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Hi-res photos available here.

## New Solutions from CPC Optimize Liquid Cooling Ease, Efficiency

CPC highlights high-performance thermoplastic and blind mate connectors at SC19

**St. Paul, Minn.—Nov. 13, 2019** <u>CPC (Colder Products Company)</u>, maker of quick disconnects (QDs) designed specifically for liquid cooling of electronics, is debuting new solutions at the SC19 meeting in Denver. The company's new blind mate BLQ4 latchless connector achieves maximum flow within 1/8" of full engagement, simplifying connections in locations that are difficult to see or access like the back of server racks. CPC will also show new lightweight, durable high-performance thermoplastic connectors, the PLQ Series of QDs.

"One of the most significant improvements in liquid cooling systems is the use of engineered plastic quick disconnects. They are lightweight, yet extremely durable without the corrosion and condensation concerns associated with metals," said Jeff Peters, product manager, thermal management. CPC offers the only QDs made of PPSU (polyphenlysulfone) for liquid cooling applications in high performance computing (HPC). "We're seeing strong interest in this high-performance plastic material by both HPC manufacturers and data center operators," said Peters. "They appreciate the weight and handling advantages compared to metal, but also that PPSU doesn't crack or creep like commodity plastics. This high performance material is in a league of its own."

PLQ Series QDs 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. The advanced engineered composition maintains excellent thermo-oxidative stability and long-term material performance over time. 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.

The new BLQ4 Series also delivers performance requirements for HPC and data center applications. The surrounding chamfer automatically guides the BLQ4 to the correct mating position allowing quick, easy and secure installation in rack-mounted liquid cooling systems. The BLQ4 is ideal where the connection, disconnection and latching mechanism are maintained on a mounted server assembly. Secure liquid cooling connections are critically important as misaligned or incomplete connections can result in leaks and damage to electronic equipment.

"Like the predecessor BLQ2 product, the BLQ4 connector is designed to optimize flow rates in a compact, easy to use format," said Peters.

CPC QDs feature multi-lobed seals for redundant protection against leakage and lasting shape retention during extended periods of connection. Multi-lobe seals also deliver greater sealing efficiency than standard o-rings while requiring less force to connect. Non-spill valves allow disconnection under pressure without leaks, protecting electronics from exposure to fluid and enabling hot swapping of equipment.

For more information about the performance and versatility of the CPC's <u>Liquid Cooling</u> solutions, visit the CPC booth #588 at SC19 or 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, 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

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