**The rugged ML-XT connection system with market-leading high-performance seal technology is a cost-competitive solution offering superior reliability for critical vehicle-wiring applications in harsh environments**

### Features and Advantages

<table>
<thead>
<tr>
<th>Feature</th>
<th>Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covalently interlocked one-piece plug housing and interfacial seal formed by 2-shot LSR (liquid silicone rubber) molding technology</td>
<td>Prevents fluid ingress; system is IP69K-rated and J2030 power-wash test capable</td>
</tr>
<tr>
<td>Drop in replacement for defacto-standard industry connectors</td>
<td>Achieves superior reliability without the need for costly re-design</td>
</tr>
<tr>
<td>Rear seals made from HCR (high consistency rubber)</td>
<td>Provides greater tear-resistance over LSR material; prevents damage to rear seal during terminal insertion/extraction</td>
</tr>
<tr>
<td>Latched rear covers lock-in rear HCR seals without exceeding the perimeter of the housings</td>
<td>Allows for flexible cable exits and cable movement whilst maintaining optimum seal position to prevent leak paths</td>
</tr>
<tr>
<td>Plug and receptacle housings are supplied pre-assembled with internal HCR rear seals and covers</td>
<td>Reduces inventory, assembly time and costs for harness manufacturers. Prevents loss of rear seals for a cost-competitive mated system</td>
</tr>
<tr>
<td>Stamped and Formed, and Solid Contact terminal options</td>
<td>Stamped and formed contacts provide a proven, standard, economic option. Solid contact option provides performance geared to larger wire sizes and heavy-duty applications</td>
</tr>
<tr>
<td>Plug housing features integral locking latch with finger grip</td>
<td>Enables easy handling and secure mating of plug and receptacle</td>
</tr>
<tr>
<td>Colour-coded housings available</td>
<td>Facilitates easy visual mating of harnesses to prevent mis-mating</td>
</tr>
</tbody>
</table>

### Specifications

**REFERENCE INFORMATION**

- **Packaging:** Bags in Boxes
- **Terminal:**
  - Stamped & Formed, 84525, 84524
  - Solid Contact: 93640, 93641
- **Designed In:** Millimeters RoHS: Yes
- **Halogen Free:** Yes
- **Cable Gauges:** 1.40 to 2.80mm, 2.70 to 3.60mm

**MECHANICAL**

- **Contact Retention to Housing:** 111N min.
- **Mating Force:** 135N max.
- **Unmating Force:** 135N max. with latches disengaged
- **Durability (min.):** 100 cycles
- **Operating Temperature:** -55 to +125°C
- **Sealed rating:** IP69K and J2030 power-wash test capable
Applications

Commercial Vehicle
- Agricultural machines
- Construction and mining equipment
- Forest and garden equipment
- Generators (Gensets)
- Search, detection and navigation equipment
- Trains and rail equipment
- Bus, coach, caravan
- Material handling equipment

Military vehicles

Marine

Aeronautical
- Commercial Aviation

Automotive
- Cars
- Motorcycles

Sealed Application Examples
- Sensors – Electrical, fluid, velocity, magnetic, moisture, navigation, position angle, optical, pressure, proximity...
- Engine Control Units (ECUs)
- Airbag Control Units (ACUs)
- Diagnostics
- Alternators
- Starters
- Air conditioning
- Lights, lamps
- Pumps
- Power steering modules
- Alarms, horns
- Infotainment and telematics
- Electric seats
- Brakes
- Hydraulics

Ordering Information

<table>
<thead>
<tr>
<th>Circuits</th>
<th>Description</th>
<th>Series No.</th>
<th>Terminals</th>
<th>Wedgelock (Green)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 3, 4, 6, 8, 12, 18</td>
<td>Receptacle Assembly†</td>
<td>93444</td>
<td>84524 (Stamped and Formed) 93640 (Solid Contact)</td>
<td>93447</td>
</tr>
<tr>
<td></td>
<td>Plug Assembly†</td>
<td>93445</td>
<td>84525 (Stamped and Formed) 93641 (Solid Contact)</td>
<td>93448</td>
</tr>
</tbody>
</table>

Notes: † Receptacle and plug assemblies include housing + rear seal locked-in by rear cover. Supplied pre-assembled.
† Green = standard coding. For other colours contact Molex.