

MultiCat Mid-Power Connector System with Precision-Machined Contacts

molex

Compact MultiCat Mid-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

Mid-power connector system: Lightweight and compact wire-to-wire, wire-to-board (vertical only). Accommodates between 20 and 28 AWG wire. 8- and 20-circuit inline available

Offers design flexibility for applications requiring mid-range power. Helps mitigate space and weight constraints

Connector position assurance (CPA) with visual indicator

- Visual assurance that connector is properly engaged
- Latch provides audible feedback
- Completely mated systems allow the CPA to actuate
- Cannot actuate CPA if system is not completely mated
- Prevents accidental latch disengagement



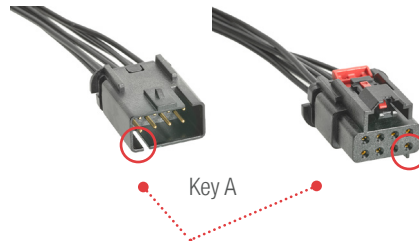
MultiCat Mid-Power Connector System

Manual mating / unmating

Facilitates quick assembly. No tooling or hardware required. Prevents mis-mating

2-piece hermaphroditic backshell

Secures cable. Provides strain relief. Easy access to actuate CPA and locking mechanism without removing backshells for quick mating and unmating



2 keying options; 2 housing color options. Polarization incorporated into latch

Eliminates assembly errors. Removes need for separate polarizing tabs

Mid-power current: 6.5A per contact (target)

Delivers design flexibility for high- and mid-current applications

Mating cycles: at least 500

Provides longer life. Withstands high-mating cycle applications



Mid-Power Contacts

Low contact resistance (high-power version: ≤ 1 milliohms; mid-power version: 10 milliohms)

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

Mating force per contact (max.): 3.4N; Unmating force per contact (min.): ≥ 0.2 N

Enables easy connection/disconnection. Mitigates operator fatigue

Solid mass contact

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

Applications

Commercial Aviation

- Unmanned vehicles
- Drones
- Commercial aircraft cabins

Industrial Automation

- Industrial motors

Commercial Vehicle

Telecommunications

- Receivers
- Satellite Dish



Industrial Automation



Drones



Satellite Dishes

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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

ELECTRICAL

Voltage (max.):
500V AC/DC
Current (max.): 6.5A per Contact
Contact Resistance (max.): < 5 milliohms
Dielectric Withstanding Voltage: 2000V AC

MECHANICAL

Contact Insertion Force into Housing (max.): 30N
Contact Retention to Housing (min.): 50N
Latch Strength (min.): 150N
Mating Force (max.): 3.4N per Circuit
Unmating Force (min.): .2N per Circuit
Durability (max.): 500 cycles

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	Current Rating	Circuit Size	2 polarization options and colors
205925	Inline Plug Housing	6.5A	8 and 20	2 polarization options and colors
205926	Inline Receptacle Housing			
205927	Inline Vertical Header			
205929	Hermaphroditic Backshell			
202935	Male Terminal			N/A
202936	Female Terminal			

Cable Assemblies

Custom Product	Description
Contact Molex	MultiCat Cable Assemblies

www.molex.com/link/multicat.html

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