

IPC-M175 Connectors

RUGGED INDUSTRIAL POWER CONNECTOR

Amphenol's IPC-M175 displays formidable power through a sleek design in the IPC product series. The power connector is designed to house two separate 1/0 (53.5mm²) contacts rated up to 175A per contact. IPC-M175 is the ideal connector solution for battery interconnects, eMobility charging, and other DC power distribution applications. This connector features a low-profile design while still providing substantial power. A wide wire range is supported, offering contact options from 4AWG – 1/0. This connector is designed for cable-to-cable applications in multiple color-coded options with built-in keying features for proper mating.

- UL rated up to 175A per 1/0 contact
- Color-keyed housing design (Gray, Blue, and Red)
- Silver plated contacts rated up to 10,000 mating cycles
- UL Tested and Approved when cross-mated with competitive connectors



TARGET MARKETS



FEATURES

- UL rated to 1/0 contacts up to 175A per contact
- Silver plated contacts rated up to 10,000 mating cycles
- Color-coded mechanically keyed housing design

BENEFITS

- Provides high power density for numerous DC applications
- Durable contact materials
- Prevent cross-mating devices with different voltages (all connectors UL rated to 600V, colors are identifiers to prevent accidents)

TECHNICAL INFORMATION

MATERIAL

- Power Contacts: Copper Alloy
- Housing: Polycarbonate
- Retention Spring: Stainless Steel
- Finish: Contact: Silver plated

ELECTRICAL PERFORMANCE

- Operating Voltage Rating: 600VAC/VDC
- Operating Current Rating:
 - Wire Size: 1/0 = 175A

MECHANICAL PERFORMANCE

- Mating/Un-mating Force:

ePwr™	Contact Type	Mating Force	Un-mating Force
IPC M175	Wire-to-wire high force contacts	160N max.	60N min.

- Durability: 10,000 Mating/Un-mating Cycles (Silver plated contacts)

APPROVALS & CERTIFICATION

- UL/CSA Approved: File # E66906

ENVIRONMENTAL

- Operating Temperature Range: -40°C and +105°C

SPECIFICATIONS

- Product Specifications: GS-12-1921
- Application Specifications: GS-20-0870

PACKAGING

- Insulator: Bulk Packing
- Contacts: Bulk Packing

TARGET MARKETS/APPLICATIONS



Energy Storage Systems (ESS)



eMobility
EV Chargers



Industrial



Robotics

PART NUMBERS

Description	Part Numbers
IPC-M175, 4 AWG contact	10170423-S02LF
IPC-M175, 2AWG contact	10170423-S03LF
IPC-M175,1/0 contact	10170423-S05LF
IPC M 175 Gray Connector	10171426-001LF
IPC M 175 Blue Connector	10171426-002LF
IPC M 175 Red Connector	10171426-003LF

Find part number details using the search box on www.amphenol-cs.com