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Brad® Micro-Change® M12 Harsh-Duty Receptacles

130299 Harsh-Duty Receptacles

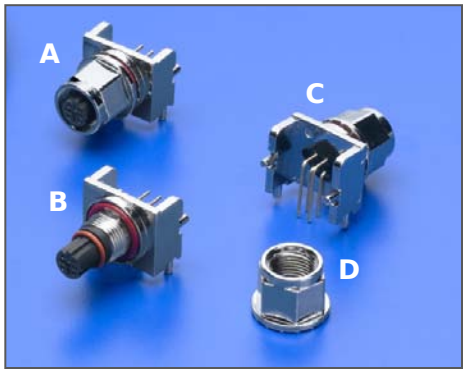
Ideal for Class 2 applications including petrochemical, factory-automation and commercial-vehicle equipment, Brad® Micro-Change® M12 Harsh-Duty Receptacles offer a sealed connection with superior EMI/RFI shielding in high-vibration systems

Brad® Micro-Change® M12 Harsh-Duty Receptacles are designed to withstand harsh commercial and industrial environments. Their superior design ensures a reliable connection for control elements in commercial vehicle equipment, factory automation equipment and petrochemical markets. Receptacles are tooled for network connectivity in both Ethernet and Controller-Area Network (CAN bus) protocols, as well as passive applications such as discreet and analog sensor applications.

Receptacles are available in 4-pole D-code and 5-pole A-code configurations; additional pole count and code variations can be developed upon request. Heavy-duty diecast construction provides 360° EMI/RFI shielding in the rugged receptacle while keeping costs to a minimum.

Brad Micro-Change M12 Harsh-Duty Receptacles are designed to interface with numerous Molex cordsets, including Series 130048, 120108, 130027 and 130028.

For more information on Molex's broad portfolio of industrial and power products for harsh-duty applications, visit: www.molex.com/product/bradproducts.html



A. 4-pole right-angle receptacle with coupling nut (Series 130299)
B. 4-pole right-angle receptacle with O-ring (Series 130299)
C. 4-pole right-angle receptacle, back view (Series 130299)
D. Coupling nut (130299)

Features and Benefits

Robust housing with heavy-duty die-cast construction and IEC 61076-2-101 compliant design	Provides superior Electro Magnetic Interference (EMI) and Radio Frequency Interference (RFI) protection. Meets CE industry requirements
Waterproof sealed and IP67, IP69K compliant	Able to withstand high-pressure wash down
Rated to 250V AC/DC, up to 4.0A	Ideal for Class 2 power and network circuit applications
Receptacle designed with a vibration-resistant mounting nut	Withstands vibration for chassis applications
Tooled for Ethernet and Controller-Area Network (CAN bus) protocols and passive applications including discreet and analog sensors	Meet high-speed data bus requirements
Receptacle pull-strength of 1.5N initial-mate torque resistance and 34kg intermittent sideload withstand rating	Durable for harsh environments, exceeding twice the strength of standard M12 receptacles. Reduces chance of pin bending during mating
Receptacles available in right-angle and straight configurations and 5-Pole A-, 4-pole D-code keyway options	Provides a full range of options for design flexibility. Keyed for poka-yoke manufacturing processes (end-of-line rework)

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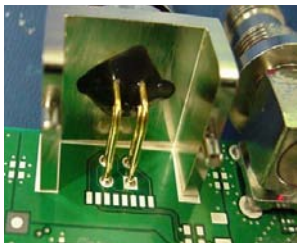
Left-to-right: Brad® Micro-Change® 4-pole straight receptacle, Micro-Change® 4-pole cordset

Specifications

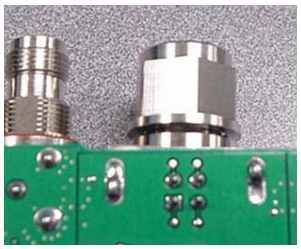
Reference Information
Packaging: 10 pack sleeve
RoHS: Yes
D-Code receptacle:
UL File No. E200650 Pending
A-Code receptacle:
UL File No. E152210 Pending
CSA File No. LR6837 Pending

Electrical
Voltage (max.): 250V AC
Current (max.): 4.0A
Contact Resistance: <10 milliohms
Dielectric Withstanding Voltage:
1500V AC
Insulation Resistance:
20 Megohms min.

Mechanical
Durability: 500 cycles



Robust shell isolates PCB poles; Right-Angle Receptacle for Ethernet Applications



Offset keying option example

4-pole straight receptacle with O-Ring

Applications

Commercial Vehicle Transportation
– Controllers and telematics
– Sensors, navigation devices
– Construction, agriculture, forestrymachinery
Industrial Machinery
– Packaging, robot, welding, material handling device manufacturers
Harsh Commercial Products
– Outdoor displays, signs
– Carwashes
Marine
– Boats
– Large vessels
Military/Aerospace
– Tactical vehicles
– C4ISR systems
– Military shelters

Truck

GPS

Harvesting Machinery

Ordering Information

Order No.	Poles	Code	Orientation
130299-0100	4	D	Right Angle
130299-0200			Straight
130299-0300	5	A	Right Angle
130299-0400			Straight

www.molex.com/link/m12.html