

# MultiCat High-Power Connector System with Precision-Machined Contacts

# molex

Compact MultiCat High-Power Connectors with Precision-Machined Contacts can be mated quickly, ensure superior durability and proper connection via connector position assurance (CPA) making it effective in multiple industry categories

## Features and Advantages

Lightweight and compact wire-to-wire (W-to-W), wire-to-board (W-to-B) configuration. Accommodates up to 8 and 18 AWG wire, 3- and 4-circuit circular and inline available

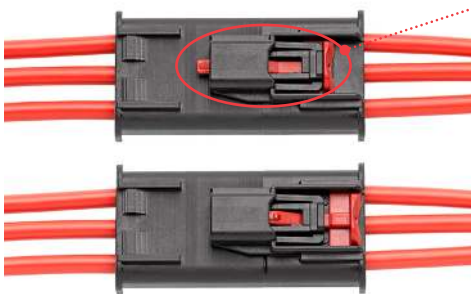
Offers design flexibility. Ideal for use in applications with space and weight constraints



**-40 to +150°C operating temperature range**

Enables use in harsh-temperature environments

CPA is properly engaged



### Patent-pending visual connector position assurance (CPA) feature

Visual assurance that connector is properly engaged

Latch provides audible feedback

Completely mated systems allow the CPA to actuate

Cannot throw CPA if system is not completely mated

Prevents accidental latch disengagement

### Manual mating / unmating

Facilitates quick assembly. Prevents mis-mating

**3-circuit circular components available**

Provides a compact connector that fits in an area as small as a 15.30mm-diameter tube



**UL1977 finger-test-certified receptacle**

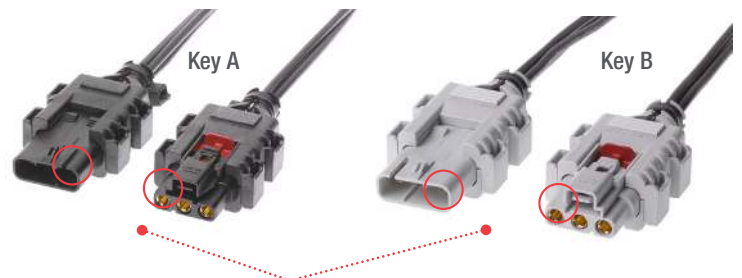
Meets safety standards for many consumer applications. Reduces risk of contact with live terminals



**2-piece hermaphroditic backshell**

Secure cable. Provides strain relief.

Easy access to actuate CPA



**2 keying options; 2 housing color options**

**(black and gray). Polarization incorporated into latch**

Eliminates assembly errors. Removes need for separate polarizing tabs

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## Features and Advantages For Precision-Machined Contacts

### Mating cycles at least 500

Provides longer life.  
Withstands high-mating cycle applications

Mating force per contact:  $\leq 24\text{N}$ ;

Unmating force per contact:  $\geq 5\text{N}$

Enables easy connection/disconnection. Lessens operator fatigue



### Solid mass contact

Provides reliability and long life cycle.  
Resistant to damage in blind-mate applications. Supports high power.

### High-current: 16.0 to 40.0A per contact

Delivers design flexibility for high-current applications

### Low contact resistance ( $\leq 1$ milliohms)

Offers large mating surface to support maximum current-carrying capacity. Transfers more power than stamped contact in a smaller interface

## Applications

### Aerospace and Defense

Unmanned vehicles

### Consumer

Drones

### Industrial Automation

Industrial motors

### Medical

Diagnostic equipment

### Telecommunications

Receivers

Satellite dish

## Specifications

### REFERENCE INFORMATION

Packaging: See Packaging Spec  
UL File No.: E29179  
Terminal Used: Crimp  
Designed In: Millimeters  
RoHS: Compliant by Exemption  
Halogen Free: No  
Glow Wire Compliant: No

### MECHANICAL

Contact Insertion Force into Housing (max.): 40N  
Contact Retention to Housing (min.): 175N  
Latch Strength (min.): 200N  
Mating Force (max.): 24N per Circuit  
Unmating Force (min.): 5N per Circuit  
Durability (max.): 500 cycles

### ELECTRICAL

Voltage (max.): 1000V AC/DC  
Current (max.): 40.0A per Contact  
Contact Resistance (max.): 1 milliohms  
Dielectric Withstanding Voltage: 3000V AC

### PHYSICAL

Housing: PEI  
Contact: Copper (Cu) alloy  
Plating:  
Contact Area — Gold (Au)  
PCB Thickness: 2.50mm  
Operating Temperature: -40 to +150°C

## Ordering Information

### MultiCat Connector System

Series No.	Component	Circuit Size	Features
<a href="#">201840</a>	Plug Housing	3 and 4	2 polarization options and colors
<a href="#">201841</a>	Receptacle Housing		
<a href="#">201842</a>	Vertical Housing		
<a href="#">201843</a>	Right-Angle Housing		
<a href="#">200915</a>	Circular Receptacle Housing	3	
<a href="#">200914</a>	Circular Plug		
<a href="#">201844</a>	Hermaphroditic Backshell	3 and 4	Two pieces, one part number

### Precision-Machined Contacts

Series No.	Component	Configuration
<a href="#">201845</a>	Plug Terminal	W-to-W
<a href="#">201846</a>	Receptacle Terminal	W-to-W

### Pre-Crimped Leads

Series No.	Description
<a href="#">79758</a>	MultiCat Pre-Crimped Leads

### Cable Assemblies

Custom Product	Description
<a href="#">Contact Molex</a>	MultiCat Cable Assemblies

[www.molex.com/link/multicat.html](http://www.molex.com/link/multicat.html)

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Order No. 987651-4731 Rev. 2

USA/0k/GF/2019.02

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