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Hi-res photos available <u>here</u> Informative video available <u>here</u>

## **New CPC QD Solution Optimizes HPC Liquid Cooling**

Advanced thermoplastic contributes to cost-effective high performance

St. Paul, Minn. – November 8, 2018 – CPC (Colder Products Company), maker of quick disconnects (QDs) designed specifically for liquid cooling use, introduces its PLQ2 high-performance thermoplastic connector. These QDs deliver new capabilities in tensile strength, creep resistance and temperature handling for high performance computing (HPC) and data center liquid cooling applications. Made of polyphenylsulfone (PPSU), the connectors offer a heat deflection temperature of more than 200°C and are chemically compatible with all of today's most widely used coolants and engineered fluids.

"PLQ Series QDs are among the highest-performing engineered polymer connectors for liquid cooling applications available. They vastly reduce concerns around plastic QD durability and performance," said Elizabeth Langer, senior design engineer, thermal management. "HPC and data center specifiers and operators can use these plastic QDs with confidence."

Until now, users seeking the lightweight and corrosion-resistant benefits of plastic QDs typically sacrificed some level of robustness. With the PLQ Series, that tradeoff is no longer necessary. The PLQ Series' advanced polymer construction maintains excellent thermo-oxidative stability and long-term material performance over time. PLQ QDs operate in temperatures from 0°F to 240°F (-17° to 115°C). Dimensionally stable PPSU has low water absorption making PLQ QDs ideal for water-cooled systems and humid environments. As a thermal insulator, PPSU reduces

potential condensation on the connector and eases handling—the QD will not be hot to the touch when warm fluid is present. The PPSU connector is inherently flame retardant with a UL94 V-0 rating.

PLQ Series QDs feature a multilobed seal for redundant protection against leakage and lasting shape retention during extended periods of connection. Multilobe seals provide greater sealing efficiency than standard O-rings while requiring less force to connect. The non-spill design allows disconnection under pressure without leaks—essential in protecting electronics from exposure to fluid and enabling hot swapping of equipment.

CPC is known for its easy-to-connect, robust non-spill connectors for HPC, data centers and other critical thermal management applications. A proven performer, the PLQ2 connector has undergone more than 10,000 cycles of leak testing as well as fluid burst pressure, creep resistance testing and more. CPC's extensive manufacturing validation process also includes both 100% function and leak testing during production.

The new PLQ2 Series will be highlighted at the SC18 meeting in Dallas November 12-15 (CPC Booth #3926) and begin shipping December 2018. For more information about the performance and versatility of the PLQ Series or any of the other 10,000+ innovative connection solutions CPC offers, visit cpcworldwide.com.

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## **About CPC**

CPC (Colder Products Company) is the leading provider of quick disconnect couplings, fittings and connectors for the life sciences, bioprocessing, thermal management, industrial and chemical handling markets. CPC is an operating company within Dover Corporation. For a free catalog or more information, contact: Colder Products Company, 1001 Westgate Drive, St. Paul, MN 55114. Phone: 651-645-0091. Toll-free: 800-444-2474. Fax: 651-645-5404. Web: cpcworldwide.com

## **About Dover**

Dover is a diversified global manufacturer with annual revenue of approximately \$7 billion. We deliver innovative equipment and components, specialty systems, consumable supplies, software and digital solutions, and support services through three operating segments: Engineered Systems, Fluids and Refrigeration & Food Equipment. Dover combines global scale with operational agility to lead the markets we serve. Recognized for our entrepreneurial approach for over 60 years, our team of over 24,000

employees takes an ownership mindset, collaborating with customers to redefine what's possible. Dover is headquartered in Downers Grove, Illinois.

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