

FEATURES AND SPECIFICATIONS

Features and Benefits

- Mat seal friendly design features center seam and coined Electrical
- Low insertion force

Reference Information

UL File No.: E152602
 Designed In: Inches
 Used With: 19419, 19429 and 19435

Electrical

Current: 18.0A

Physical

Contact: Copper Alloy
 Plating: Tin or Gold

Mechanical

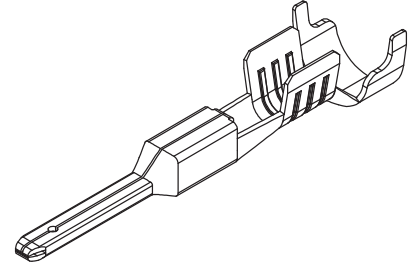
Contact Insertion Force: 1.0 lb. max.
 Durability: Tin Plating—25 cycles
 Gold Plating—100 cycles



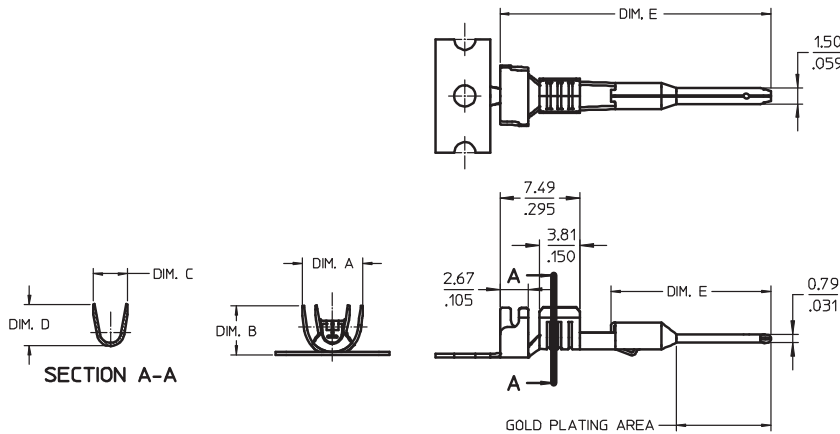
5.84mm (.230") Pitch
MX150L™
Terminal

19417

Male



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

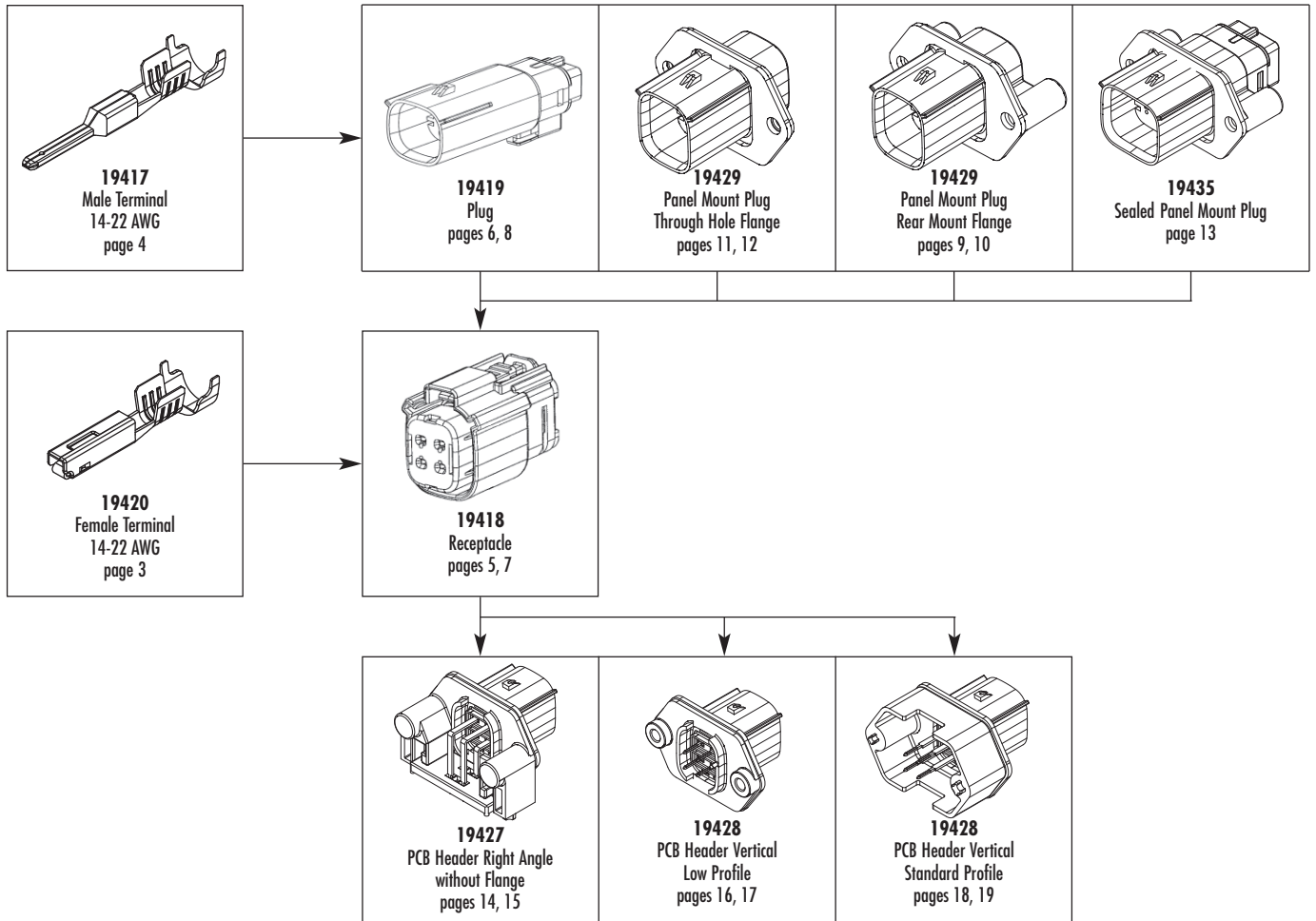
| Wire Range (AWG) | Insulation Diameter mm (in) | Order No. | | | | Pin Length | Dimension | | | | |
|------------------|-----------------------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|--------------|
| | | Pre-Tin | | Gold | | | A | B | C | D | E |
| | | Strip | Loose | Strip | Loose | | | | | | |
| 18-22 | 2.36-2.74 (.093-.108) | 19417-0024 | 19417-0048 | 19417-0026 | 19417-0050 | Standard | 4.60 (.181) | 3.63 (.143) | 2.50 (.098) | 2.70 (.106) | 25.40 (1.00) |
| 14-16 | 2.87-3.53 (.113-.139) | 19417-0011 | 19417-0047 | 19417-0025 | 19417-0049 | Standard | 5.66 (.223) | 4.62 (.182) | 3.58 (.141) | 3.94 (.155) | 25.40 (1.00) |
| 18-22 | 2.36-2.74 (.093-.108) | 19417-0028 | 19417-0052 | 19417-0030 | 19417-0054 | Long | 4.60 (.181) | 3.63 (.143) | 2.50 (.098) | 2.70 (.106) | 26.16 (1.03) |
| 14-16 | 2.87-3.53 (.113-.139) | 19417-0027 | 19417-0051 | 19417-0029 | 19417-0053 | Long | 5.66 (.223) | 4.62 (.182) | 3.58 (.141) | 3.94 (.155) | 26.16 (1.03) |



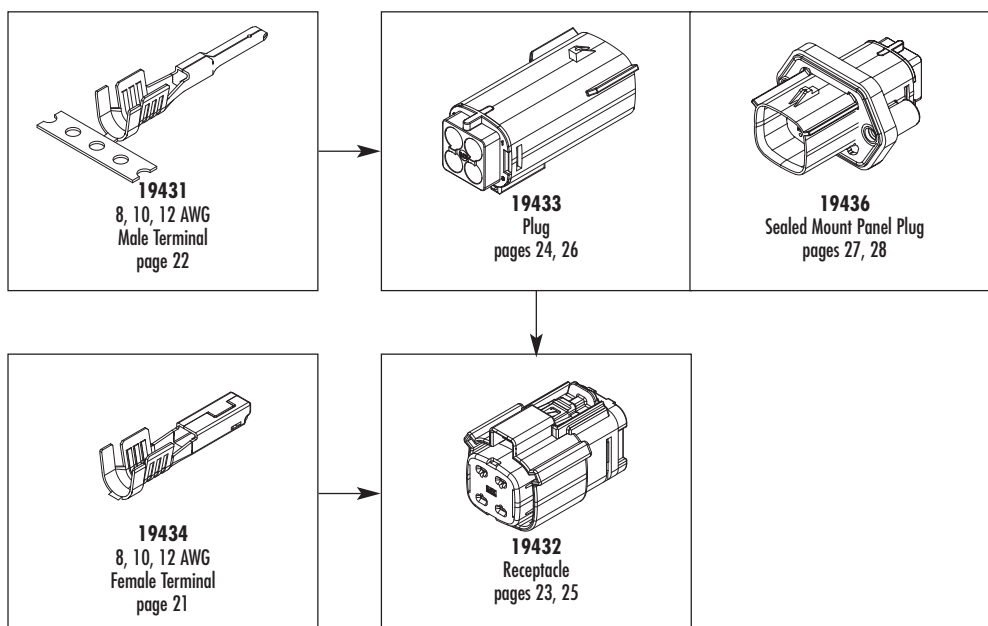
MX150L™

Product Overview

14 TO 22 AWG WIRE-TO-WIRE, PANEL MOUNT AND PCB



8, 10 AND 12 AWG WIRE-TO-WIRE





**MX150L™ Sealed
Connector System**





MX150L™ Sealed Connector System

The pre-assembled, submersible MX150L is a high performance connector system suitable for challenging, rugged and harsh applications.

The MX150L sealed connector system is designed to meet the need for a rugged, environmentally sealed connector system supporting both low-level signal applications as well as power applications up to 40.0A, from on-engine automotive and marine applications to off-road construction equipment applications. The system is comprised of wire-to-wire, wire-to-panel and wire-to-board configurations.

These innovative mat-sealed connectors are based upon the 1.50 and 2.50mm (.059 and .098") blade-type terminals. This design eliminates the need to purchase, handle and crimp individual wire seals to lower 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 optional Connector Position Assurance (CPA) components eliminate

time-consuming and costly assembly operations. Completing the application is as simple as crimping the appropriate terminal, inserting the crimped terminal lead and seating the TPA to its final locked 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.

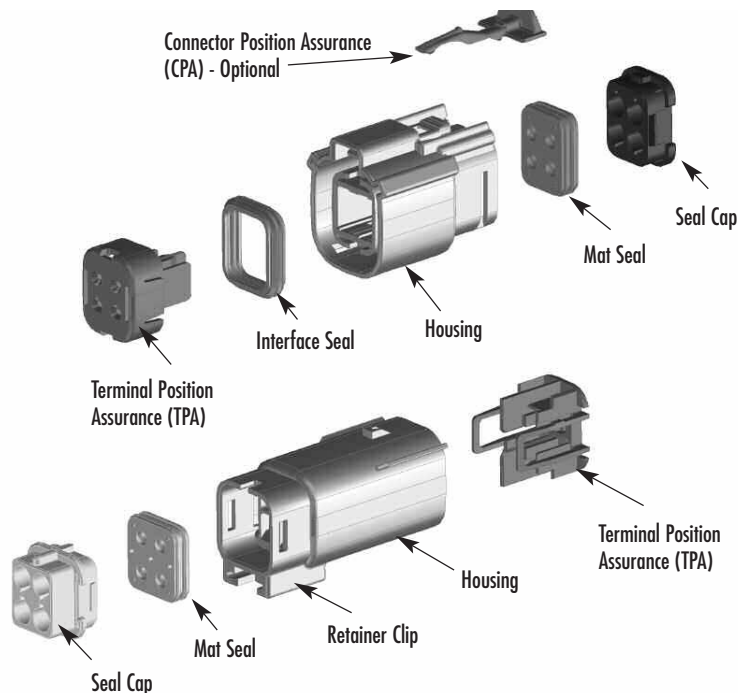
FEATURES AND BENEFITS

- Pre-assembled connector housings, seals, TPA components and mat-seal cap shipped in one piece to provide applied labor and cost savings
- Audible and tactile clicks on insertion, extraction and mating feedback facilitates reliable mating and terminal loading and removal
- Integral, 2-way mat and interface seals designed and tested to IEC IP 67 and SAE USCAR-2, Rev. 3 standards exceeds "waterproof" demands as a true sealed connector system tested under submersed conditions in various fluids
- Integral 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)
- Unused circuits can be blocked using plastic seal plugs, which facilitates flexibility of sealing unused circuits without adding complexity to part numbers and customer inventory
- Easy terminal insertion and extraction provides quick, low-cost field repairs using common screw driver, needle nose pliers and terminal extraction tool
- Conforms to UL 1977, which allows for a UL recognized sealed connector system for use in data, signal, control and power applications
- Integral locking latch with secondary, pre-loaded CPA option assures that connector system is properly latched. CPA will not move to final locked position if connector is not latched. Confirms positive mating of connector
- Protective mat-seal cap protects, securely retains, and provides strain relief to wire seal interface
- Superior electrical and mechanical performance capabilities surpass performance of most mature competitive products in market
- Sealed panel mount plugs are equipped with a blind hole boss feature which reduces extra hardware while improving the sealing process during assembly by eliminating a leak path
- Simple crimp, poke and plug application eliminates need to crimp individual wire seals

MX150L SEALED CONNECTOR SYSTEMS - EXPLODED VIEW

Receptacle Connector

Plug Connector



NOTE: All discrete components shown above for both the receptacle and plug housings are pre-assembled. Terminals are simply crimped and poked into the housings. No additional wire seals, wedge locks or CPA locks are required.