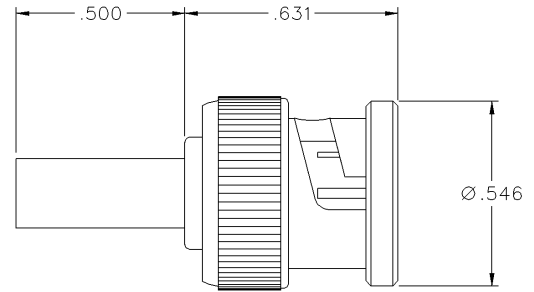


# True 75 Ohm BNC Straight Cabled Plug - 3 Piece Solder or Crimp Captivated Contact



INCHES (MILLIMETERS)  
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST



PART NUMBER	CABLE TYPE	CONTACT I.D.	BODY I.D.	FERRULE I.D.
CPMC-68-2	RG-59, 140, 302, Belden 9209A, 8279, 8241, 8263, Commscope 5563 Gepco VJ59U	.028 (0.71)	.152 (3.86)	.252 (6.40)
CPMC-68-3	Belden 8281, 9231, 9141, 735A Commscope 7501 VP618PVC	.036 (0.91)	.203 (5.16)	.330 (8.38)
CPMC-68-5	RG-6 Belden 8215	.033 (0.84)	.191 (4.85)	.355 (9.01)
CPMC-68-10	Belden 82108, 89108 Coleman 99969	.036 (0.91)	.149 (3.78)	.234 (5.94)
CPMC-68-18	Belden 8218	.021 (0.53)	.105 (3.81)	.180 (4.57)
CPMC-68-20	RG-179, 187 Belden 1520A	.016 (0.41)	.067 (1.70)	.128 (3.25)
CPMC-68-33	Belden 735A Commscope 735, Helix/Hitemp 735 BT3002, TZC75024	.021 (0.53)	.082 (2.08)	.160 (4.06)
CPMC-68-34	Belden 1855A, 720A Commscope 7538, Gepco 7538	.028 (0.71)	.105 (3.81)	.180 (4.57)
CPMC-68-35	Belden 1505A, 734A Commscope 5565, Gepco VPM2000	.036 (0.91)	.152 (3.86)	.252 (6.40)
CPMC-68-36	Belden 1695A Gepco VSD2001TS	.044 (1.12)	.176 (4.47)	.265 (6.73)
CPMC-68-45	Belden 1694A, 9248, Commscope 5765 Gepco VSD2001	.044 (1.12)	.187 (4.75)	.290 (7.37)
CPMC-68-50	Belden 1506A, 82259, 89259, Gepco VPM2000TK, VPM2000TS	.036 (0.91)	.138 (3.51)	.234 (5.94)

# BNC Connectors - True 75 Ohm



## Specifications

INCHES (MILLIMETERS)  
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST

### Electrical Characteristics

**Impedance:** 75 Ohm  
**Frequency range:** 0-3 GHz  
**VSWR:**  
BNC Cabled Plugs (except CPMC-68-18) ..... 1.10 + .03 F (F in GHz)  
CPMC-68-18 ..... 1.22 + .01 F (F in GHz)  
BNC Adapters (In-series and Between-series) 1.03 + .02 F (F in GHz)  
**Working voltage:** BNC Cabled Plugs and Adapters  
(except CPMC-88-18, 20 and 33) ..... 500 VRMS at sea level  
CPMC-88-18, 20 and 33 ..... 335 VRMS at sea level  
**Dielectric withstanding voltage:**  
BNC Cabled Plugs and Adapters  
(except CPMC-88-18, 20 and 33) ..... 1500 VRMS at sea level  
CPMC-88-18, 20 and 33 ..... 1000 VRMS at sea level  
**Insulation resistance:** 5000 megohms minimum  
**Contact resistance:**  
Outer - Nickel plated initial 1.0 milliohm max,  
after environmental 1.5 milliohm max  
Center - Initial 3 milliohm max,  
after environmental 4 milliohm max  
Braid to Body - 2.5 milliohm max (nickel plated), after environ-  
mental not applicable  
**Corona level:** 375 volts minimum at 70,000 feet  
**RF High Potential Withstanding Voltage:** 700 VRMS at 4 MHz

**Operating temperature:** -65° C to 165° C  
**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

### Mechanical Characteristics

**Durability:** 500 cycles min  
**Force to engage/disengage:** 5 lbs. max, after durability 5 lbs max; 1 lb. min.  
**Coupling nut retention:** 75 lbs. min  
**Contact retention:** 6 lbs. min axial force

### Material Specifications

**Body:** Brass, nickel plated .0001 min over copper plated .00005 min  
**Contact:** Brass, gold plated .00005 min over nickel plated .00005 min over copper plated .00005 min  
**Crimp Sleeve:** Copper, nickel plate .0001 min over copper plated .00005 min  
**Nut:** Zinc, nickel plated over copper plated  
**Insulator:** Teflon  
**Spring Washer:** Beryllium Copper (unplated)  
**Flat Washer:** Steel, nickel plated  
**Gasket:** Silicone rubber

### Environmental Characteristics

(meets or exceeds the applicable paragraph of MIL-C-39012)  
**Thermal shock:** MIL-STD-202, Method 107

## True 75 Ohm BNC Plug and Jack Mating Engagement

