MAX-LOC Pluggable Cable Assemblies

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MAX-LOC Pluggable Cable Assemblies deliver next-generation power for cutting-edge commercial vehicle electrification in a small form factor with ultrasonically welded terminals for a reliable, low-resistance connection

Features and Advantages

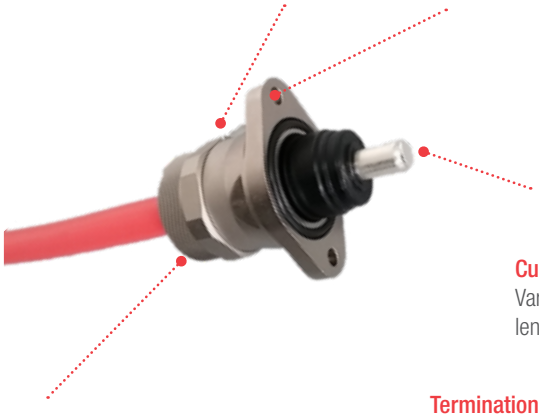
Cable Assembly

Small form factor
Accommodates use in inverters/motors. Presents space savings for applications with real estate constraints

Market-leading current (to 450.0A continuous) and voltage (1000V)
Provides commercial vehicle system architects with a reliable, powerful connector

Die cast aluminum (nickel plated) housing
Delivers superior shielding and durability

Two external mounting holes connect directly to the OEM panel, enclosure or vehicle body
Simplifies the installation process via a single-side connection (single person installation versus two installers). Ensures stable connection in rugged applications



11.00mm pin diameters
Fits a variety of hybrid-electric and all-electric applications

Customizable cable options
Various options for wire size, cable length and wire-covering

Cable retention
Provides sealing and cable retention to withstand 222.4N (50 lbs.) pull force

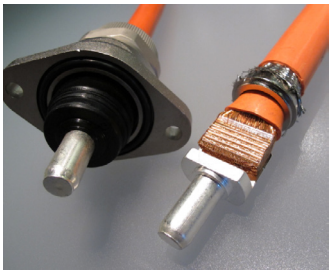
Termination options for B end
Allows for a connector or hard-wire termination, furthering application specificity

Features and Advantages

Ultrasonic Welding

Ultrasonically welded termination
Extremely low contact resistance, consistent performance over life of the product

Proven Imperium terminal system
Uses robust copper plug and receptacle terminals. Reduces contact resistance for lower power loss



Welded connection (no crimp- created stress joint)
Ensures reliable connection over the life of the vehicle. Does not degrade due to thermal aging

Significant reduction in temperature-rise (t-rise) advantage over crimp
Enables the use of smaller, more cost-effective cable

Cable Sizes: 35mm2, 1 AWG, 1/0, 2/0, 4/0
Variety of cables sizes to align with various application power requirements (Metric equivalents available)

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Applications

Commerical Transportation – Hybrid Electric Vehicles

- Construction
- Agricultural
- Truck/Bus
- Military
- Mining

Accessory OEM

- Power Inverter
- Motor
- Drive
- Power Distribution Units

Hybrid End Loader

Specifications

REFERENCE INFORMATION

Packaging: Individually
UL File No.:TBD
CSA File No.:TBD
RoHS: Yes
Halogen Free: Yes

ELECTRICAL

360° EMI/RFI shielding
Dielectric withstand: 2,000 volts VAC for 1 minute
Voltage: 1000 V
Note: These ratings are at connector level per IEC60664-1, Table F.4 – Creepage distance. Voltage rating is highly application dependent with limitation of wire voltage rating.
Amperage: See table to the right

ENVIRONMENTAL

Immersion: IP67 and IP6k9k
Power wash: Duration of 5 minutes. 12,000kPaG (~1740psig), 13 l/min (~ 3.4 gal/min).
Operating Temperature: -40 to 125°C
Other Environmental Specs: See Product Spec.

MECHANICAL

Cable Retention:222.4N (50 lbs.) cable pull withstand 30 second
Durability: 75 assembly/disassembly

PHYSICAL

Body: Electroless Nickel plated Aluminum die-cast
Nut: Electroless Nickel plated Aluminum die-cast
Shield Ring: Electroless Nickel plated Aluminum die-cast
Stop Ring: Electroless Nickel plated Aluminum die-cast
Grommet: HNBR
O-Ring: HNBR

Wire Size	Continues Current (Amps)	Peak Current (Amps)
35mm^2	250.0A	350.0A
2/0	350.0A	500.0A
4/0	450.0A	650.0A

www.molex.com/link/maxloccableassembly.html

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