Woodhead® MAX-LOC® Plus Shielded Cord-Grip Assemblies

Reduce disruptive EMI and RFI with Woodhead® MAX-LOC® Plus Shielded Cord-Grip Assemblies, featuring a simplified installation design ideal for high-frequency switched-mode power supply (SMPS) applications

Woodhead® MAX-LOC® Plus Shielded Cord-Grip Assemblies allow OEM’s and end-user’s to connect high-power electrical cables directly to an application via an exterior mounting enclosure, simplifying the installation process for high-volume, cost-sensitive programs. The robust assemblies provide excellent EMI and RFI shielding plus sealing protection (liquids and dust). MAXLOC® Plus Shielded Cord-Grip Assemblies bring multiple features found across numerous products into a single-product solution. This unique design results in cost and labor savings over conventional industry-standard products.

Features and Benefits

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tbody>
<tr>
<td>Nickel-plated aluminum housing and shielding ring</td>
<td>Provide electro magnetic interference (EM) and radio frequency interference (RFI) protection</td>
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<tr>
<td>Unique grip-body internal cut-away design</td>
<td>Ensures a clear pass-through of pre-assembled harnesses and pre-crimped lugs through center and offset lugs. Provides simple assembly and field serviceability</td>
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<td>Tapered shielding ring (as opposed to competitor’s finger contacts)</td>
<td>Provides a robust, reliable connection. Ensures low contact resistance and cable grounding</td>
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<td>Internal wedge-shaped grommet</td>
<td>Provides liquid and dust sealing and cable retention to withstand 50 lb (222.4N) pull force versus two installers) directly to the OEM panel, enclosure or vehicle body. Ensures stable connection in rugged applications</td>
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<tr>
<td>Two external mounting holes</td>
<td>Simplify the installation process via a single-side connection (single person versus two installers) directly to the OEM panel, enclosure or vehicle body. Ensures stable connection in rugged applications</td>
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<tr>
<td>Aluminum die-cast, nickel-plated threaded assembly</td>
<td>Strong, light-weight design for ease of use. Reduces galling (wear and transfer of material between the assembly and panel)</td>
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<tr>
<td>Compression nut</td>
<td>Provides cable retention to withstand 222.4N (50 lbs.) pull force</td>
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<tr>
<td>Sealed O-ring, IP67 and IP69K rated</td>
<td>Seals out moisture and dust contamination. Meets SAE industry standards</td>
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<tr>
<td>Grip assembly accommodates 1 AWG, 1/0, 2/0 shielded cables with an expanded range to follow</td>
<td>Provides design flexibility and installed cost savings. Meets harsh-environment application requirements</td>
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Woodhead® MAX-LOC® Plus Shielded Cord-Grip Assemblies

Additional Product Features

- **O-Ring** (HNBR or Silicone)
- **Grip Body** (AL w/Electroless Nickel Plating)
- **Stop Ring** (AL w/Electroless Nickel Plating)
- **Shield Ring** (AL w/Electroless Nickel Plating)
- **Chamfered End** Towards Grommet
- **Compression Nut** (AL w/Electroless Nickel Plating)
- **Grommet** (HNBR or Silicone)

Exploded View of MAX-LOC® Plus Shielded Cord-Grip Assembly

Applications

- **Industrial (Automation)**
  - Power-inverter, motor, drive installations
  - Factory automation
  - Process control
- **Aerospace and Defense**
  - Hybrid electric vehicles
  - Electrical-vehicle-drive systems
- **Commercial Vehicle**
  - Hybrid electric vehicles
  - Construction/agricultural
  - Buses
  - Mining
- **Alternative Energy**
  - Wind mills
  - Solar
  - Scientific
  - Bio-reactors
- **Telecommunications/Networking**
  - HVAC variable-speed motors
- **Pressure Washer**

Component Assembly View with Shielded Cable
Woodhead® MAX-LOC® Plus Shielded Cord-Grip Assemblies

Specifications

Reference Information
Packaging: Box
RoHS: Yes
Halogen Free: Yes

Mechanical
Cable Retention:
50 lb (222.4N) cable pull withstand for 30 seconds

Electrical
EMI/RFI Shielding: 360°
Die-Electric Withstand: 2400V AC for 1 minute

Environmental
Immersion: IP67 and IP68 rated
Power Wash (Duration of 5 Minutes):
12,000kPaG (~1740psig), 13 l/min (~ 3.4 gal/min).
Operating Temperature:
HNBR — -40 to +150°C
Silicone — -60 to +200°C
UV resistant
Meets UL 94 VO flammability rating

Physical
Housing: 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 or Silicone
O-Ring: HNBR or Silicone

Ordering Information

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<th>Grommet/O-ring Material</th>
<th>Cable Gauge (AWG)</th>
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www.molex.com/product/maxlocplus.html