

10 M Type N to Type N M/F 240 Series Low Loss Cable Jumper

CA240LL016-10M



Configuration

- Connector 1: N Male
- Connector 2: N Female
- Cable Type: PPBC-240LL

Features

- LMR Equivalent Coax
- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Low Insertion Loss
- Double Shielded
- PE Jacket
- One Time Bend Radius of 0.75 Inches



Applications

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

Description

PolyPhaser CA240LL016-10M is a 10 meter Type N to Type N M/F 240 Series Low Loss Cable Jumper is built using high quality components by skilled technicians to ensure a reliable product. The N Male and N Female jumper connections are designed to industry standard interface dimensions to ensure superior performance. This product is in stock and available for same day shipping. This high-quality RF coaxial assembly is perfect in many RF Interconnect applications such as Land Mobile Radio (LMR), test and measurement, military / defense, and many other applications. The CA240LL016-10M 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 240 Series coax used in these assemblies is a 0.24 inch diameter coax with a black Polyethylene jacket. This cable's foam PE dielectric is low loss material with a VoP of 84% reducing the attenuation when compared to solid dielectric coax cables. PolyPhaser Low Loss 240 Series coax has a solid center conductor and uses a double shield comprised of a wire braid over a foil tape construction providing shielding >90%. The construction and materials of the CA240LL016-10M result in a coax cable assembly with 0.75" one time bend radius and a repeat bend radius of 2.5". The cable assembly's combination of Type N to Type N Male/Female and 240 Series Low Loss Cable 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 10 meter assembly. These epoxy filled heat shrinks provide strain relief to help prevent damage from over-bending the assembly ends.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
[10 M Type N to Type N M/F 240 Series Low Loss Cable Jumper CA240LL016-10M](#)

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.3:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Operating Voltage (AC)			1,500	Vrms
Jacket Spark			5,000	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.)	16	19.94	35.69	59.31	90.81	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 0.15 dB per N male connector and 0.1 dB per N female connector.

Mechanical Specifications

Size

Length	393.7 in [10 m]
Diameter	0.24 in [6.1 mm]
Weight	1.12225 lbs [509.04 g]

Cable

Cable Type	PPBC-240LL
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
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	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.752 in [19.1 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]

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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, Gold	Beryllium Copper, Gold
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	
Hex Size	18 mm	
Torque	9 in-lbs [1.02 Nm]	

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: [10 M Type N to Type N M/F 240 Series Low Loss Cable Jumper CA240LL016-10M](https://www.polyphaser.com/10-m-type-n-to-type-n-m-f-240-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.

CA240LL016-10M CAD Drawing

