

Brad® M12 Power F-Coding Cordsets and Receptacles

molex®

Delivering four times the power of standard M12 connectors, 300V AC/DC and 16A, IP67-rated Brad® M12 Power F-Coding Connectors provide compact and robust blind-mating for ease-of-use in factory automation applications and more

Features and Benefits

300V AC/DC; up to 16.0A current per pin

Leads the industry for connector current capability in an M12 format

F-Coding mating interface

Prevents mating with other M12 connectors being used for input, output, signal, or industrial network connections. Provides up to two DC power circuits (2 x V- / 2 x V+)

Robust blind-mate key design

Significantly reduces chance of connector being mated. Ensures blind mate capability in hard-to-view installations

IP67 sealed interface

Provides a sealed connection ideal for use in harsh and wet industrial environments. Connector is dust-proof and can be temporarily submerged in up to one meter of water

Pins enclosed in contact carrier

Enhances finger safety by eliminating chance of electrical shock due to exposed pins

Enhanced heat-dissipating design

Dissipates heat more efficiently for higher current-carrying capabilities in a compact design

Will be added to IEC Standard 61076-2-111. Submitted for ANSI/EIA acceptance

Establishes an open-industry connector standard to increase adoption among a wide array of platforms and manufacturers

Accommodates up to 14 AWG/2.5mm² wire size

Ideal for a wide range of power applications



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Applications

Factory Automation

- DC Motors and Drivers
- 24V DC Auxiliary Power Distribution
- Control Systems
- Value Actuators

Industrial Lighting Applications

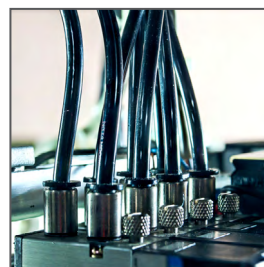
- Compact LED
- Conventional Lighting Fixtures

Commercial Vehicle (CV)

- Telemetry Modules
- Control System Power
- On-Board Lighting Power



LED Lighting Fixture



Valve Bank



Compact DC Motors

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Specifications

REFERENCE INFORMATION

UL File No.: TBD
CSA File No.: TBD
RoHS: Compliant by Exemption
Halogen Free: Yes

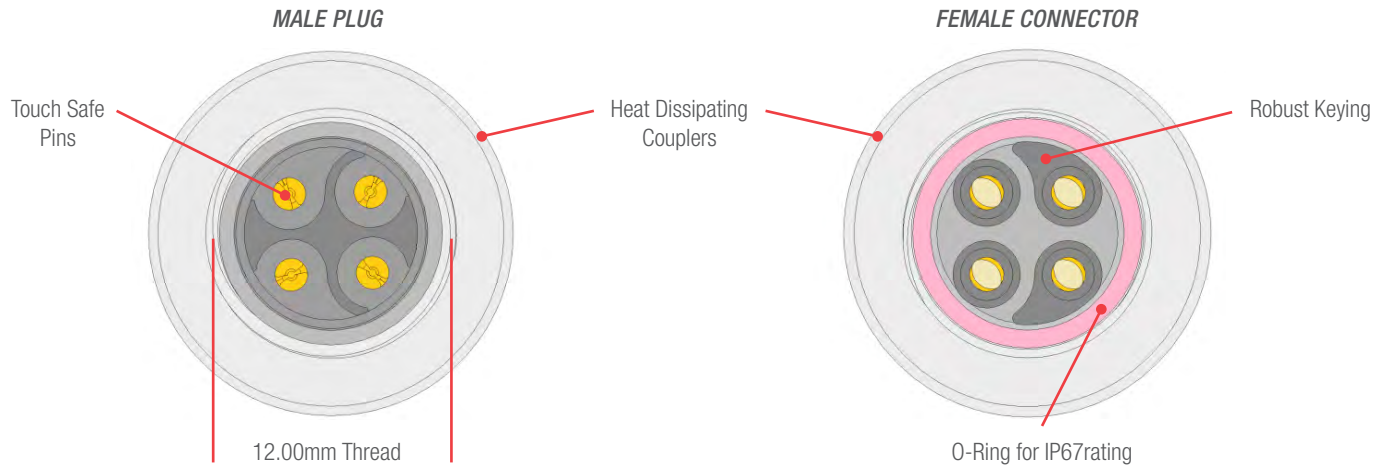
ELECTRICAL

Voltage (max.): 300V AC/DC
Current (max.): 16.0A
Dielectric Withstanding Voltage: 1600V

PHYSICAL

Body: TPE
Insert: TPE
Coupling Nut and Receptacle Shell:
Nickel-Plated Brass
Contact: Copper Alloy
Plating: Gold over Nickel
Operating Temperature: -20 to +90° C

M12 F-Coded Plug and Receptacle Cross Section



Ordering Information

Series No.	Engineering No.	Component	Current per Pin	Cable Type	Cable Jacket	Length	Gender	Orientation
120500	S04000K18M020	Single-Ended Cordset	16.0A	TC-ER (K18)	TPE	2.0m	Male, Female	Straight, 90°
	S04001K18M020							
	S04006K18M020							
	S04007K18M020							
120501	SS4030K18M010	Double-Ended Cordset				1.0m		
	SS4031K18M010							
	SS4032K18M010							
	SS4033K18M010							
120502	SR4U30F01C3003	Receptacle	Wire Type		Wire Insulation		0.3m	Front-Panel Mount
	SR4U36F01C3003		AWM 11028	mPPE				

www.molex.com/link/bradpower.html