

Mini-Fit Sigma Sealed Power Connectors

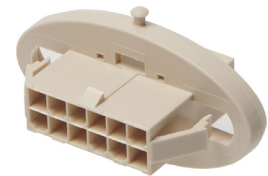
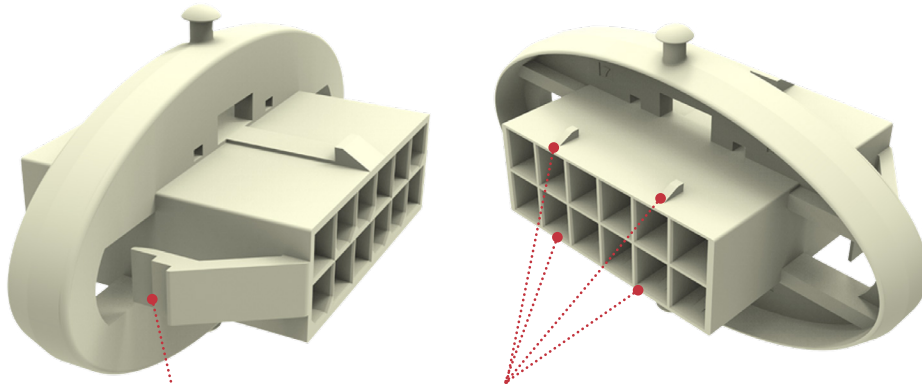
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Mini-Fit Sigma Sealed Wire-to-Wire Connectors utilize traditional Mini-Fit TPA2 terminals and wire gauges while providing protection from moisture, foam and dust debris ingress

Housing Features and Advantages



Mini-Fit Sigma Sealed Assembly



Mini-Fit Sigma Sealed Housing

Panel Mount Ears

Recommended panel cut-outs for 0.89mm to 3.00mm thick panels

Panel cut-out tolerances +0.10mm

Provides safety, and stability of housing to the panel

TPA supports

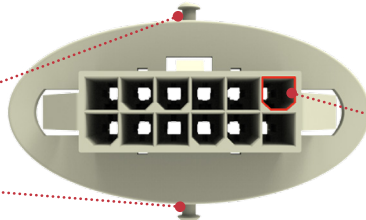
Used to properly support the optional TPAs after terminals are inserted and seated into the housing



Mini-Fit Sigma Sealed Cap

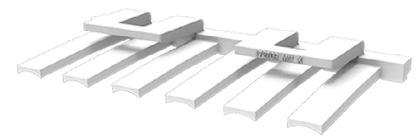
Seal cap supports

Provides excellent support for the rubber cap that mounts around the back of the housing.



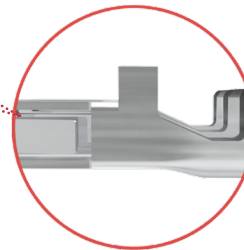
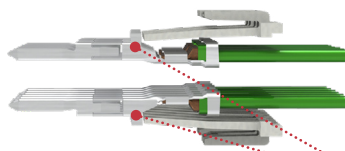
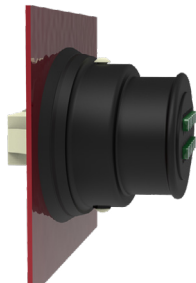
Keying and polarization

Allows for accurate mating to standard Mini-Fit 4.2 Power Connectors



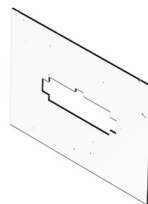
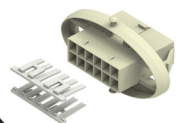
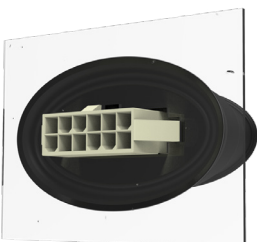
Mini-Fit Sigma Sealed TPA

Features and Advantages



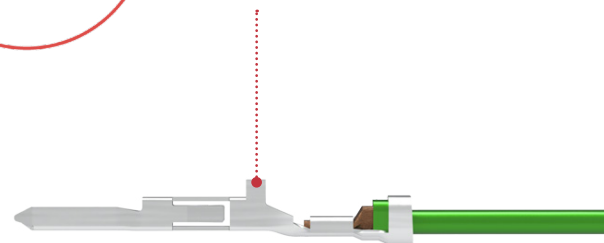
TPA stop

Provides stability for the terminal in the receptacle housing. Offers a physical block for the terminals to back out if a TPA is properly inserted



Elongated contact points

Provides larger contact area



NOTE: New circuit sizes available in 4, 6, 16 and 18 versions

Mini-Fit Sigma Sealed Power Connectors

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Markets and Applications

Home Appliance

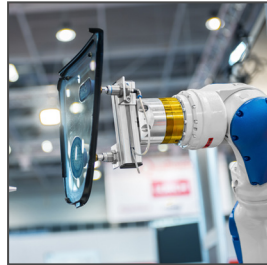
- Refrigerators
- Ovens
- Dishwashers

Consumer and Commercial

- Air duct machines
- Air conditioners
- HVAC units

Industrial Automation

- Robotic arm
- Drives and conveyer lines
- Motors
- Process control



Robotic Arm



White Goods



Vending Machine

Specifications

REFERENCE INFORMATION

Packaging: Bag, Reel
UL File No.: E29179
CSA File No.: LR19980
Mates With: All Applicable Mini-Fit Connectors
Use With: TPA: 172709, CAP: 207019
Terminal Used: 172718, 172765
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes
Glow Wire Capable: Yes

ELECTRICAL

Voltage (max.): 600V AC (rms) / DC
Current (max.): 13.0A
Contact Resistance (max.): 10 milliohms
Dielectric Withstanding Voltage:
No breakdown. Current leakage < 5 mA
Insulation Resistance (min.): 1000 megohms

MECHANICAL

Contact Insertion Force (max.): 15.0 N
Contact Retention to Housing (min.): 30.0 N
Insertion Force to PCB (max.): 225 N
PCB Retention Force (min.): 100 N
Foam Leakage Test: See Product Spec
Durability: 8 Hours
Shock (max.): 20 milliohms

PHYSICAL

Pitch: 4.20mm
Wire Gauge: 16 to 24AWG
PCB Thickness: 0.89 to 3.00mm thick
Operating Temperature: -40 to +105°C

www.molex.com/link/minifit.html

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