related questions. CPC's dedicated engineers are happy to help.

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LIQUID COOLING FLUID HANDLING TO TAKE YOU FORWARD, FASTER

CPC (Colder Products Company) has been designing and manufacturing connectors since 1978. For over the past decade, CPC has supplied quick disconnect couplings or QDs (also known as quick release connectors) to manufacturers designing and building liquid cooling of electronics systems to address the heat density and high temperatures generated by technology such as powerful microchips and lasers. Our range of purpose-built for liquid cooling Everis® QDs are used by premier technology leaders in applications ranging from supercomputing and data centers to EV charging stations. CPC's innovative non-spill coupling and connection technologies allow tubing to be quickly and easily connected and disconnected, instilling confidence for thermal engineers and system operators alike.

Colder Products Company®

COLDER PRODUCTS COMPANY
4200 W. ROUND LAKE ROAD,
ARDEN HILLS, MINNESOTA 55112
U.S.A.

PHONE: +1 (651) 645-0091
TOLL FREE: +1 (800) 444-2474

COLDER PRODUCTS COMPANY GMBH
KURHESSENSTRASSE 15
64546 MÖRFELDEN-WALLDORF
GERMANY

PHONE: +49 6105 9743-003

DOVER (SHANGHAI) INDUSTRIAL CO., LTD.
ROOM 1802, BUILDING A, IBC,
391 GUIPING ROAD, XUHUI DISTRICT,
SHANGHAI, CHINA 200233

PHONE: +86 21 2411 2666
TOLL FREE: +86 400 990 1978

cpcworldwide.com
info@cpcworldwide.com

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CPC PATENT STATEMENT: CPC takes pride in its innovative quick disconnect coupling and fittings solutions, many of which have been awarded United States and international patents. CPC 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 has a benefit to its customers, CPC has licensed its proprietary technology. Please contact CPC to discuss your unique needs.

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

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