



Ideal for factory-automation applications requiring up to 630V and 12.0A — three times the power of standard M12 connectors — Brad® M12 Power Connectors will provide the industry’s most robust keying and polarization for enhanced performance and blind mating, plus enclosed electrical contacts for finger safety; connectors available with 4 pin plus PE ground pin

Factory automation applications are demanding increasing complex machinery in more compact sizes. The soon-to-be-released Brad M12 Power Connector System will be the optimum choice for this market, due to its small footprint, watertight and rugged design. The higher current capability of the M12 connector was developed to meet the higher power consumption requirements of control, sensing and actuators in automation control systems while maintaining a small compact footprint.

PRELIMINARY Brad® M12 Power Connector System

Connectors and Receptacles 2 to 4 Pins Plus PE Ground Pin (up to 630V, 12.0A)



Brad® M12 Power Connectors (4-pin connector and receptacle shown)

Features and Benefits

Available in AC (630V, 12.0A, 2 to 4 pins plus Protective Earth (PE) ground pin) and DC (63V, 12.0A, 2 to 4 pins with optional PE ground pin) versions	Provides industry’s only 5-pin option (4 pins plus PE). AC version carries 630V (2ØY (120/208V), 3ØY(277/480V) and 3ØD(120/208/240V)) power circuits (pins for L1,L2,L3,N plus PE ground circuits). DC version accommodates up to 2 DC power circuits (2x V-/2x V+) or 1 DC circuit plus PE and up to 63V
Superior, robust key design	Significantly reduces chance of connector mismatching. Ensures blind mate capability for easy connections in hard-to-view installation areas
Pins enclosed in contact carrier	Provides finger safety (eliminates chance of electrical shock due to exposed pins)
Center (AC Version) or 4th pin (DC Version) PE ground pin	Provides first-mate-last-break engagement
IP67-sealed interface rated for temporary submersion in water	Provides a sealed connection ideal for use in harsh and wet industrial environments
Enhanced heat-dissipating design	Provides thermal heat-dissipation for higher current-carrying capabilities in a compact design
Submitted for IEC and 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 and 1.5mm ² wire conductor sizes	For use with common wire gauge sizes used in power applications

Applications

Factory Automation

- AC/DC motors and drives for power connections
- Auxiliary power distribution for control systems
- Hydraulic and pneumatic valve banks

Industrial Lighting Applications

- Compact LED and conventional lighting fixtures

Commercial Vehicles

General Rugged Mobile Devices

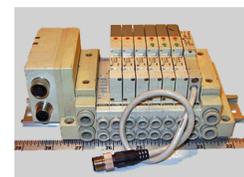
- Battery/power connector for device



DC Brushes Drives



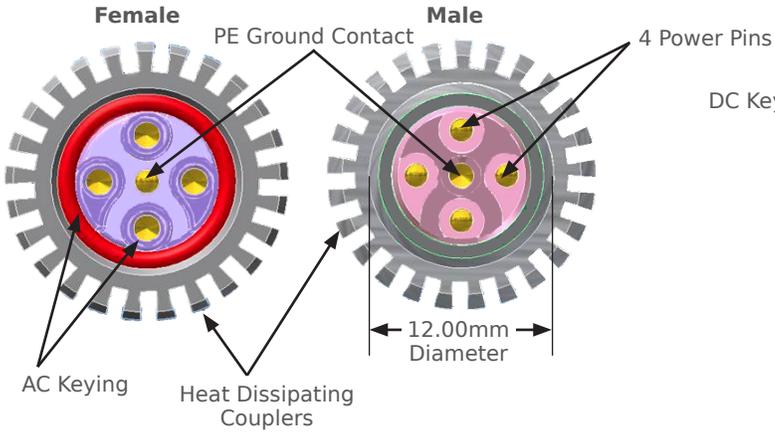
Lighting Fixture



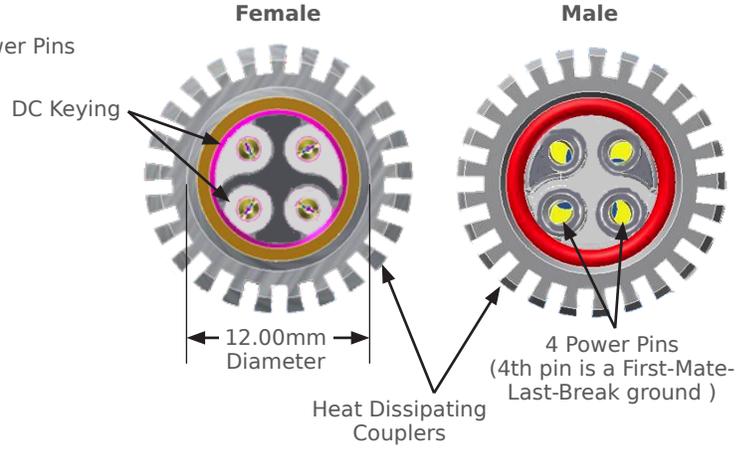
Pneumatic Valve Bank

Note: Molex reserves the right to delay or cancel production of the depicted product without additional notice. Please contact your Molex customer service representative for product availability.

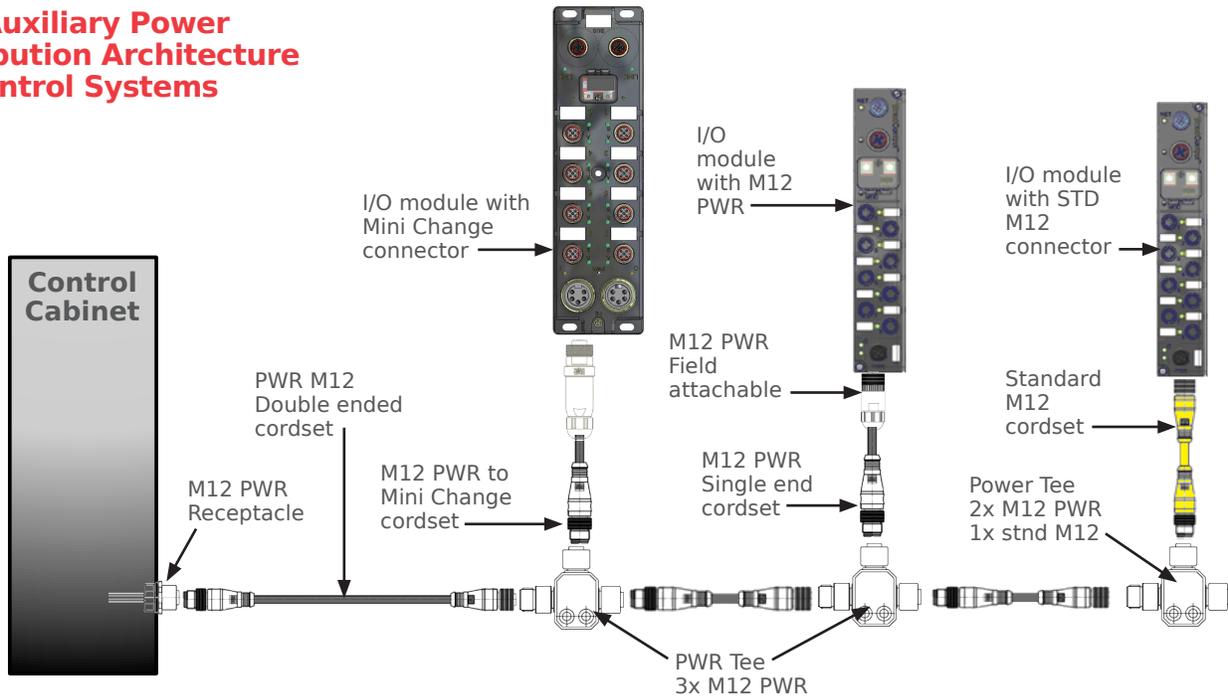
AC Version (630V, 12.0A per pin)



DC Version (63V, 12.0A per pin)



M12 Auxiliary Power
Distribution Architecture
for Control Systems



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www.molex.com/link/m12power.html