

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

Covalently interlocked one-piece plug housing and interfacial seal formed by 2-shot LSR (liquid silicone rubber) molding technology

Prevents fluid ingress; system is IP69K-rated and J2030 power-wash test capable
Prevents loss/ misalignment of seal; ensures repeatable retention during unmating and mating of plug and receptacle

Drop in replacement for defacto-standard industry connectors

Achieves superior reliability without the need for costly re-design

Rear seals made from HCR (high consistency rubber)

Provides greater tear-resistance over LSR material; prevents damage to rear seal during terminal insertion/ extraction

Latched rear covers lock-in rear HCR seals without exceeding the perimeter of the housings

Allows for flexible cable exits and cable movement whilst maintaining optimum seal position to prevent leak paths

Plug and receptacle housings are supplied pre-assembled with internal HCR rear seals and covers

Reduces inventory, assembly time and costs for harness manufacturers. Prevents loss of rear seals for a cost-competitive mated system

Stamped and Formed, and Solid Contact terminal options

Stamped and formed contacts provide a proven, standard, economic option. Solid contact option provides performance geared to larger wire sizes and heavy-duty applications

Plug housing features integral locking latch with finger grip

Enables easy handling and secure mating of plug and receptacle

Colour-coded housings available

Facilitates easy visual mating of harnesses to prevent mis-mating

ML-XT Sealed Connection System



2-Circuit
ML-XT System

3-Circuit
ML-XT System



4-Circuit
ML-XT System

6-Circuit
ML-XT System



8-Circuit
ML-XT System

12-Circuit
ML-XT System



18-Circuit
ML-XT System

Solid Contact
Terminals

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

ELECTRICAL

Voltage (max.): 500V DC

Current (max.): 13.0A

Contact Resistance:

30 milliohm max.

Insulation Resistance:

20 Megaohms min.

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
Generator sets (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

ML-XT Sealed Connection System



Technical Information



Exploded View
2-Circuit ML-XT Connector System



Stamped and Formed, and Solid Contact terminal options

Stamped and formed contacts provide a proven, standard, economic option



Solid contact option provides performance geared to larger wire sizes and heavy-duty applications



Ordering Information

| Circuits | Description | Series No. | Terminals | WedgeLock (Green [†]) |
|-----------------------|----------------------------------|------------|---|---------------------------------|
| 2, 3, 4, 6, 8, 12, 18 | Receptacle Assembly [‡] | 93444 | 84524 (Stamped and Formed) 93640 (Solid Contact) | 93447 |
| | Plug Assembly [‡] | 93445 | 84525 (Stamped and Formed) 93641 (Solid Contact) | 93448 |

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.

www.molex.com/link/mlxt.html