

PowerWize High-Current Wire-to-Board, Wire-to-Busbar Interconnects >

PowerWize High-Current Wire-to-Board/Wire-to-Busbar Connectors leverage our Coeur socket technology and are offered in two sizes, 6.00mm and 8.00mm, delivering up to 200.0A of current, and the headers can be mounted on either printed circuit boards or busbars

FEATURES AND ADVANTAGES

Optimal current-carrying capacity

Offers multiple contact beams to ensure low contact resistance, low voltage drop and minimal heat generation at the contact interface

Finger touch-safe receptacles

Designed per UL 60950 to isolate the crimp contacts and to prevent accidental contact with an energized circuit



Coeur Socket



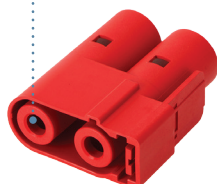
PowerWize Interconnects
6.00mm Wire-to-Board/
Wire-to-Busbar
Connectors



PowerWize Interconnects
8.00mm Wire-to-Board/
Wire-to-Busbar
Connectors

Positive locking with active latches on receptacles and barbed geometry on headers

Provides operators tactile and audible feedback during system integration to help ensure secure mating; helps prevent cable assemblies from backing off headers due to shock, vibration, or mishandling



Finger touch-safe headers

Designed per UL 60950 to isolate the pins and to prevent accidental contact with an energized circuit



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FEATURES AND ADVANTAGES

Low mating and unmating forces

Enable operators to mate and unmate cable assemblies even in hard-to-reach or tight spaces



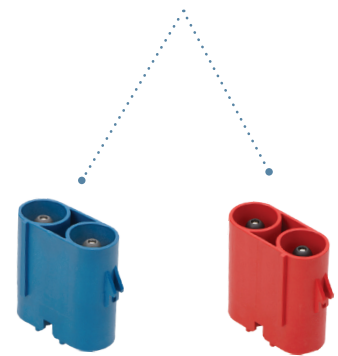
Reliable, high-quality eight-sided crimp profile

Ensures minimal contact resistance at the interface between the wire and the crimp barrel, contributing to the system's minimal heat generation and higher current-carrying capacity compared to other designs



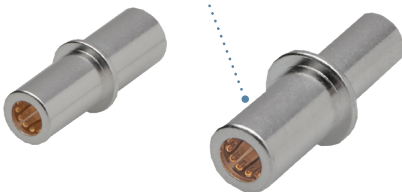
Mechanically keyed and color coded with uniquely positioned ribs on header housings and matching slots on receptacles (based on connector color)

Ensures only like-colored connectors mate; helps prevent mismating when multiple wire-to-board or wire-to-busbar interconnects are used in the same application



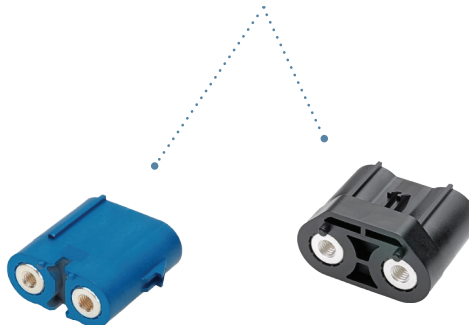
Crimp contacts are available in a wide range of wire gauges

Provides design and manufacturing flexibility



Screw-mount headers attach securely to either busbars or printed circuit boards

Provides design and manufacturing flexibility



Field installable with battery-powered applicators

Enables on-site cable assembly fabrication for applications where cable assembly lengths are uncertain until installation is underway

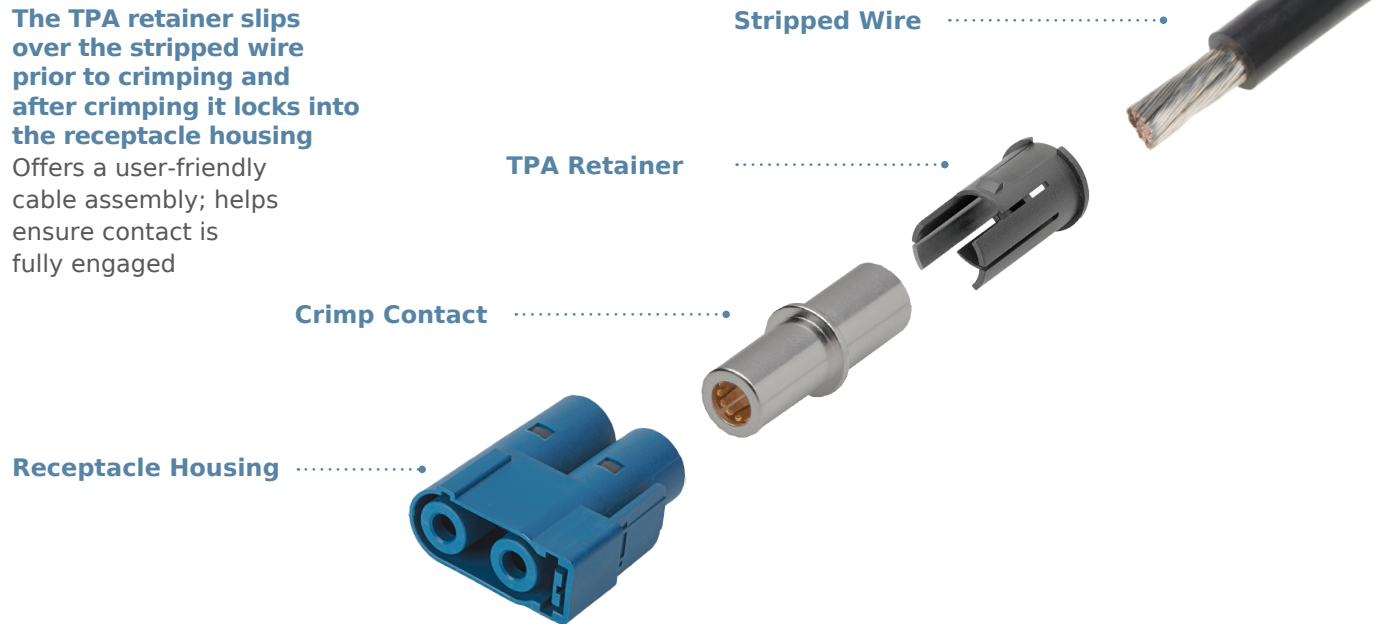


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FEATURES AND ADVANTAGES

The TPA retainer slips over the stripped wire prior to crimping and after crimping it locks into the receptacle housing

Offers a user-friendly cable assembly; helps ensure contact is fully engaged



MARKETS AND APPLICATIONS

Telecommunications/Networking

- 5G/6G Base Stations
- Servers
- Data storage units
- Power distribution units (PDUs)
- Uninterruptable power supplies (UPSs)
- Digital cross connect switches
- Network routers

Data Centers

- Servers
- Data storage units
- Power distribution units (PDUs)
- UPS/battery storage units
- Enterprise switches
- Circuit breakers
- Routers

Industrial

- Factory equipment
- Battery farms
- Robotics

Test and Measurement

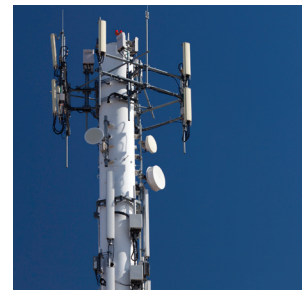
- Instrumentation devices



Factory Equipment



Data Center Servers



5G/6G Base Station

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SPECIFICATIONS

Reference Information

Packaging: Tray or bag depending on part number; see packaging specifications for details
UL File No.: E29179
CSA File No.: LR19980-70184994
Use With: Printed circuit boards and busbars
Designed In: Millimeters
RoHS: Yes

Physical

Receptacle Housing: PBT
Header Housing: PBT
TPA Retainer: PBT
Contact: High-performance Copper (Cu) Alloy
Plating:
 Socket contact area—Gold (Au)
 Pin—Silver (Ag)
PCB Thickness (min.): 1.58mm
Busbar Thickness (min.): 1.50mm
Operating Temperatures: -40 to +125°C

Electrical (6.00mm Size)

Voltage (max.): 300V
Current (max.): 120.0A
Contact Resistance (max.): 0.25 milliohms

Mechanical (6.00mm Size)

Whole Connector Mating Force (max.): 75N
Whole Connector Unmating Force (min.): 10N
Durability (min.): 200 mating cycles

Electrical (8.00mm Size)

Voltage (max.): 600V
Current (max.): 175.0A
Contact Resistance (max.): 0.20 milliohms

Mechanical (8.00mm Size)

Whole Connector Mating Force (max.): 110N
Whole Connector Unmating Force (min.): 20N
Durability (min.): 200 mating cycles

www.molex.com/link/powerwize.html