



OUTER SHIELD

DIELECTRIC

SOLID CENTER CONDUCTOR

# **RF Cable Assemblies Technical Data Sheet**



- Connector 1: N Male
- Connector 2: 7/16 DIN Male

### Features

- Max Frequency 6 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 100 dB
- 76% Phase Velocity
- FEP Jacket
- PIM < -160 dBc
- 100% Tested with PIM Test Results Marked on Cable
- UL910 Plenum Rated Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)

## **Applications**

General PurposeLaboratory Use

Low PIM Applications

 Distributed Antenna Systems (DAS)

• Plenum Installations

- Multi-Carrier Communication
  Systems
- PIM Testing

Ø 280

[7.11]

JACKET

### Description

Ebeestock's low PIM plenum cable assemblies using coax and N male to 7/16 DIN male connections are part of our full line of RF components available for fast shipping. These N male to 7/16 DIN male plenum coax cable assemblies deliver low PIM performance to support Distributed Antenna Systems (DAS) and other complex, multi-carrier com-munication systems. The coax cable has been certified in accordance with UL910 for plenum coaxial cable installations. Each N male to 7/16 DIN male cable assembly is 100% tested for Passive Intermodulation (PIM) and the tested value is marked directly on the cable.

Our N male to 7/16 DIN male cable datasheet specifications and drawing with dimensions are shown below in this PDF. Whether the need is to provide a low PIM jumper connection, low PIM test cable or simply create a custom cable assembly configuration, Ebeestock has the right cable assemblies for the job.





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#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.35:1	
Velocity of Propagation		76		%
RF Shielding				dB
Passive Intermodulation		-165	-160	dBc
Capacitance		27 [88.58]		pF/ft [pF/m]
Inductance		0.067 [0.22]		uH/ft [uH/m]
Operating Voltage (AC)			750	Vrms

#### **Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2	4	6	GHz
Insertion Loss (Max.)	0.6	0.69	0.82	1	1.15	dB
VSWR (Max.)	1.25:1	1.25:1	1.25:1	1.35:1	1.35:1	

**Electrical Specification Notes:** 

PIM test results vary between cables

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.4dB of connector loss.

#### **Mechanical Specifications**

Cable Assembly	
Length*	60 in [152.4 cm]
Diameter	0.28 in [7.11 mm]

#### Cable

Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Outer Conductor Diameter 50 Ohms Solid Copper, Bare PTFE 1 Helically Corrugated Copper Tube 0.25 in [6.35 mm]

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## **RF Cable Assemblies Technical Data Sheet**

Jacket Material Jacket Diameter

One Time Minimum Bend Radius

FEP 0.28 in [7.11 mm] 1.5 in [38.1 mm]

#### Connectors

Description	Connector 1	Connector 2
Туре	N Male	7/16 DIN Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Silver	Brass, Silver
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Seal Gasket Material	Silicone Rubber Silicone Rubber	

Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8$ ", whichever is greater.

#### **Environmental Specifications**

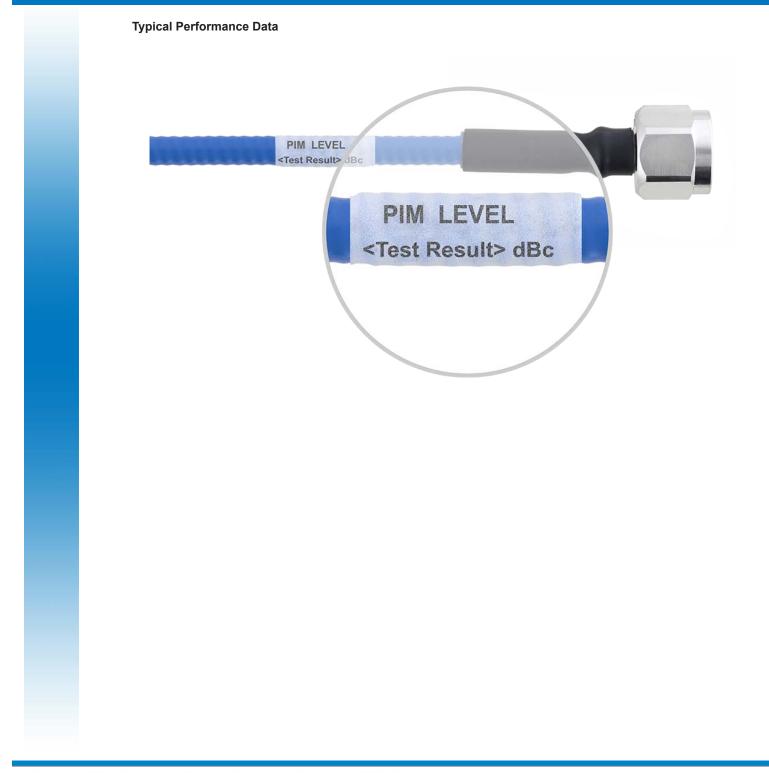
Temperature	
Operating Range	-55 to +200 deg C
Storage Range	-55 to +200 deg C
Plenum Rating	UL910

Notes: • Values at 25°C, sea level.





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8th Floor, Building 1, Yongfu Science and Technology Center Industrial Park, Nanzha District 5, Humen,523900,Dongguan, Guangdong, China Website: www.ebeestock.com Email: sales@ebeestock.com ET17407 CAD Drawing Plenum N Male to 7/16 DIN Male Low PIM Cable 60 Inch

Length Using Coax , LF Solder

