

CP Connectors >

Designed with enhanced safety measures and optimized for assembly efficiency, CP Connectors offer a versatile family of robust interconnect solutions that support wire-to-wire, wire-to-board and panel-mount applications. Color-coded mating and polarization keys help prevent mis-mating, while retainers ensure secure, reliable performance. An inertia lock with tactile/audible feedback enables durable connections in demanding environments, making these connectors ideal for consumer and industrial applications such as home appliances, HVAC systems and industrial equipment.

ADVANTAGES AND FEATURES

Provides exceptional protection by mitigating hazards in safety-critical applications

CP-3.3, -4.5 and -6.5 Connectors meet global UL and Glow Wire-safety standards.

Improves environmental health and safety by reducing contamination

Halogen-free options allow for environmentally-friendly manufacturing.

Offers structural cost advantage versus newer competitive systems

Optimized tooling / mature manufacturing helps meet aggressive cost-down targets without sacrificing validated performance.

Current	Up to 12.5A
Pitch	2.50, 3.30, 4.50 and 6.50mm
Circuits	2, 4, 6 and 12
Operating Temperatures	-40 to 105°C

Enables secure mating for reliable performance

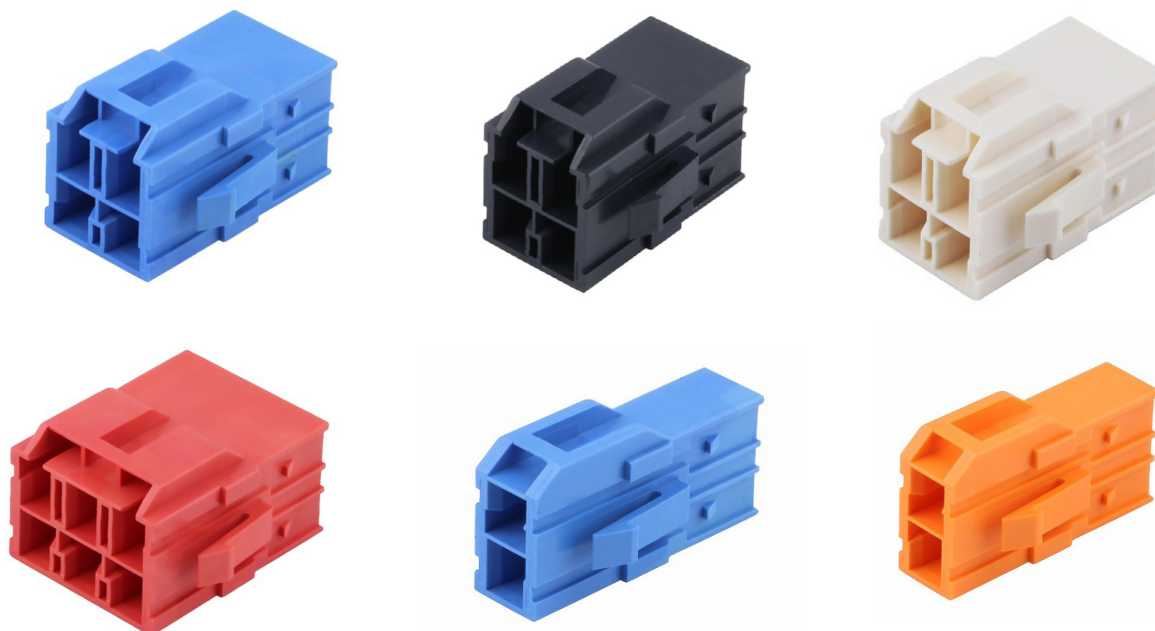
The positive-lock latch design lowers the possibility of incomplete mating during assembly.

Provides strain relief at terminations to avoid connector damage and electrical failure

An integral beam supports both ends of the connector housing to help prevent wire snagging.

Ensures accurate mating for increased performance reliability

Polarization keys on CP-3.3, -4.5 and -6.5 connector housing ribs help prevent mis-mating, which can cause electrical shorting.



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MARKETS AND APPLICATIONS

Appliances

Dishwashers
Refrigerators

HVAC

Data center HVAC systems
Residential HVAC equipment

Industrial Automation

Industrial robotics

Networking

Ethernet Connections

Server and storage

Server Systems

Telecommunications

Antennas



Industrial Robotics



Ethernet Connections



Server Systems



Antennas

SPECIFICATIONS

Reference Information

Packaging
Terminal: Reel/bag
Header: Tube/reel/tray
Housing and Retainer: Bag
Designed In: Millimeters
RoHS: Yes
Halogen Free: Not low halogen
Glow Wire Capable:
Wire-to-board—Yes
Wire-to-wire—Yes

Electrical

Voltage (max.): 600V AC
Wire-to-Board (Vertical): 2.0 to 10.0A
Wire-to-Board (Right-Angle): 5.6 to 11.8A
Wire-to-Wire: 5.0 to 12.5A
Low-level Contact Resistance (max.): 10 milliohms
Dielectric Withstanding Voltage: 1,500V AC
Insulation Resistance (min.): 1,000 Megohms

Mechanical

Lock Strength (min.): 49N
Receptacle Crimp Pull-Out Force: 14.7 to 127.4N
Temal Retention Force (min.): 39.2N
Durability (max.): 30 cycles

Physical

Plug Housing: Nylon, UL 94V-0 (at all instances), G/W
Receptacle Housing: PBTB or PA66, UL 94V-0, G/W
Header Housing (Vertical): PA, UL 94V-0, G/W
Header Housing (Right Angle): Nylon, UL 94V-0, G/W
Retainer: PBTP, UL 94V-0
Terminal: Copper alloy tin-plated
Header Plating:
Contact: Tin-plated
Solder tail: Tin-plated over nickel underplate
Operating Temperature: -40 to +105° C