





# CSC-BNCM-ccc-BNCM

**BNC Plug to BNC Plug Cable Assembly** 

The CSC-BNCM-ccc-BNCM cable assembly provides a BNC plug (male pin) to BNC plug (male pin) connection with the option of 914 mm, 1500 mm, or 1800 mm lengths of RG-58C/U coaxial cable.

Operating from 0 Hz to 1 GHz, the CSC-BNCM- ccc-BNCM cable assembly combines superior performance, compact size, and a convenient twist-lock mating interface to provide a reliable, easy-to-use cable assembly. Additionally, all Linx coaxial cables and connectors meet RoHS lead free standards and are tested to meet requirements for corrosion resistance, vibration, mechanical and thermal shock.

#### **FEATURES**

- 0 Hz to 1 GHz operation
- BNC plug (male pin) connection
  - Nickel plated brass construction
  - Gold plated brass center contact
  - Bayonet-style (push-twist) connection
  - RG-58C/U 50 ohm coaxial cable

#### **APPLICATIONS**

- · Audio/Video
- Broadcasting
- · Test Equipment
- Surveillance Systems
- Ethernet
- Industrial, Commercial, Enterprise

#### **TABLE 1. ELECTRICAL SPECIFICATIONS**

Parameter	Value				
Insertion Loss (dB max)	CSC-BNCM-914-BNCM	CSC-BNCM-1500-BNCM	CSC-BNCM-1800-BNCM		
	1.0 1.3		1.4		
VSWR (max)	1.6				
Impedance	50 Ω				
Insulation Resistance	500 MΩ min.				

#### ORDERING INFORMATION

Part Number	Description		
CSC-BNCM-914-BNCM	BNC plug (male pin) to BNC plug (male pin) on 914.0 mm (35.98 in) of RG- 58C/U coaxial cable		
CSC-BNCM-1500-BNCM	BNC plug (male pin) to BNC plug (male pin) on 1500.0 mm (59.06 in) of RG- 58C/U coaxial cable		
CSC-BNCM-1800-BNCM	BNC plug (male pin) to BNC plug (male pin) on 1800.0 mm (70.87 in) of RG- 58C/U coaxial cable		

Available from Linx Technologies and select distributors and representatives.

# **PRODUCT DIMENSIONS**

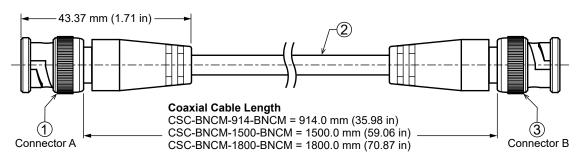


Figure 1. Product Dimensions for the CSC-BNCM-ccc-BNCM Cable Assembly

# **TABLE 2. CABLE ASSEMBLY COMPONENTS**

Item #	Description	Material	Finish
1	Connector, BNC plug (male pin)	Brass	Nickel
2	RG-58C/U coaxial cable	RG-58C/U	Black
3	Connector, BNC plug (male pin)	Brass	Nickel

#### TABLE 3. CABLE ASSEMBLY MECHANICAL SPECIFICATIONS

Parameter	Connector A BNC plug (male pin)	Connector B BNC plug (male pin)			
Fastening Type	Bayonet-style Coupling (Push/Twist)	Bayonet-style Coupling (Push/Twist)			
Connector Durability	500 cycles min.	500 cycles min.			
	CSC-BNCM-914-BNCM = 56.5 g (2.00 oz)				
Weight	CSC-BNCM-1500-BN	CSC-BNCM-1500-BNCM = 76.8 g (2.71 oz)			
	CSC-BNCM-1800-BN	CSC-BNCM-1800-BNCM = 86.8 g (3.10 oz)			

## **COAXIAL CABLE SPECIFICATIONS**

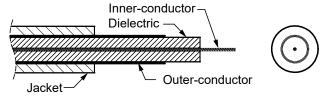


Figure 2. Coaxial Cable Cutaway Diagram

## TABLE 4. COAXIAL CABLE MATERIAL SPECIFICATIONS FOR RG-58C/U

Parameter	Material	Dimensions		
Inner-Conductor	Silver plated copper, 19 strand, 21 AWG	Ø0.085 mm (0.003 in)		
Dielectric	PE, Natural	Ø2.95 mm (0.12 in)		
Outer-Conductor	Silver plated copper braid, 112/0.10	Ø3.05 mm (0.12 in)		
Jacket	PVC, black	Ø5.0 mm (0.02 in) ±0.10 mm		

# TABLE 5. COAXIAL CABLE ELECTRICAL AND PHYSICAL SPECIFICATIONS FOR RG-58C/U

Parameter	Value					
Conductor Resistance	46.9 Ω/km @20 °C					
Nominal Impedance	50 ± 5 Ω					
Attenuation (dB/1M)	1.0 MHz 14	10 MHz 48	30 MHz 81	100 MHz 160	200 MHz 230	2000 MHz 900
Minimum Inside Bend radius	50.8 mm (2.00 in)					

# **INSERTION LOSS**

Figure 3 shows the Insertion Loss for the CSC-BNCM-ccc-BNCM cable assemblies. Insertion loss is the loss of signal power (gain) resulting from the insertion of a device in a transmission line.

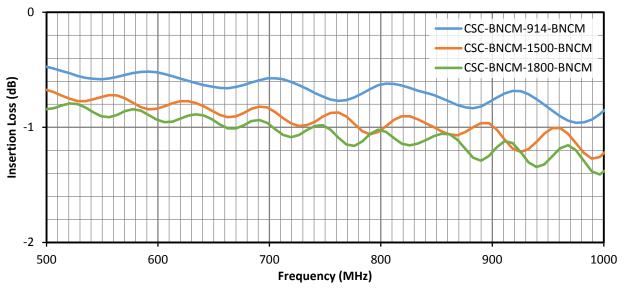


Figure 3. Insertion Loss for the CSC-BNCM-ccc-BNCM Cable Assemblies

#### **VSWR**

Figure 4 provides the voltage standing wave ratio (VSWR) across the cable assembly's bandwidth for the CSC-BNCM-ccc-BNCM cable assemblies. VSWR describes how efficiently power is transmitted through the cable assembly. A lower VSWR value indicates better performance at a given frequency.

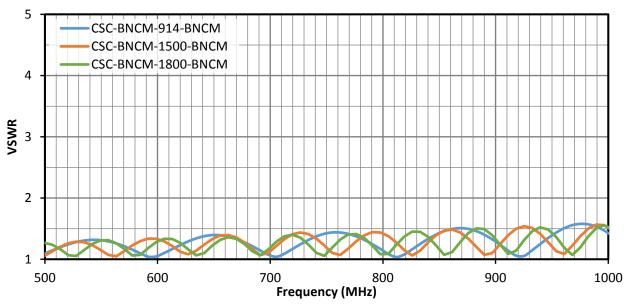


Figure 4. Insertion Loss for the CSB-RGFB-102-UFFR Cable Assembly

## **PACKAGING INFORMATION**

The CSC-BNCM-ccc-BNCM cable assembly is packaged in a clear plastic bag, in quantities of 10. Distribution channels may offer alternative packaging options.

#### CABLE ASSEMBLY DEFINITIONS AND USEFUL FORMULAS

**VSWR** - Voltage Standing Wave Ratio. VSWR is a unitless ratio that describes how efficiently power is transmitted through the cable assembly. A lower VSWR value indicates better performance at a given frequency. VSWR is easily derived from Return Loss.

$$VSWR = \frac{10^{\left[\frac{Return\ Loss}{20}\right]} + 1}{10^{\left[\frac{Return\ Loss}{20}\right]} - 1}$$

Insertion Loss - The loss of signal power (gain) resulting from the insertion of a device in a transmission line. Insertion loss can be derived from the power transmitted to the load before the insertion of the component PT and the power transmitted to the load after the insertion of the component  $PR_p$ .

$$Insertion \ Loss \ (dB) = 10 \log_{10} \frac{P_T}{P_R}$$

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