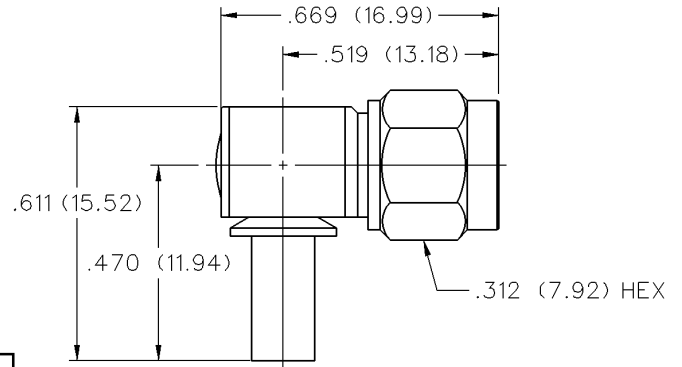


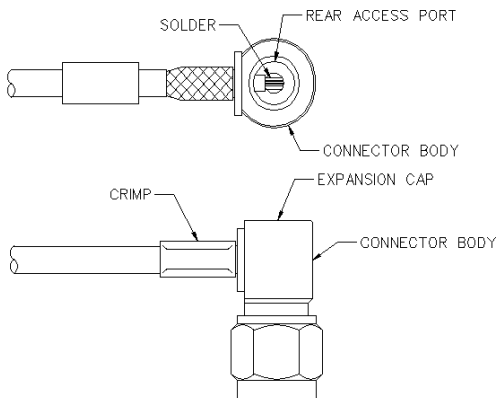
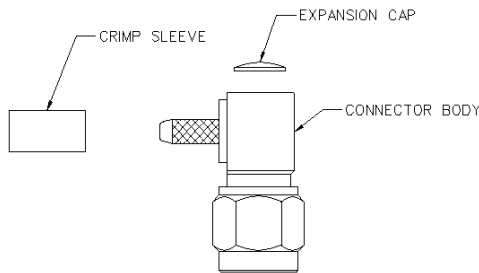
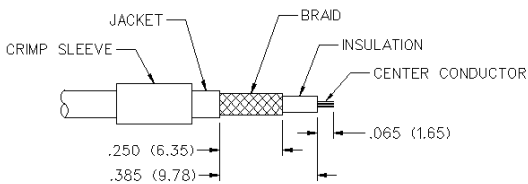
## Right Angle Crimp Type Plug - Captivated Contact



CABLE TYPE	VSWR & FREQ. RANGE	GOLD PLATED
RG-316/u, 188, 174	1.15 + .03f (GHz) 0-12.4 GHz	142-9403-101

## SMA Crimp Type Right Angle Plugs For Flexible Cable

CABLE GROUP	PART NUMBER	CRIMP HEX
RG-316/u, 188, 174	142-9403-101	.128 (3.25)
RG-316 DS, 188 DS	142-9404-101	.151 (3.83)
RG-58/u, 141	142-9407-101	.213 (5.41)



1. Identify connector parts. (3 piece parts)
2. Strip cable to dimensions shown. Do not nick braid or center conductor. 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. Twist stranded center conductor into tight bundle and tin (optional). Slide crimp sleeve onto cable as shown.
3. Flare braid and slide cable into body making certain that the cable insulation bottoms on center contact. Solder center conductor to contact through the rear access port. Use a minimum amount of solder for a full fillet joint. **.020 (0.51) diameter solder is recommended.**
4. Arrange braid uniformly around crimp stem. Slide crimp sleeve over braid and crimp securely using recommended crimp tool. Place expansion cap in access port and seat with .187 (4.75) diameter flat punch. Shrink heat shrink tubing over crimp sleeve if applicable.

## 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

Uncabled receptacles ..... N/A

**Working Voltage:** (Vrms maximum)

#### Connectors for Cable Type

	Sea Level	70K Feet
RG-316 .....	250	65
RG-58, uncabled receptacles .....	335	85

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

Connectors for RG-316 .....	750
Connectors for RG-58, uncabled receptacles .....	1000

**Corona Level:** (Volts minimum at 70,000 feet)<sup>†</sup>

Connectors for RG-316 .....	190
Connectors for RG-58, uncabled receptacles .....	250

**Insertion Loss:** (dB maximum)

Straight flexible cable connectors .....	$0.06 \sqrt{f}$ (GHz), tested at 6 GHz
Right angle flexible cable connectors .....	$0.15 \sqrt{f}$ (GHz), tested at 6 GHz
Uncabled receptacles .....	N/A

**Insulation Resistance:** 5000 megohms minimum

**Contact Resistance:** (milliohms maximum)

	Initial	After Environmental
Center contact (straight cabled connectors, uncabled receptacles) ...	3.0	4.0
Center contact (right angle cabled connectors) .....	4.0	6.0
Outer contact (all connectors) .....	2.0	N/A
Braid to body .....	0.5	N/A

**RF Leakage:** (dB minimum, tested at 2.5 GHz)

Flexible cable connectors .....	-60 dB
Uncabled receptacles .....	N/A

**RF High Potential Withstanding Voltage:** (Vrms minimum, tested at 4 and 7 MHz)<sup>†</sup>

Connectors for RG-316 .....	500
Connectors for RG-58, uncabled receptacles .....	670

### 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

**Coupling Nut Retention:** 60 pounds minimum

**Contact Retention:** 6 lbs. minimum axial force (captivated contacts)  
4 inch-ounce minimum torque (uncabled receptacles)

Cable Retention:	Axial Force*(lbs)	Torque (in-oz)
Connectors for RG-316 .....	20	N/A
Connectors for RG-58 .....	40	N/A

\*Or cable breaking strength whichever is less.

**Durability:** 500 cycles minimum

**ENVIRONMENTAL RATINGS** (Meets or exceed the applicable paragraph of MIL-C-39012)

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

**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

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