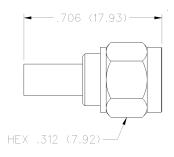
SMA Non-Magnetic RF Connectors

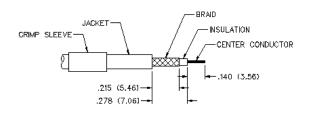
INCHES (MILLIMETERS) CUSTOMER DRAWINGS AVAILABLE UPON REQUEST For Flexible Cable

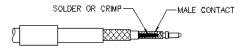
Straight Crimp Type Plug (3-piece) - Captivated Contact

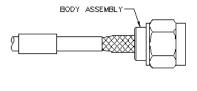


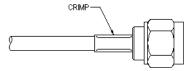
CABLE TYPE	VSWR & FREQ. RANGE	GOLD PLATED
RG-316/u, 188, 174	1.15 + .02f (GHz) 0-12.4 GHz	142-9403-011











CABLE GROUP	PART NUMBER	CRIMP HEX
RG-316/u, 188, 174	142-9403-011	.128 (3.25)
RG-316 DS, 188 DS	142-9404-011	.151 (3.83)
RG-58/u, 141	142-9407-011	.213 (5.41)



STD PLUG CONTACT

1. Identify connector parts. (3 piece parts)

CRIMP SLEEVE-

- 2. Strip cable to dimensions shown. Do not nick braid or center conductor. Tin center conductor if contact will be solder attached. Do not tin center conductor if contact is to be crimp attached. When stripping LMR-100 low loss cable, remove foil back to where cable jacket is stripped. A wire stripper of correct size is recommended for this step. 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 amount of solder for a good joint.
 - **Crimp Attachment:** Crimp contact to center conductor using Johnson Components[™] Hand Tool 144-0000-910, setting #2, with positioner 141-0000-907. Crimp location should be centered between end of contact and X-hole. Crimp attachment to solid center conductor cables is not recommended.
- 4. Flare 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).

PLUG



EMERSON

INCHES (MILLIMETERS)
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST

SPECIFICATIONS

ELECTRICAL RATINGS Impedance: 50 ohms Frequency Range: Flexible cable connectors 0-12.4 GHz Uncabled receptacles 0-18.0 GHz
 VSWR: (f = GHz)
 Straight Cabled Connectors
 RA Cabled Connectors

 RG-316
 1.15 + .02f
 1.15 + .03f

 RG-58
 1.15 + .01f
 1.15 + .02f
 RG-58 1.15 + .01f 1.15 + .02f Uncabled receptaclesN/A Working Voltage: (Vrms maximum)
 Connectors for Cable Type
 Sea Level
 70K Feet

 RG-316
 250
 65
 Corona Level: (Volts minimum at 70,000 feet)= Uncabled receptaclesN/A Insulation Resistance: 5000 megohms minimum Contact Resistance: (milliohms maximum) After Initial Environmental Center contact (straight cabled connectors, uncabled receptacles) ... 3.0 40 6.0 N/A N/A

	RF Leakage: (dB minimum, tested at 2.5 GHz)	
	Flexible cable connectors	60 dB
	Uncabled receptacles	
<u>'S</u>	RF High Potential Withstanding Voltage: (Vrms minimum, tested at 4 and Connectors for RG-316	
	Connectors for RG-58, uncabled receptacles	. 670
Α		
	MECHANICAL RATINGS	
	Engagement Design: MIL-STD-348, Series SMA	
	Engagement/Disengagement Force: 2 inch-pounds maximum	
	Mating Torque: 7 to 10 inch-pounds	
	Coupling Proof Torque: 15 inch-pounds minimum	
0	Coupling Nut Retention: 60 pounds minimum	
0	Contact Retention: 6 lbs. minimum axial force (captivated contacts)	
	4 inch-ounce minimum torque (uncabled receptacles)	
0	Cable Retention: Axial Force*(lbs) Torque (in-oz)	
0	Connectors for RG-316	
	Connectors for RG-58	
lz	*Or cable breaking strength whichever is less.	
lz	Durability: 500 cycles minimum	
Α	, ,	
	ENVIRONMENTAL RATINGS (Meets or exceed the applicable paragraph of MIL-C-390)12)
	Temperature Range: - 65°C to + 165°C	,
al	Thermal Shock: MIL-STD-202, Method 107, Condition B	
	Corrosion: MIL-STD-202, Method 101, Condition B	
	Shock: MIL-STD-202, Method 213, Condition I	
	Vibration: MIL-STD-202, Method 204, Condition D	

Moisture Resistance: MIL-STD-202, Method 106