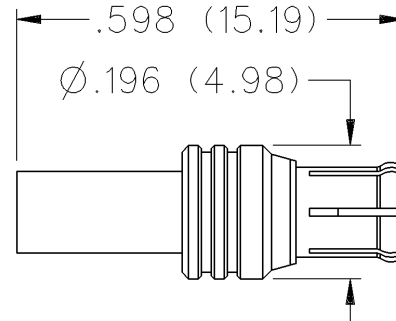


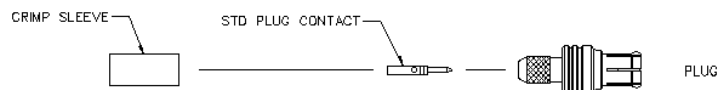
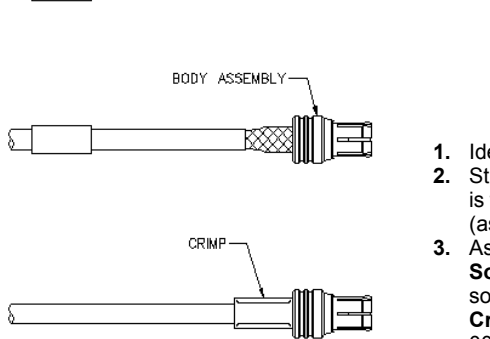
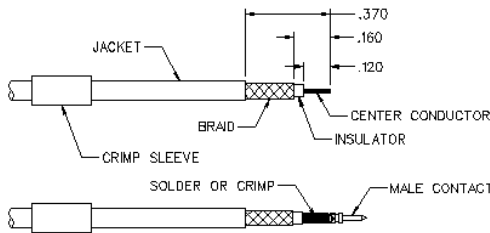
## Straight Crimp Type Plug - Solder or Crimp Contact - Captivated Contact



CABLE TYPE	GOLD PLATED
RG-316/u, 188, 174	133-9403-001

## MCX Crimp Type Straight Connectors For Flexible Cable

CABLE GROUP	PART NUMBER	CRIMP HEX
RG-316/u, 188, 174	133-9403-001	.128 (3.25)
RG-316DS, 188DS	133-9404-001	.151 (3.83)



1. Identify connector parts. (3 piece parts)
2. Strip cable to dimensions shown. Do not nick braid or center conductor. Tin center conductor if contact is to be solder attached. Do not tin center conductor if contact is to be crimp attached. Slide heat shrink (as applicable) and crimp sleeve onto jacket of cable.
3. Assemble contact onto cable as shown.  
**Solder attachment.** Solder contact to center conductor through solder hole using .020 (0.51) diameter solder. Use a minimum of solder for a good joint.  
**Crimp attachment.** Crimp contact to center conductor using Johnson Components™ hand tool 140-0000-952 and die set 140-0000-953. Crimp location should be centered between end of contact and cross hole. Crimp attachment to solid center conductor cable is not recommended.
4. Flair braid and slide body assembly over contact and under braid. Then seat body assembly firmly onto contact. The cable may have to be held in a clamping fixture. Arrange braid uniformly around crimp stem. Slide crimp sleeve forward and crimp using recommended crimp tool. Slide heat shrink forward and shrink (as applicable).

# MCX Non-Magnetic RF Connectors Specifications

INCHES (MILLIMETERS)  
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST

## SPECIFICATIONS

### ELECTRICAL RATINGS

**Impedance:** 50 Ohms

**Frequency Range:** 0-6 GHz

**VSWR:** (f = GHz)

	<u>Straight Cabled Connectors</u>	<u>Right Angle Cabled Connectors</u>
RG-316 cable .....	1.13 + .04f	1.07 + .04f
Uncabled receptacles .....		N/A

**Working Voltage:** (Vrms maximum)

Connectors for Cable Type	<u>Sea Level</u>	<u>70K Feet</u>
RG-316 .....	335	85

**Dielectric Withstanding Voltage:** (VRMS minimum at sea level)

Connectors for RG-316, uncabled receptacles .....	1000
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**Corona Level:** (Volts minimum at 70,000 feet)

Connectors for RG-316, uncabled receptacles .....	250
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**Insertion Loss:** (dB maximum, tested at 1 GHz)

Straight cable connectors .....	0.1 dB
Right angle cable connectors .....	0.2 dB
Uncabled receptacles .....	N/A

**Insulation Resistance:** 10,000 megohms minimum

**Contact Resistance:** (milliohms maximum)

	<u>Initial</u>	<u>After Environmental</u>
Center contact (straight cabled connectors, uncabled receptacles) .....	5.0	8.0
Center contact (right angle cabled connectors) .....	5.0	15.0
Outer contact .....	1.0	1.5
Braid to body .....	1.0	N/A

**RF Leakage:** (dB typical tested at 2.5 GHz)

Cable connectors .....	-55
Uncabled receptacles .....	N/A

**RF High Potential Withstanding Voltage:** (Vrms minimum, tested at 4 and 7 MHz)

Cabled connectors .....	700
Uncabled receptacles .....	600

### MECHANICAL RATINGS

**Engagement Design:** Compatible with CECC 22220, Series MCX

**Engagement Force:** 5.6 pounds maximum axial force

**Disengagement Force:** 8 pounds maximum axial force, 1 pound min.

**Contact Retention:** 2.3 pounds min. axial force (captivated contacts)  
1 inch-ounce min. torque (uncabled receptacles)

<b>Cable Retention:</b>	<b>Axial Force* (pounds)</b>	<b>Torque (in-oz)</b>
Connectors for RG316 .....	20	N/A
Connectors for RG316DS .....	25	N/A

\* or cable breaking strength whichever is less.

### ENVIRONMENTAL RATINGS (Meets or exceed the applicable paragraph of MIL-PRF-39012)

**Durability:** 500 cycles minimum

**Temperature Range:** - 65°C to + 165°C

**Thermal Shock:** MIL-STD-202, Method 107, Condition F

**Corrosion:** MIL-STD-202, Method 101, Condition B

**Shock:** MIL-STD-202, Method 213, Condition B

**Vibration:** MIL-STD-202, Method 204, Condition B

**Moisture Resistance:** MIL-STD-202, Method 106