Brad M12 Power L-Coding Connector System

Providing the power required for Industry 4.0 electric propulsion while being both compact and reliable, the Brad M12 Power L-Code Connector System meets PROFIBUS and PROFINET International (PI) standards for PROFINET systems.

Features and Advantages

63 V AC/DC; up to 16A current per pin
Delivers four times the power of standard M12 connectors and 2.50mm² thick wires allow longer installations and reduce voltage drop

IP67-rated sealed interface
Provides a sealed connection ideal for use in harsh and wet industrial environments. Mated connector is dust-proof and can be temporarily submerged in up to one meter of water.

Pins enclosed in contact carrier
Enhances finger safety by eliminating chance of electrical shock due to exposed pins.

L-coding mating interface
Prevents mating with other M12 connectors being used for input, output, signal, or industrial network connections.

PI selected
Enables immediate implementation into PROFINET applications. Saves time and costs.

Applications

Industrial Automation
- Power Supplies for Decentralized I/O
- Field-Bus-Controlled I/O Boxes
- Small Server/DC Motors and Drives
- Machine Tools, Presses, Molding and Stamping
- Automotive Plants

Automotive Production / Robotics / Machine & Line Builders

CNC Control Panel

Machine Tools / Machining Centers / Injection & Casting Machines

Standard products according to IEC Standard 61076-2-111
Establishes an open-industry connector standard to increase adoption among a wide array of platforms and manufacturers.
Brad M12 Power L-Coding Connector System

Specifications

**REFERENCE INFORMATION**
- Packaging: Bag
- Mates With: M12 Power L-Code Cordsets and Receptacles
- Coding/Number of Pins:
  - CSE L-Code 5 X 2.5mm² -- L-Code (4+FE)
  - CSE L-Code 4 X 2.5mm² -- L-Code (4 w/o FE)
  - CSE L-Code 5 X 1.5mm² -- L-Code (4 +FE) (Q1 2021)
  - CSE L-Code 4 X 1.5mm² -- L-Code (4 w/o FE) (Q1 2021)
  - Receptacles -- L-Code (4+FE)

**Designed In:** Millimeters
- RoHS: Yes
- Glow Wire: Yes
- UL: Pending
- IEC Standard: 61076-2-111:2017
- IP Rating: IP67

**ELECTRICAL**
- Voltage (max.): 63V (Pollution Degree 3)
- Current (max.):
  - 1.5mm² wires: 12.0A per Pin
  - 2.5mm² wires: 16.0A per Pin
- Contact Resistance: < 5 milliohms
- Insulation Resistance: >10⁸ Ohms

**Brad M12 Power Portfolio**

<table>
<thead>
<tr>
<th>CODING</th>
<th>CURRENTLY AVAILABLE</th>
<th>AVAILABLE Q4 2020</th>
<th>AVAILABLE 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Code</td>
<td>IEC 61076-2-101</td>
<td>IEC 61076-2-111</td>
<td>IEC 61076-2-111</td>
</tr>
<tr>
<td></td>
<td>0.34mm² / 22AWG</td>
<td>*2.50mm² / 14AWG</td>
<td>2.50mm² / 14AWG</td>
</tr>
<tr>
<td></td>
<td>up to 4A</td>
<td>up to 16A</td>
<td>up to 16A</td>
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<tr>
<td></td>
<td>60V AC/DC</td>
<td>63V AC/DC</td>
<td>300V AC/DC</td>
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*1.5mm² (16AWG) @12A available as well

**Note:** Molex reserves the right to delay or cancel production of the depicted product without additional notice. Please contact your Molex customer service representative for product availability.

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www.molex.com/link/m12.html