

# Additional pitch and wire gauge options enhance Molex's high-performance MX150L connector system, which is designed for challenging, rugged and harsh applications

The MX150L 8, 10 and 12 AWG additions are designed to meet the need for a rugged, environmentally sealed connector system supporting high-power applications and long-voltage runs to eliminate voltage drops. The new pitch and wire gauge options add to the existing product family of 14-22 AWG with a 5.84mm (.230") pitch. The 7.62mm (.300") pitch supports up to 40 amps per circuit.

This innovative mat-sealed connector family is based upon a 2.50mm (.098") blade-type terminal system, available in a pre-Tin finish. This design eliminates the need to purchase, handle and crimp individual wire seals, which lowers applied cost. The mat-seal design is a single silicone-based seal with individual wire openings and a seal cap to protect, securely retain, and provide strain relief to the seal. The cost-effective connector design features all-in-one plug and receptacle housings with pre-assembled mat-wire and interfacial connector seals. Integral terminal position assurance (TPA) and connector position assurance (CPA) components eliminate time-consuming and costly assembly operations. Populating the housings consists

of crimp-and-poke technology. Simply crimp the appropriate terminal, insert the crimped terminal lead, and seat the TPA to it's lock position. No additional components are required.

Tooling solutions include FineAdjust™ crimp press applicators for high-volume production, as well as hand tools for low-volume production and field repairs.

7.62mm (.300") Pitch
MX150L™ Sealed
Wire-to-Wire Plugs,
Receptacles and Terminals
8, 10, 12 AWG

**19433 Plugs** 

19432 Receptacles

19431 Male Terminals

19434 Female Terminals



#### **Features and Benefits**

- Pre-assembled connector housings and TPA components shipped in one-piece units for applied labor and cost savings
- Simple crimp, poke and plug application eliminates need to crimp individual wire seals
- Integral terminal position assurance (TPA) assures that crimped terminal leads are properly locked into connector (TPA will not seat into final lock position and connector system will not latch if terminal is not locked properly into position)
- Integral, two-way mat seal on the mating connector designed and tested to IEC IP 67 exceeds "waterproof" demands as a true sealed connector system tested under submersed conditions in various fluids
- Two independent terminals (10 to 12 AWG and 8 AWG) allow customers to support 30amp applications with 10 to 12 AWG terminals and 40amp applications with 8 AWG terminals
- Audible and tactile feedback clicks on insertion, extraction and mating facilitates reliable mating and terminal loading and removal
- 7.62mm (.300") pitch housing design with 2 styles of terminals for wire styles from 10 to 12 AWG as well 8 AWG allows flexibility in selecting from a wide range of wire styles and insulation thicknesses, (nominal 0.D. ranges .155 to .237") to support numerous applications

## **SPECIFICATIONS**

### Reference Information

Packaging:

Housings — Bulk

Terminals — Reel and loose piece

UL File No.: E152602 Designed In: Inches

#### Electrical

Voltage: 600V

Current: 10 to 12 AWG — 30.0A

8 AWG — 40.0A

Dielectric Withstanding Voltage: 2200V AC min. Insulation Resistance: 1000 Megohms

## Mechanical

Contact Insertion Force: 4.4N (1 lbf) max. Sealing: IEC 529 — IP67 standard

Durability: 25 cycles

# Physical

Housing: Glass-filled PBT, Black Contact: Copper (Cu) Alloy

Plating: Tin (Sn)

Operating Temperature: -40 to +125°C

Flammability: UL 94V-0

# **APPLICATIONS**



- Construction equipment
- Recreational vehicles
- Marine equipment









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#### **ORDERING INFORMATION**

#### **Female Terminals**

	AWG Insulation Diameter mm (in)	Insulation Diameter	Order No.		Dimensions mm (in)			
		mm (in)	Loose	Strip	Α	В	C	D
	10-12	3.94-4.45 (.155175)	19434-0003	19434-0001	6.35 (.250)	6.00 (.236)	5.00 (.197)	5.60 (.220)
10-12 AWG 8 AWG	8	6.02 (.237)	19434-0004	19434-0002	N/A	N/A	6.10 (.240)	7.0 (.276)

#### **Male Terminals**

	AWG Insulation Diameter mm (in)	Insulation Diameter	Order No.		Dimensions mm (in)			
		mm (in)	Loose	Strip	A	В	C	D
	10-12	3.94-4.45 (.155175)	19431-0016	19431-0001	6.35 (.250)	6.00 (.236)	5.00 (.197)	5.60 (.220)
10-12 AWG 8 AWG	8	6.02 (.237)	19431-0017	19431-0015	N/A	N/A	6.10 (.240)	7.00 (.276)

## Single-Row Receptacle

_	Order No.	Circuits	Wire Range (AWG)	Mat Seal Color
	19432-0013	9	10-12	Yellow
	19432-0014	2	8	Red

## Single-Row Plug

	Order No.	Circuits	Wire Range (AWG)	Mat Seal Color	
	19433-0013	2	10-12	Yellow	
	19433-0014	I	8	Red	

# Dual-Row Receptacle - 8, 10, 12 AWG

	Order No.	Circuits	Wire Range (AWG)	Mat Seal Color	
	19432-0001	4	10-12	Yellow	
	19432-0002	4	8	Red	

# Dual-Row Plug - 8, 10, 12 AWG

	Order No.	Circuits	Wire Range (AWG)	Mat Seal Color
	19433-0001	4	10-12	Yellow
	19433-0002	4	8	Red

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