



STEADY LINK™

# DATA SHEET

## SERIES-C

### 1/2 IN. RF50 CORRUGATED COAXIAL CABLE ASSEMBLIES LOW PIM ASSEMBLY WITH STRAIGHT CONNECTORS



NAI's Series-C Low PIM Coax Cable Assemblies have been designed to provide durable and reliable connections for transmitters, receivers, antennas and other applications in antenna feeder systems on cell towers. Part of NAI's STEADY LINK™ line, these assemblies are well suited for connections in low loss and VSWR signal transmission at high frequency applications.

Series-C Low PIM Coax Assemblies are made to order from inventoried materials with quick turn programs available.



### NAI COAX ASSEMBLY CONFIGURATOR

NAI's easy-to-use online configurator will walk you through a set of decisions to be made in order to provide you a quote or place an order for your coax assemblies.

[www.nai-group.com/configcoax](http://www.nai-group.com/configcoax)

## PRODUCT SPECIFICATIONS

### GENERAL DESCRIPTION

Impedance:	50 ohm
Lengths Available:	As Specified by Customer
Frequencies Available:	10 MHz to 3,000+ MHz
Peak Power:	40 kW (7/16" DIN)

### CABLE SPECIFICATIONS

Center Conductor:	Copper-plated Aluminum
Dielectric:	Foam PE
Outer Shield:	Corrugated Copper
Jacket:	PE
O.D.	.62"

### CONNECTOR SPECIFICATIONS

Connector Types Available (male versions shown here):

7/16" DIN



N



4.3 – 10



4.1 – 9.5



**Connector Body:** Brass, with Tri-metal plate

**Connector Nut:** Brass Nickel plate

**Center Contact:**

Male: Phosphorus Bronze, with Silver plate

Female: Phosphorus Bronze, with Silver plate

**Dielectric:** PTFE

**Sealing Material:** Silicone Rubber

**Exterior Plastics:** Zero Halogen, IEC 60754-1 and IEC 60754-2

**Standards:** RoHS Compliant



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## PRODUCT SPECIFICATIONS (Continued)

### ELECTRICAL SPECIFICATIONS

<b>Impedance:</b>	50 ohm +/-2 ohms
<b>PIM:</b>	2x20W, dBc ≤160
<b>Inner Dielectric:</b>	Foam PE
<b>Standard:</b>	IEC 61196-1
<b>Return Loss (VSWR):</b>	Swept 800MHz -2700MHz [1.07:1.1]
<b>Velocity of Propagation (%)</b>	.86

### MECHANICAL SPECIFICATIONS

<b>Bend Radius:</b>	70mm Single
<b>Tensile:</b>	1130N
<b>Crush Resistance:</b>	2.0 kg/mm
<b>Sealing:</b>	IP 68
<b>Operating Temperatures:</b>	-40°C +/- 2°C to +85°C +/- 2°C @ 2 hours
<b>Rel. Humidity:</b>	-40°C +/- 2°C, 90~95% @ 48 hours
<b>Storage Temperature:</b>	-70°C to +85°C (-94°F to +185°F)

### OTHER STEADY LINK™ ASSEMBLIES AND OPTIONS FROM NAI

NAI Series-C 50-Ohm Coax Cable Assemblies and Series-S GPS & Sync Cable Assemblies offer a variety of standard assembly configurations. Refer to the respective data sheet for each type.

- Series-C Low PIM 50-Ohm Corrugated Coax Assemblies with Straight-to-Straight Connectors (This Data Sheet)
- Series-C Low PIM 50-Ohm Corrugated Flexible Coax Assemblies with Straight-to-Straight Connectors
- Series-C LMR\* 400 Coax Assemblies
- Series-C LMR\* 240 Coax Assemblies
- Series-S GPS and Sync Cable Assemblies
- Series-C Low PIM 50-Ohm Corrugated Flexible Coax Assemblies with Next10\*\* Connectors
- Series-C Low PIM 50-Ohm Corrugated Flexible and Regular Assemblies with Right Angle to Right Angle Connectors

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\*\* Next10 is a registered trademark of the Huber+Suhner, Radiall and Rosenberger consortium.