

Brad® Micro-Change® M12 PCB Receptacles

molex®

Facilitating strong mechanical and electrical connections, Brad® Micro-Change® M12 PCB Receptacles comply with OEM automated manufacturing requirements while saving valuable PCB space and reducing costs

Features and Benefits

Integrated metal mounting bracket snaps onto PCB

Ensures strong mechanical and electrical connections via precise pin alignment with robust and secure PCB mounting. Complies with OEM automated manufacturing requirements

Compact footprint optimized for automated termination

Enables M12 connectivity on boards with space constraints. Saves precious PCB space

IP67-rated M12 interface

Provides industrial-grade sealing against ingress of dust and water at up to depths of one meter

Delrin* acetal resin on coupling nut

Eliminates connectivity issues associated with grounding, electro-static discharge and other metal-specific issues. Provides high mechanical strength, rigidity and long-term fatigue endurance



Brad® Micro-Change® M12 PCB Receptacles
Left: Female | Right: Male

Applications

Industrial Automation

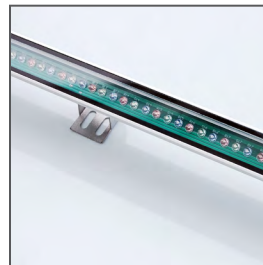
- Sensors
- Instrumentation
- Electronic Accessories
- Motors, Drives, etc.

Lighting

- Standard Industrial Lighting
- Machine Lighting



Sensors



Industrial Lighting



Motor

Specifications

REFERENCE INFORMATION

Packaging: Tray
UL File No.: E152210
Mates With: Brad® Micro-Change® M12 Connectors
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes
Glow Wire Compliant: Yes

ELECTRICAL

Voltage (max.): 250V AC/DC
Current (max.): 4.0A
Contact Resistance: < 20 mΩ
Dielectric Withstanding Voltage: 1500V

MECHANICAL

Mating Force: @23C → 44.48N
Unmating Force: @23C → Female = 53.38N
Male = 40.03N
Durability (min.): 100 Mating Cycles ≥ 75% of initial mating force (@23C)
Sealing: IP67

PHYSICAL

Body Material: Nylon
Lock Nut Material: Delrin* Acetyl Resin
Insert: Nylon
Contact Plating:
Contact Area — Gold-plated Brass
Operating Temperature: -20 to +80°C

*Delrin is a registered trademark of DuPont for its acetal resins

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Ordering Information

Order No.	Engineering No.	Gender	Poles	Orientation
120070-0084	8R3L560005	Male	3	Straight
120070-0086	8R3L570005			90°
120070-0162	8R4L560005		4	Straight
120070-0164	8R4L570005			90°
120070-0242	8R5L560006		5	Straight
120070-0244	8R5L570005			90°
120070-0516	8R3L500005	Female	3	Straight
120070-0082	8R3L510005			90°
120070-0158	8R4L500005		4	Straight
120070-0160	8R4L510005			90°
120070-0238	8R5L500005		5	Straight
120070-0240	8R5L510005			90°

www.molex.com/link/M12.html