



## CONN012-1-W

### N Plug Right Angle Coaxial Cable Mount Connector

The CONN012-1-W is an N plug cable mount connector designed for use with RG-8, RG-8/A, RG-8/B, RG-8/C, Belden 9258, LMR-240 or equivalent coaxial cable using the provided crimp ferrule and heat shrink tubing. Operating from 0 GHz to 11 GHz, the CONN012-1-W provides superior performance by utilizing white bronze plating to reduce distortion caused by passive intermodulation (PIM). Additionally, all Linx connectors meet RoHS lead free standards and are tested to meet requirements for corrosion resistance, vibration, mechanical and thermal shock.

### FEATURES

- 0 to 11 GHz operation
- White Bronze plating
  - Low Passive Intermodulation (PIM)
  - Superior corrosion resistance
- N plug (male pin) connection
  - Gold plated brass center contact
- Crimp type coaxial cable mount for use with
  - RG-8, RG-8/A, RG-8/B, RG-8/C
  - Belden 9258
  - LMR-240
- Crimp ferrule, and heat shrink tubing provided

### ELECTRICAL SPECIFICATIONS

Impedance	50 $\Omega$	
Frequency Range	0 to 11 GHz	
Voltage Rating	1500 V RMS	
Contact Resistance	Center: $\leq 1.0$ m $\Omega$ Outer: $\leq 1.0$ m $\Omega$	
Selected Frequencies	2.4 GHz	6 GHz
Insertion Loss (dB max)	-0.22	-0.96
VSWR (max)	1.3	2.3

## ORDERING INFORMATION

Part Number	Description
CONN012-1-W	N plug (male pin) crimp type coaxial cable mount connector for RG-8, RG-8/A, RG-8/B, RG-8/C, Belden 9258, LMR-240 or equivalent coaxial cable

Available from Linx Technologies and select distributors and representatives.

## ORDERING DIMENSIONS

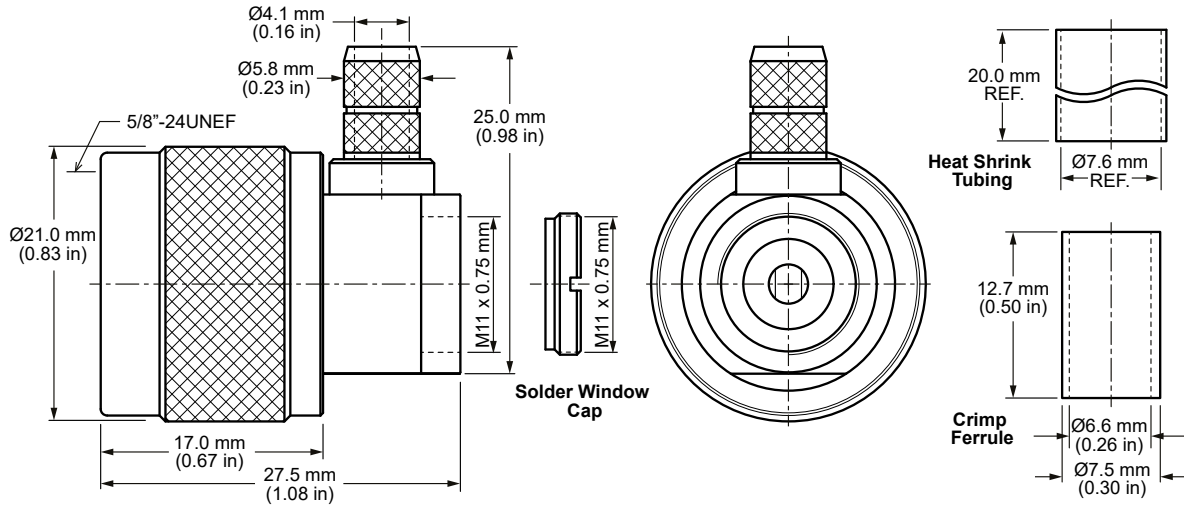


Figure 1: Product Dimensions for the CONN012-1-W Connector

## CONNECTOR COMPONENTS

Model	CONN012-1-W		
Connector Part	Material	Finish	
Connector Body	Brass	White Bronze	
Center Contact (pin)	Brass	Gold	
Insulator	PTFE	-	
Gasket	Silicone	-	
Crimp Ferrule	Brass	White Bronze	
Heat Shrink Tubing	PE	-	

## COAXIAL CABLE INSTALLATION

The CONN012-1-W provides a crimp type coaxial cable retention system for installation to the connector using the provided crimp ferrule and heat shrink tubing. The coaxial cable trim dimensions are provided below in Table 1 for supported coaxial cable types, and recommended hex crimp tool sizes for CONN012-1-W are shown in Table 2.

**TABLE 1. COAXIAL CABLE TRIM DIMENSIONS FOR THE CONN012-1-W CONNECTOR**

Coaxial Cable Types	A	A2	B
RG-8, RG-8/A, RG-8/B, RG-8/C, Belden 9258, LMR-240	2.5 mm (0.10 in)	11.0 mm (0.43 in)	19.5 mm (0.77 in)

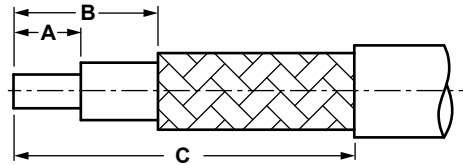


Figure 2: Recommended Hex Crimp Tool Sizes

Connector Part	Crimp Tool Size
Crimp Ferrule	5.41 mm (0.213 in)
Center Contact	2.54 mm (0.100 in)

### CONNECTOR PERFORMANCE

Table 3 shows insertion loss and VSWR values for the CONN00712-1-W connector at commonly used frequencies. Insertion loss is the loss of signal power (gain) resulting from the insertion of a device in a transmission line. VSWR describes how efficiently power is transmitted through the connector. A lower VSWR value indicates better performance at a given frequency.

**TABLE 3. INSERTION LOSS AND VSWR FOR THE CONN012-1-W CONNECTOR**

Band	Low-Band Cellular/ ISM/LPWA	Midband Cellular/ GNSS	WiFi/ISM	WiFi 6
Frequency Range	400 MHz to 960 MHz	1.1 GHz to 5 GHz	2.4 GHz	5 GHz to 7.125 GHz
Insertion Loss (dB max)	-0.10	-0.59	-0.22	-0.97
VSWR (max)	1.1	1.8	1.3	2.3

### MECHANICAL SPECIFICATIONS

Model	CONN012-1-W
Mounting Type	Coaxial Cable Mount, Crimp Type
Fastening Type	5/8"-24UNEF Threaded Coupling
Interface in Accordance with	MIL-STD-348A
Recommended Torque	0.85 N m (7.5 ft lbs)
Coupling Nut Retention	100 lbs. min.
Connector Durability	500 cycles min.
Weight	40.9 g (1.44 oz)

## ENVIRONMENTAL SPECIFICATIONS

MIL-STD/Method/Test Condition	
Corrosion (Salt spray)	MIL-STD-202 Method 101 test condition B
Thermal Shock	MIL-STD-202 Method 107 test condition B
Vibration	MIL-STD-202 Method 204 test condition B
Mechanical Shock	MIL-STD-202 Method 213 test condition I
Temperature Range	-60 °C to +165 ° C
Environmental Compliance	RoHS

## PACKAGING INFORMATION

The CONN012-1-W connectors are individually packaged in a clear plastic bag. Connectors are packaged in cartons of 250 pcs. Distribution channels may offer alternative packaging options.

### TE TECHNICAL SUPPORT CENTER

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