

Connector Catalog Number Matrix

Below is an example of a properly constructed Connector part number and how it translates to an actual part.

113020A01F2001

Mini-Change® 3 Pole Female Straight to Male Straight Double-Ended Cordset with 20' of 16 AWG, ST00W-A, U.S. Color Code, Stainless Steel Coupling Nut

1 1 3 0 2 0 A 0 1 F 2 0 0 1

LENGTH	
1st Digit	10 X Length
2nd Digit	1 X Length
3rd Digit	.1 X Length
UNIT OF MEASURE	
F	Feet
CABLE TYPE	
A01	16 AWG Type ST00W U.S. Color Code 2P-12P
A02	16 AWG Type ST00W AUTO Color Code 3P&5P
A03	18 AWG PVC Jacket AUTO Color Code 3P-5P
A05	18 AWG PVC Jacket IEC DC Color Code 3P&4P
A06	18 AWG PVC Jacket IEC AC Color Code 3P
A07	20 AWG PVC Jacket IEC AC Color Code 5P
B13	18 AWG PUR Coil Cord AUTO Color Code 3P&5P
C01	16 AWG Type SOO AUTO Color Code 3P-5P
K02	18 AWG TPE Jacket AUTO Color Code 3P&5P
CONNECTOR TYPE	
Single-Ended Cordset	
000	Female Straight
001	Female 90°
002	Male Straight
003	Male 90°
Double-Ended Cordset	
020	Female Straight - Male Straight
021	Female 90° - Male Straight
022	Female Straight - Male 90°
023	Female 90° - Male 90°
NUMBER OF POLES	
X	X Pole: 2 to 9 Pole
1	10 Pole C-size only
2	12 Pole C-size only
PRODUCT FAMILY (2 characters)	
1 st Character	
1	2 to 6 Pole 1" Coupler A-size
2	6 to 8 Pole 1½" Coupler B-size
3	9, 10, 12 Pole 1¼" Coupler C-size
2 nd Character	
0	Single-Ended Cordset A, B & C sizes
1	Double-Ended Cordset A-size
2	Double-Ended Cordset B-size
3	Double-Ended Cordset C-size
COUPLING NUT	
Blank	Zinc Diecast, epoxy coat
1	Stainless Steel, Type 303
2	Non-Metallic Nylon 6/6 (2P - 6P, A-size only)

Brad® Micro-Change® (M12) Connectors

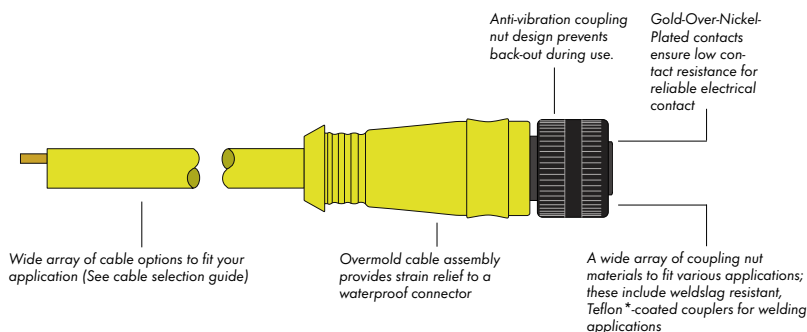
UNITED STATES (also includes Canada, Mexico and South America)

Rugged Micro-Change® connectors provide a high-pin-density, M12 solution that is ideal for use in industrial and harsh commercial environments.

Brad Micro-Change products are Molex's offering of rugged, high-circuit density, industry-standard M12 circular connectors for industrial automation applications.

Micro-Change connectors are designed to withstand harsh industrial environments and their superior quality assures a very reliable connection for control elements in automated equipment. These IEC 61076-2-101 compliant connectors allow fast and simple connections to 12.00 and 18.00mm sensors, encoders, switches and other input and output devices in industrial machinery.

Brad's complete line of M12 connectivity provides a quick-connect wiring system that eliminates field-install cabinets and minimizes field wiring termination errors.



Features and Benefits

Cordsets

- Available in 3-, 4-, 5-, 8- and 12-poles; in single and dual-key configurations; with or without LEDs; in straight and 90°; and with different coupling nut materials to provide a wide variety of options to meet application requirements
- Intermates with industry standard M12 devices that comply with IEC 61076-2-101
- Rugged, IP68 rated watertight connector is well suited for harsh, wet environments
- Patented, anti-vibration feature prevents back-out in applications that experience high vibration and mechanical shock
- Gold-over-nickel-plated contacts provide a durable, corrosion-resistant plating that maintains low electrical resistance throughout the life of the connector

Receptacles, Field Attachables and Accessories

- Large selection of configurations to fit your panel or device design, including front- and back-panel-mount receptacles in a variety of materials, with PCB or wire leads
- Epoxy potted receptacles are IP67- and IP68-rated, and are ideal for rugged industrial environments

- 3- to 5-pole field-attachable connectors with screw-down terminals for easy field installation, allow users to make their own cable assemblies for a custom fit to a machine or application

Distribution Boxes

- Available in 4-, 6- and 8-port distribution boxes; single and dual I/O versions. These pre-wired junction boxes comprise the Molex quick-connect wiring system for I/O devices. They eliminate the need for field-installed junction boxes, providing improved wire management
- Fully potted housing ensures performance in high-vibration and wet environment applications
- Rugged and compact to allow placement in tight places

Applications

- Proximity switches, photo eyes, safety switches and other I/O connectivity
- Connector interface for IP69-rated devices
- Connectivity for devices in high-vibration environments
- Connections requiring blind-mating

Teflon® is a registered trademark of E.I. DuPont De Nemours and Company.

Brad® Mini-Change® A-Size Single-Ended Cordsets

130006

Female

**Straight, Right Angle
Internal Thread**



Features and Benefits

- Patented Quad Beam™ contact provides high reliability and low resistance
- Epoxy coated coupling nut is corrosion and weld slag resistant
- Cable is oil, water and abrasion resistant

Reference Information

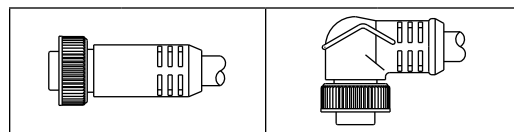
UL File No.: E152210
CSA File No.: LR6837

Physical

Connector Face: PVC
Connector Body: PVC
Contacts: Brass with Gold over Nickel plating
Coupling Nut: Black epoxy-coated Zinc
Cable: A01, A02—UL Type ST00W, Hard Service Cord
A03, A05, A06, A07—UL 2661, AWM
C01—UL Type S00W, Hard Service Cord
Cable Jacket Color: Yellow
Operating Temperature: A03, A05, A06, A07—
-20 to +80° C
A01, A02, C01— -20 to +105° C

Environmental

Protection: IP67



Poles (Female View)	Current	Voltage	Cable Type	Cable Jacket (Cable Code)	Wire Size AWG	Cable Length	Female Straight		Female Right Angle	
							Engineering No.	Standard Order No.	Engineering No.	Standard Order No.
4-Pole 1 - Black 2 - White 3 - Red 4 - Green/Yellow-gnd	10.0A	600V AC/DC	ST00W	PVC (A01)	16	6'	104000A01F060	130006-0728	104001A01F060	130006-0902
4-Pole 1 - Red with black trace 2 - Red with white trace 3 - Red 4 - Green-gnd	7.0A	300V AC/DC	UL 2661	PVC (A03)	18	6'	104000A03F060	130006-0813		
4-Pole 1 - Brown 3 - Blue 2 - White 4 - Black	5.6A	300V AC/DC	UL 2661	PVC (A05)	18	2.0m	104000A05M020	130006-0833		
4-Pole 1 - Black 2 - White 3 - Red 4 - Green-gnd	10.0A	600V AC/DC	S00W	Rubber (C01)	16	6'	104000C01F060	130006-0868		
5-Pole 1 - White 4 - Orange 2 - Red 5 - Black 3 - Green/Yellow-gnd	8.0A	600V AC/DC	ST00W	PVC (A01)	16	6'	105000A01F060	130006-1163	105001A01F060	130006-1349

Configuration Code*
Build-a-Part Number

	Length	Code
Feet	3	F030
	6	F060
	12	F120
	20	F200
Meters	2	M020
	5	M050
	10	M100

102000A01F0601

Coupling Nut Option
Stainless Steel 1
Nonmetallic 2

Cable Code
Orientation Code
Straight female 000
Right angle female 001

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