START COOLING SMARTER.

QUICK DISCONNECT COUPLINGS
LIQUID COOLING OF HIGH-PERFORMANCE COMPUTERS AND DATA CENTERS

CPCWORLDWIDE.COM/LIQUIDCOOLING
High-performance computer (HPC) processing power is increasing all the time. Simultaneously, components are becoming smaller and denser, which means things are heating up — literally. To handle the heat, liquid cooling is a must.

Power is critical, as is managing heat.

Cutting edge artificial intelligence and HPC clusters don’t just require the highest performing GPUs and CPUs, they are now packed in incredibly dense configurations. That leads to substantially higher wattage densities at both the node and rack level, with rack power densities increasing to 80kW and beyond. Further, given their expense and the critical computing for research these systems are often dedicated to performing, these high-density clusters run at 100% capacity for sustained periods 24/7.
LIQUID COOLING: IT’S SIMPLE PHYSICS.

Data centers around the world are being tasked with the challenge of increasing energy efficiency, consolidating operations and reducing costs. The fundamental nature of liquid cooling provides a powerful tool to start addressing those challenges head-on and it will be a key factor in moving the power usage effectiveness (PUE) of data centers closer to 1.0.

Liquid is up to 4,000 times better at storing and transferring heat than air. This capability property provides immediate and measurable benefits to a data center no matter the scale of operation. By lowering processor temperatures through liquid cooling, operators can realize a 4% reduction in solution times and minimize latency by maximizing cluster interconnect density.

Even beyond those impressive effects, liquid cooling offers the ability to reduce power consumption, which in turn reduces fossil fuel consumption. This can further lead to reduced CO\textsubscript{2} emissions and can play a vital role in protecting the planet for generations to come.
A GLOBAL LEADER IN LIQUID COOLING CONNECTORS.

CPC has been delivering lightweight, non-spill, worry-free couplings for decades. Now our thermal management expertise and proven record of liquid cooling quick disconnect (QD) coupling innovation sets CPC apart.

MAKE THE CONNECTION

CPC couplings are purpose-built to address the challenges you face today.
YOUR CHALLENGES

100% Uptime
It’s not negotiable — any maintenance schedule or upgrade costs time and money.

Performance + Sustainability
The demands of increased power for a data center are one thing. The toll that increase places on the health of the planet are another entirely.

Rapid Pace
In this industry, things move fast and become obsolete even faster. You need proven solutions that are simultaneously on the cutting edge of technology development.

OUR SOLUTIONS

Dependable Durability
CPC provides a wide range of high-performance quick disconnect couplings that deliver years of leak-free performance.

Maximum Control
Make the choice that’s right for you from a wide array of QD designs, materials and component terminations.

Expert Flexibility
Our engineers are excited to work with yours and collaborate at the speed of your business, providing insights on testing and performance and fit for various locations within a system.
TORTURE TESTED AGAIN AND AGAIN AND AGAIN.

We want you to be absolutely confident in our liquid cooling connectors. That’s why we are always testing them. It starts with materials testing, followed by product testing and then torture testing to failure. In addition to published validation reports, our connectors are designed and manufactured to meet the stringent ISO 9001 and ISO 13485 quality standards. All of which means you can rest easy knowing that CPC products will perform to their specifications. Our testing protocols include:

- Helium Mass Spectrometer Leak Testing
- Bubble Leak Testing
- Pressure Decay Testing
- Hydrostatic Leak Testing
- AND MORE
Backed by decades of experience, we’re at the forefront of innovation, delivering the features needed to connect with confidence.

- Range of seal options and QD materials for temperature, chemical and pressure compatibilities
- Optimized flowrates for superior performance.
- Redundant, multi-lobed seals retain their shape in connected states and offer leak prevention confidence.
- Ergonomically designed thumb latch provides both ease and speed of installation and system maintenance — just listen for the CPC “click” to know you’re connected.
- Blind mates and compact couplings built with swivel joints enable ease of installation and access within tight spaces.
MEET YOUR LIQUID COOLING LINEUP.

A wide variety of use cases within HPC and data center applications requires a wide portfolio of products. CPC offers the quick disconnect couplings options you need with features like non-spill shutoff valves and locking hose barb terminations.

CPC’s innovative design and quality manufacturing spans all product lines. However, Everis™ connectors are exclusively designed and built for the rigors of liquid cooling applications. But it doesn’t end there. CPC continues to expand the portfolio with advanced engineering coupling models along with new size, configuration and termination option solutions. Visit cpcworldwide.com/liquidcooling for details.

EVERIS™ LQ SERIES

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

**Everis™ LQ2**
Nominal flow of 1/8" (3.2 mm) with a Cv of 0.37 (Kv 0.32)
Termination options: locking hose barb, SAE, & G thread

**Everis™ LQ4**
Nominal flow of 1/4" (6.4 mm) with a Cv of 1.3 (Kv 1.1)
Termination options: hose barb, locking hose barb, SAE, NPT, G thread, & PTF

**Everis™ LQ6**
Nominal flow of 3/8" (9.5 mm) with a Cv of 2.2 (Kv 1.9)
Termination options: hose barb, locking hose barb, SAE, NPT, G thread, & PTF

**Everis™ LQ8**
Nominal flow of 1/2" (12.7 mm) with a Cv of 6 (Kv 5.2)
Termination options: locking hose barb, SAE & G thread

EVERIS™ BLQ SERIES

Designed specifically for integrated mounting and external locking engagement, with ultra-reliable dripless connections and disconnections.

**Everis™ BLQ2**
Nominal flow of 1/8" (3.2 mm) with a Cv of 0.37 (Kv 0.32)
Termination option: SAE

**Everis™ BLQ4**
Nominal flow of 1/4" (6.4 mm) with a Cv of 1.3 (Kv 1.1)
Termination options: SAE & G thread

**Everis™ BLQ6**
Nominal flow of 3/8" (9.5 mm) with a Cv of 2.2 (Kv 1.9)
Termination options: SAE & G thread
EVERIS™ PLQ SERIES
The robust Everis PLQ series’ high-performance polyphenylsulfone PPSU QDs are lightweight, dimensionally stable and UL94 VO-rated. Specify the Everis PLQ line to avoid galvanic corrosion and condensation issues.

Everis™ PLQ2
Nominal flow of 1/8” (3.2 mm)
with a Cv of 0.37 (Kv 0.32)
Termination options: Locking hose barb, SAE, G thread

Everis™ PLQ4
Nominal flow of 1/4” (6.4 mm)
with a Cv of 1.3 (Kv 1.1)
Termination options: hose barb, locking hose barb, SAE, G thread

Note: Graphs indicate flow performance using water at room temperature
INNOVATION BORN FROM EXPERIENCE.

For over 40 years, CPC has been a leading provider of quick disconnect couplings, fittings and connectors for plastic tubing. Our expertise in liquid cooling doesn’t stop at high performance computing or data centers — we’ve been active in liquid cooling in fields ranging from electric vehicle charging to radar, lasers, 5G, medical devices and more.

By synthesizing our learnings from such a wide variety of disciplines, we’re able to innovate in unexpected ways, anticipate future challenges and bring you better, purpose-built solutions.

READY TO CRACK THE CODE ON BETTER COOLING?

We want to work with you today to solve the computing needs of the future.

KNOW EXACTLY WHAT YOU’RE LOOKING FOR?

Great, let’s get down to business. Just call or e-mail us at info@cpcworldwide.com to request samples or a quote.

CPCWORLDWIDE.COM

North America
1-800-444-2474

Europe
49-6026-9973-0

Asia Pacific
(852) 2987-5272
CPC WARRANTY STATEMENT: CPC (Colder Products Company) warrants its products against defects in workmanship and materials for a period of 12 months from the date of sale by CPC to its initial customer (regardless of any subsequent sale of the products). This warranty is void if the product is misused, altered, tampered with or is installed or used in a manner that is inconsistent with CPC’s written recommendations, specifications and/or instructions, or fails to perform due to normal wear and tear. CPC does not warrant the suitability of the product for any particular application. Determining product application suitability is solely the customer’s responsibility. CPC is not liable for special, indirect, incidental, consequential or other damages including, but not limited to, loss, damage, personal injury, or any other expense directly or indirectly arising from the use of or inability to use its products either separately or in combination with other products. ALL OTHER WARRANTIES EXPRESS OR IMPLIED, WHETHER ORAL, WRITTEN OR IN ANY OTHER FORM, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY EXCLUDED. The sole and exclusive remedy under this warranty is limited, at the option of CPC, to replacement of the defective product or an account credit in the amount of the original selling price. All allegedly defective CPC products must be returned prepaid transportation to CPC, together with information describing the product’s application and performance, unless otherwise authorized in writing by CPC.

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.
WANT TO COLLABORATE?

For designers of data centers, to high performance computers or even medical equipment electronics, we’ve curated tools and resources to help you tackle any challenge:

- ASK AN ENGINEER
- WHITE PAPERS
- LIQUID COOLING TECH GUIDES
- CAD FILES

VISIT US AT CPCWORLDWIDE.COM TO GET STARTED.