

Brad® Mini-Change® Connectors

Mini

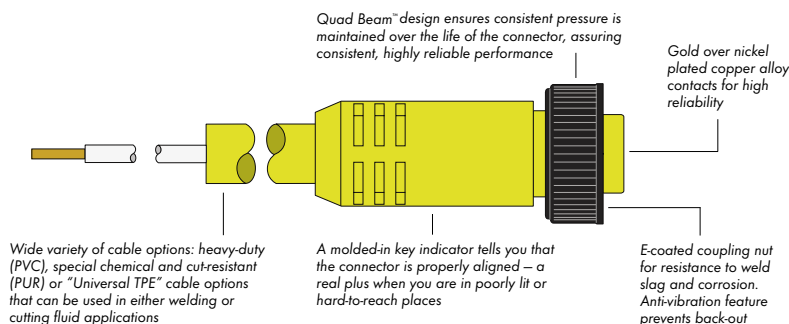
The Brad® Mini-Change® connector family from Molex is the standard by which all industrial sealed connectors are measured.

With the introduction of the Mini-Change in 1968, Brad pioneered miniature connectors by offering the first quick-connect alternative to hardwiring. Today, Brad connectors from Molex continue to be recognized as the industry's leading connectors for their quality, durability and the widest selection in the market.

The Brad Mini-Change connector family from Molex includes molded cordsets and receptacles available in 2- through 12-pole and 19-pole configurations, straight or right angle. Field-installed connectors are available in 3-, 4- and 5-pole configurations. Hardware choices include epoxy-coated zinc die-cast, stainless steel and nylon. A large selection of custom configurations is also available.

To ensure a reliable, low-resistance connection, Molex uses the patented Quad Beam™ female contact with gold-over-nickel plating and a stainless steel sleeve. The sealed construction provides IP67 protection. An anti-vibration feature prevents the coupler from loosening, even under extreme conditions.

Brad Mini-Change connectors from Molex continue to evolve, providing the best, most cost-effective solution for tough connector applications.



Features and Benefits

- Patented, Quad Beam™ socket contact with stainless steel sleeve maintains consistent pressure on the male pin to ensure optimum conductivity
- Gold-over-nickel-plated contacts are corrosion-resistant and help maintain low electrical resistance through high mate/unmate cycles
- Molded key indicator allows for quick and easy alignment and mating of the connector
- Integral strain relief provides 100 pounds minimum cable strain relief and radiates stress in side-loaded conditions
- Sealed to an IP67 rating to prevent the entry of water during temporary submersion

Applications

- 24V DC and 120V AC auxiliary power distribution on automated equipment
- Commercial and industrial lighting
- Industrial heaters
- Controls on Power Grid switchgear
- Power connector to WiLAN and WiMax transmitters
- Power connector to Smart Grid receiver stations
- Power connector to street light accessories
- Sump pump power and control
- Limit switches
- Proximity switches
- Photoelectric sensors
- Load cells
- Solenoid operated valves
- Valve position indicators
- Test equipment
- Portable/mobile light towers
- Solar panel power systems (from inverter to control panel)

Brad® Mini-Change® A-Size Receptacles With Leads

130013

**Female Straight, Right Angle
Front Mount
External Thread**



Features and Benefits

- Patented Quad Beam™ contact provides high reliability and low resistance

Reference Information

UL File No.: E152210

CSA File No.: LR6837

Physical

Connector Face: PVC

Shell Material:

Zinc with black epoxy coat or anodized Aluminum

Contact: Brass with Gold over Nickel plate

Operating Temperature: -20° to +105° C

Environmental

Protection: IP67

Configuration			
Wire Type	PVC, UL1061	PVC, UL1061	PVC, UL1061
Wire Size AWG	16	16	16
Length	12"	12"	12"

Poles (Female View)	Current	Voltage	Engineering No.	Standard Order No.	Engineering No.	Standard Order No.	Engineering No.	Standard Order No.
2-Pole 1 - White 2 - Black	13.0A	600V AC/DC	1R2004A20A120	130013-0060	1R2005A20A120	130013-0074	1R2604A20A120	130013-0093
3-Pole 1 - Green/Yellow-gnd 2 - Black 3 - White	13.0A	600V AC/DC	1R3004A20A120	130013-0135	1R3005A20A120	130013-0184	1R3604A20A120	130013-0273
4-Pole 1 - Black 2 - White 3 - Red 4 - Green/Yellow-gnd	10.0A	600V AC/DC	1R4004A20A120	130013-0314	1R4005A20A120	130013-0337	1R4604A20A120	130013-0402
5-Pole 1 - White 4 - Orange 2 - Red 5 - Black 3 - Green/Yellow-gnd	8.0A	600V AC/DC	1R5004A20A120	130013-0442	1R5005A20A120	130013-0482	1R5604A20A120	130013-0550
6-Pole 1 - White 2 - Red 3 - Green/Yellow-gnd 4 - Orange 5 - Black 6 - Blue	8.0A	600V AC/DC	1R6004A20A120	130013-0567	1R6005A20A120	130013-0589	1R6604A20A120	130013-0614

Note: Sales drawings for all standard order numbers are available on molex.com

Configuration Code*
Build-a-Part Number

	Length	Code
Inches	12	A120
Feet	6	F060

1R2004A20A120

Coupling Nut Option
Stainless Steel1†
Nonmetallic2‡

Orientation Code
Straight female..... 004
Right angle female..... 005
Straight flange mount female shell..... G04

*Once an engineering number is created using the configuration code, consult Molex tech support for information regarding any part numbers.

†Stainless steel available only with straight, 1/2"-14 NPT shell or flange shell.

‡Nonmetallic available only with straight, 1/2"-14 NPT shell.