



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 Benefits

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

Utilises Molex proven XRC™ terminals with current ratings up to 13.0A

Supports tooling widely used at harness makers

High terminal retention force; exceeds 111N

Withstands high axial pull-out forces per J2030 specification

Wedglock / TPA (Terminal Position Assurance) loaded after terminals

Locks terminals in position for secure electrical contact

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

Specifications

REFERENCE INFORMATION

Packaging: Bags in Boxes
Terminal: XRC™ series 84525, 84524
Designed In: Millimeters RoHS: Yes
Halogen Free: Yes
Cable Gauges:
1.40 to 2.80mm
2.70 to 3.60mm

ELECTRICAL

Voltage (max.): 500V DC
Current (max.): 13.0A
Contact Resistance:
30 milliohm max.
Insulation Resistance:
20 Megaohms min.

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

ML-XT™ Sealed Connection System

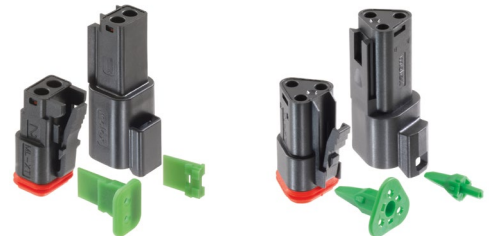
93444 Receptacle

93447 Receptacle

Wedglock (TPA)

93445 Plug

93448 Plug Wedglock (TPA)



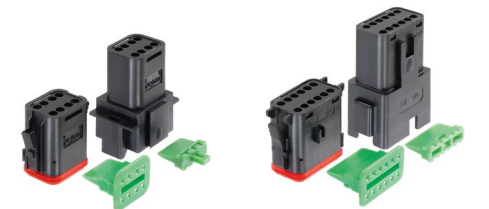
2-Circuit ML-XT™ System

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



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

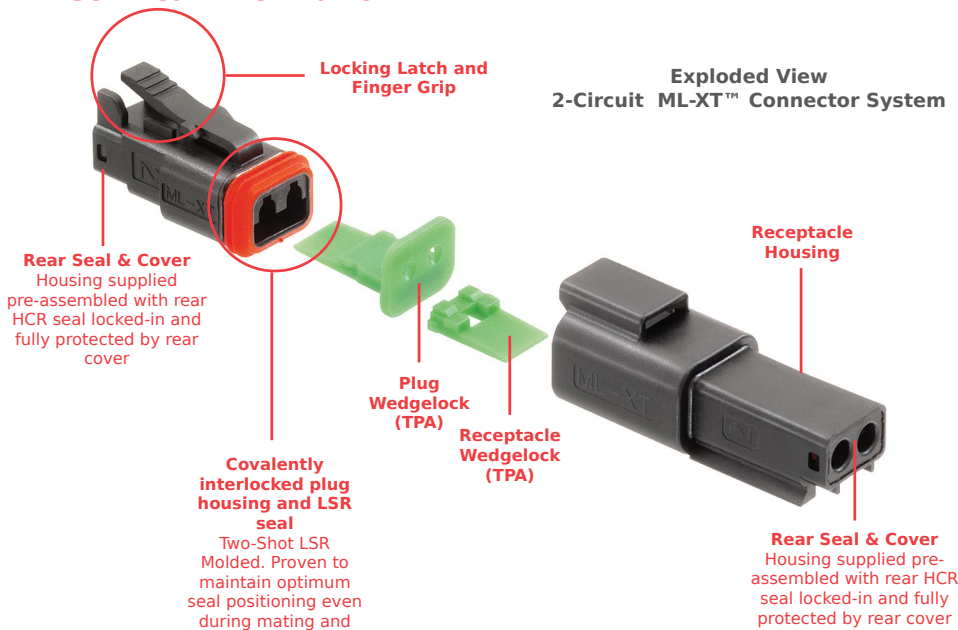
Sealed Application Examples

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



Ordering Information

Circuits	Description	Series No.	Terminals	Wedgelock (Green [†])
2, 3, 4, 6, 8, 12, 18	Receptacle Assembly [‡]	<u>93444</u>	84524-0004 / 84524-0014 84524-0012 / 85424-0018 85424-0008 / 84524-0016	<u>93447</u>
	Plug Assembly [‡]	<u>93445</u>	84525-0009 / 84525-0032 84525-0025 / 84525-0046 84525-0017 / 84525-0039	<u>93448</u>

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.