

IPC-M120 Connectors

RUGGED INDUSTRIAL POWER CONNECTOR

Amphenol's IPC-M120 is a reliable, mid-range connector within the IPC product series. The power connector is designed to house two separate 2AWG (33.6mm²) contacts rated up to 115A per contact. IPC-M120 is the ideal connector solution for battery interconnects, eMobility charging, and other DC power distribution applications. This connector features a slim profile while still providing substantial power. A wide wire range is supported, offering contact options from 6AWG – 2AWG. 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 115A per 2AWG 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



FEATURES

- UL rated to 2AWG contacts up to 115A per contact
- Silver plated contacts rated up to 10,000 mating cycles
- Color-coded mechanically keyed housing design

BENEFITS

- Provides power density in a low profile configuration
- 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 M120	Wire-to-wire high force contacts	110N 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-12-1920
- Application Specifications: GS-20-0869

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-M120, 6 AWG contact	10171411-S01LF
IPC-M120, 4 AWG contact	10171411-S02LF
IPC-M120, 2 AWG contact	10171411-S03LF
IPC M 120 Gray Connector	10171413-001 LF
IPC M 120 Blue Connector	10171413-002 LF
IPC M 120 Red Connector	10171413-003 LF

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