

## N Male to TNC Male Low Loss Cable Using PE-C400 Coax



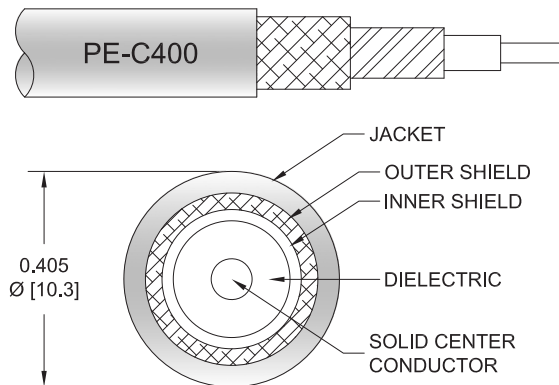
### PE3W09251

#### Configuration

- Connector 1: N Male
- Connector 2: TNC Male
- Cable Type: PE-C400
- Coax Flex Type: Flexible

#### Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W09251 type N male to TNC male cable using PE-C400 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack type N to TNC cable assembly has a male to male gender configuration with 50 ohm flexible PE-C400 coax. The PE3W09251 type N male to TNC male cable assembly operates to 5.8 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.5:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.059 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conductor		1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.85 [6.07]		Ohms/1000ft [Ohms/Km]

#### Specifications by Frequency

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### PE3W09251

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	250	500	1000	2500	5800	
PE3W09251	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.028	0.041	0.068	0.108	dB/ft	
			0.07	0.1	0.14	0.23	0.36	dB/m	
PE3W09251-24	24 inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	0.268
PE3W09251-36	36 inch	Insertion Loss (Typ.)	0.26	0.29	0.33	0.41	0.53	dB	0.331
PE3W09251-48	48 inch	Insertion Loss (Typ.)	0.28	0.32	0.37	0.48	0.64	dB	0.394
PE3W09251-60	60 inch	Insertion Loss (Typ.)	0.3	0.34	0.41	0.54	0.74	dB	0.457
PE3W09251-72	72 inch	Insertion Loss (Typ.)	0.32	0.37	0.45	0.61	0.85	dB	0.52

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.1 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.205 pounds
Additional Weight per Inch:	0.00525 pounds

### Mechanical Specifications

#### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.205 lbs [92.99 g]

#### Cable

Cable Type	PE-C400
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	0.405 in [10.29 mm]
Repeated Minimum Bend Radius	4 in [101.6 mm]

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#### Connectors

Description	Connector 1	Connector 2
Type	N Male	TNC Male
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Silver
Contact Plating Specification	15 µin minimum	ASTM-B700
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Nickel
Body Plating Specification		ASTM-B689
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Nickel
Coupling Nut Plating Specification		ASTM-B689
Hex Size	18 mm	

#### Environmental Specifications

Operating Range Temperature -40 to +85 deg C

**Compliance Certifications** (see [product page](#) for current document)

#### Plotted and Other Data

Notes:

## N Male to TNC Male Low Loss Cable Using PE-C400 Coax



### PE3W09251

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3W09251**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W09251-12 = 12 inches long cable  
PE3W09251-100cm = 100 cm long cable

N Male to TNC Male Low Loss Cable Using PE-C400 Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

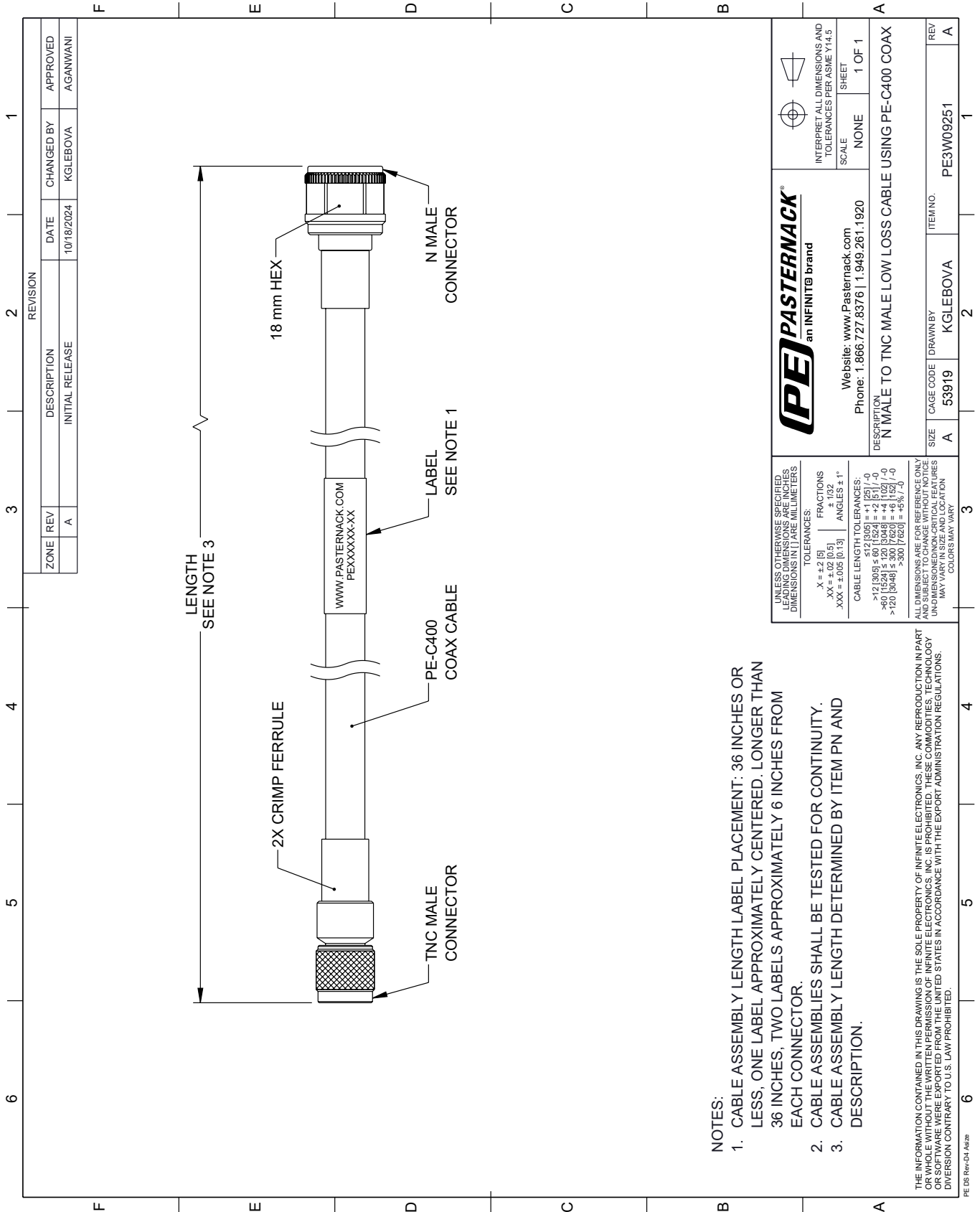
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to TNC Male Low Loss Cable Using PE-C400 Coax PE3W09251](#)

URL: <https://www.pasternack.com/n-male-to-tnc-male-low-loss-cable-using-pe-c400-pe3w09251-p.aspx>

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# PE3W09251 CAD Drawing

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**NOTES:**

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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