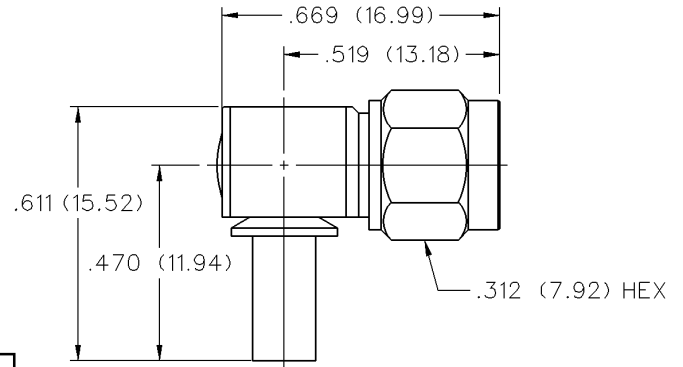


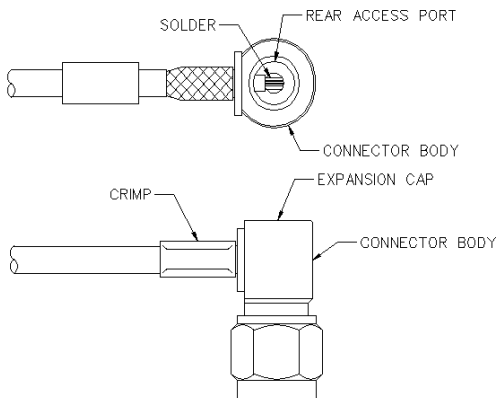
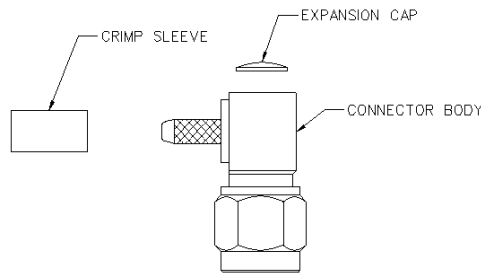
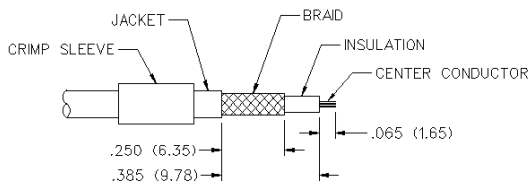
Right Angle Crimp Type Plug - Captivated Contact



CABLE TYPE	VSWR & FREQ. RANGE	GOLD PLATED
RG-316 DS, 188 DS	1.15 + .03f (GHz) 0-12.4 GHz	142-9404-101

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)	<u>Straight Cabled Connectors</u>	<u>RA Cabled Connectors</u>
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

	<u>Sea Level</u>	<u>70K Feet</u>
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)²

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)

	<u>Initial</u>	<u>After Environmental</u>
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)²

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:	<u>Axial Force*(lbs)</u>	<u>Torque (in-oz)</u>
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