

# Mini-Fit Sigma Sealed Power Connectors

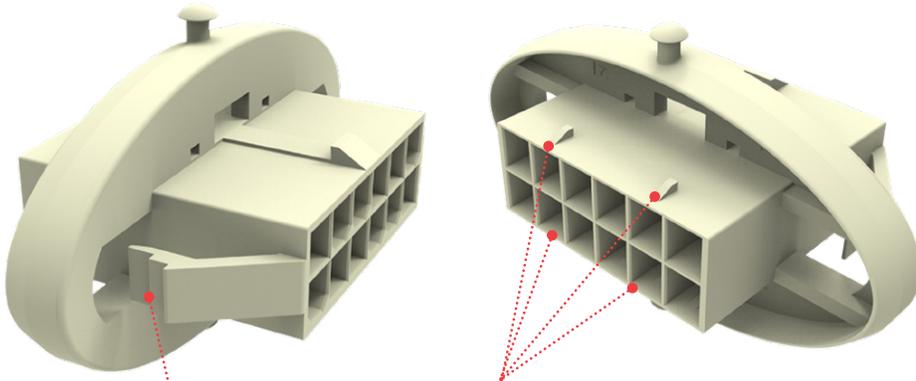
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Mini-Fit Sigma Sealed Wire-to-Wire Connectors utilize traditional Mini-Fit TPA2 terminals and wire gauges while providing protection from water, foam and dust debris ingress

## Housing Features and Advantages



Mini-Fit Sigma Sealed Assembly



### 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

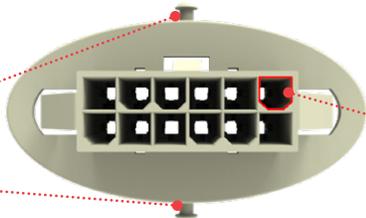
Used to properly support the optional TPAs after terminals are inserted and seated into the housing



Mini-Fit Sigma Sealed Housing

### Seal cap supports

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



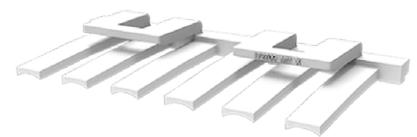
### Keying and polarization

Allows for accurate mating to standard Mini-Fit 3.0 Power Connectors

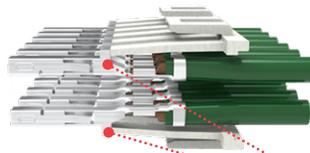


Mini-Fit Sigma Sealed Cap

## Features and Advantages

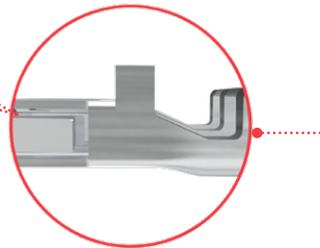


Mini-Fit Sigma Sealed TPA



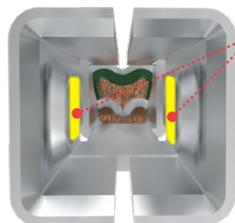
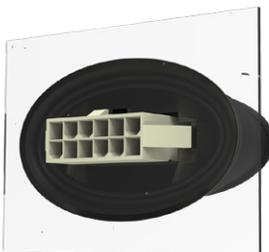
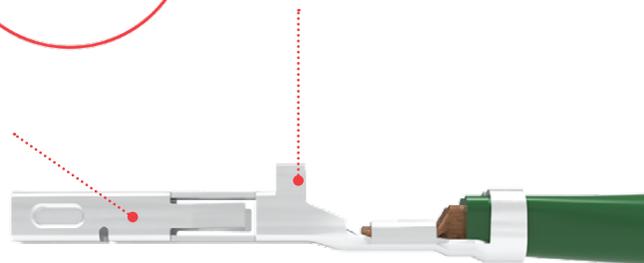
### TPA stop

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



# Mini-Fit Sigma Sealed Power Connectors

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## Markets and Applications

### Commercial Vehicle

- Buses
- Trains
- Boats
- Emergency vehicles
- Refrigeration vehicles
- Agriculture vehicles



Robotic Arm



White Goods



Vending Machine

### Home Appliance

- Refrigerators
- Ovens
- Dishwashers

### Consumer

- Vending machines

### Industrial Automation

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

## 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](http://www.molex.com/link/minifit.html)

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