

100 FT Type N to Type N M/F 400 Series Low Loss Cable Jumper

CA400LL002-100FT



Configuration

- Connector 1: N Male
- Connector 2: N Female
- Cable Type: PPBC-400LL

Features

- LMR Equivalent Coax
- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Low Insertion Loss
- Double Shielded
- PE Jacket
- One Time Bend Radius of 1 Inch



Applications

- General Purpose
- Laboratory Use
- Antenna Installations
- Land Mobile Radio & Other Communication Systems
- Cellular & Wi-Fi Systems

Description

PolyPhaser CA400LL002-100FT is a 100 foot Type N to Type N M/F 400 Series Low Loss Cable Jumper is built using high quality components by skilled technicians to ensure a reliable product. The Type N Male and Type N Female cable jumper connections are designed to industry standard interface dimensions to ensure superior performance. If you have an immediate need, these products are available to ship same day. This high-quality RF coaxial assembly is perfect in many RF Interconnect applications such as Wireless Lan, telecom, industrial / commercial, and many other applications. The CA400LL002-100FT Type N to Type N cable assembly is the perfect companion to PolyPhaser line of RF surge protection devices particularly when used as an antenna jumper cable.

The 400 Series coax used in these Type N to Type N assemblies is a 0.4" diameter coax with a black polyethylene jacket. This cable's foam PE dielectric is low loss material with a VoP of 85% reducing the attenuation when compared to solid dielectric coax cables. PolyPhaser Low Loss 400 Series coax has a solid center conductor and uses a double shield comprised of a wire braid over a foil tape construction providing >90% shielding effectivity. The construction and materials of the CA400LL002-100FT result in a coax cable assembly with a one inch one time bend radius and a repeat bend radius of 4 inches. The cable assembly's combination of Type N to Type N (M)/(F) and 400 Series Low Loss Assembly supports a maximum operating frequency of 5.8 GHz. Detailed specifications for this configuration includes layout drawings and key performance specifications. All assemblies are design verified and shipped with a certificate of compliance.

Polyolefin heat shrink strain relief boots add additional strength on both ends of this 100 foot assembly. The epoxy filled heat shrink extends the life of these cables by distributing the stresses applied to the connector/coax attachment.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
[100 FT Type N to Type N M/F 400 Series Low Loss Cable Jumper CA400LL002-100FT](#)

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.3:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Capacitance		24 [78.74]		pF/ft [pF/m]
Jacket Spark			8,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Max.)	2.2	3.2	5.2	8.2	12.2	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Size

Length	1,200 in [30.48 m]
Diameter	0.405 in [10.29 mm]
Weight	6.542 lbs [2.97 Kg]

Cable

Cable Type	PPBC-400LL
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.4 in [10.16 mm]

One Time Minimum Bend Radius	1 in [25.4 mm]
Repeated Minimum Bend Radius	4 in [101.6 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]
Tensile Strength	160 lbs [72.57 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	N Male	N Female
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Silver	Phosphor Bronze, Gold
Contact Plating Specification	70µ in. minimum	
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Specification	100µ in. minimum	
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100µ in. minimum	

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

Compliance Certifications

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

PolyPhaser protects and increases the reliability of global RF communications networks, including transportation, telecommunications, defense, security and industrial applications, with superior RF surge protection technologies including DC Block, DC Pass and Ultra Low PIM. Backed by responsive service and expert technical support PolyPhaser continually expands its product offering and services to serve engineers' urgent needs for RF components in mission critical communication networks.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [100 FT Type N to Type N M/F 400 Series Low Loss Cable Jumper CA400LL002-100FT](https://www.polyphaser.com/100-ft-type-n-to-type-n-m-f-400-series-low-loss-cable-jumper-p.aspx)

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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. PolyPhaser reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. PolyPhaser does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and PolyPhaser does not assume any liability arising out of the use of any part or documentation.

CA400LL002-100FT CAD Drawing

