

## Waterproof IP68 N Male (Plug) to N Female (Jack) Low Loss Cable Using SPO-250 Coax with Times Microwave Components

### PE3C8508/WP



#### Configuration

- Connector 1: N Male
- Connector 2: N Female
- Cable Type: SPO-250
- Coax Flex Type: Flexible

#### Features

- Max Frequency 6 GHz
- Low PIM: -160 dBc Max
- 83% Phase Velocity
- PE Jacket
- Silicone Connector Boot
- IP68 Rated

#### Applications

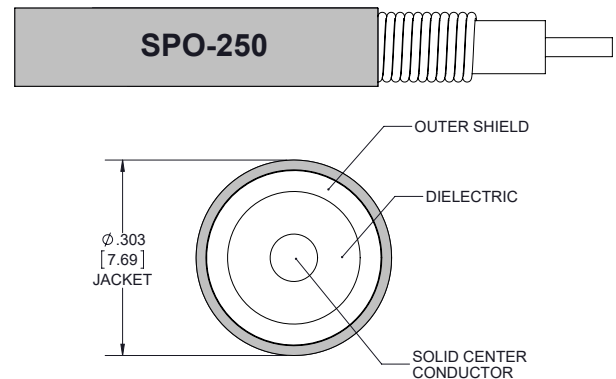
- General Purpose
- Laboratory Use

#### Description

The Pasternack PE3C8508/WP is a weatherproof low loss cable assembly that comes with type N male connection with weatherproof boot on one end and type N female on the other. Pasternack's RF coaxial cable assembly products are designed for typical use, production, laboratory test and measurement, defense/military, aerial antenna towers, etc. The low loss cable has a 50 Ohm impedance and is specifically ready for quicker shipment than most in the industry can provide.

This weatherproof low loss RF cable assembly operates at a maximum frequency of 6 GHz. Our RF cable assembly has a PE jacket with 0.303 inches diameter. The type N male to type N female cable assembly PE3C8508/WP is built with SPO-250 coax, which has a flexible design. This RF cable assembly with 0.5 inches diameter has copper clad aluminum as cable's inner conducting material and foam PE dielectric type. The weatherproof boot low loss cable can operate at a temperature range of -40 to 85 degrees C. Additional dimensions, specifications, and CAD drawings for this PE3C8508/WP low loss RF cable are available on our downloadable PDF datasheet.

Pasternack stocks a wide selection of weatherproof low loss cable assemblies that ship the same business day as ordered from our warehouse. Make your online purchase right now to take advantage of our same-day shipping. For further information on similar products, our expert technical support and knowledgeable sales team can help you get the ideal type N male to type N female cable assembly as per your requirements.



#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation			-160	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				
Capacitance		24 [78.74]		pF/ft [pF/m]

Waterproof IP68 N Male (Plug) to N Female (Jack) Low Loss Cable Using SPO-250 Coax with Times Microwave Components



## PE3C8508/WP

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Inductance		0.054 [0.18]		uH/ft [uH/m]

### Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
		Frequency	500	1000	2500	6000	MHz	
PE3C8508/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.028	0.041	0.068	0.108	dB/ft	
			0.1	0.14	0.23	0.36	dB/m	
PE3C8508/WP-24	24 In	Insertion Loss (Typ.)	0.2	0.29	0.46	0.71	dB	0.751
PE3C8508/WP-36	36 In	Insertion Loss (Typ.)	0.23	0.33	0.53	0.82	dB	0.798
PE3C8508/WP-60	60 In	Insertion Loss (Typ.)	0.29	0.2	0.66	1.03	dB	0.892
PE3C8508/WP-50CM	50 CM	Insertion Loss (Typ.)	0.19	0.27	0.43	0.67	dB	0.735

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*SQRT(FGHz) dB
Loss due to Connector 2:	0.1*SQRT(FGHz) dB
Base Weight:	0.704 pounds
Additional Weight per Inch:	0.00391 pounds

### Mechanical Specifications

#### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.704 lbs [319.33 g]

#### Cable

Cable Type	SPO-250
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	Foam PE
Outer Conductor 1 Material and Plating	Copper, Corrugated
Jacket Material	PE
Jacket Diameter	0.303 in [7.7 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]

## Waterproof IP68 N Male (Plug) to N Female (Jack) Low Loss Cable Using SPO-250 Coax with Times Microwave Components



### PE3C8508/WP

#### Connectors

Description	Connector 1	Connector 2
Type	N Male	N Female
Option	Weatherproof Boot	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Phosphor Bronze, Silver	Brass, Silver
Contact Plating Specification	196 µin minimum	200 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Outer Conductor Plating Specification		100 µin minimum
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	118 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification	118 µin minimum	
Boot Material	Silicone	Silicone

#### Environmental Specifications

Operating Range Temperature	-40 to +85 deg C
Ingress Protection (IP) Rating	IP68

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

#### Plotted and Other Data

Notes:  
Values at 25°C, sea level.

## Waterproof IP68 N Male (Plug) to N Female (Jack) Low Loss Cable Using SPO-250 Coax with Times Microwave Components



### PE3C8508/WP

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C8508/WP**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C8508/WP-12 = 12 inches long cable  
PE3C8508/WP-100cm = 100 cm long cable

Waterproof IP68 N Male (Plug) to N Female (Jack) Low Loss Cable Using SPO-250 Coax with Times Microwave Components 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: [Waterproof IP68 N Male \(Plug\) to N Female \(Jack\) Low Loss Cable Using SPO-250 Coax with Times Microwave Components PE3C8508/WP](#)

URL: <https://www.pasternack.com/waterproof-ip68-n-male-plug-to-n-female-jack-low-loss-cable-using-spo-250-pe3c8508-wp-p.aspx>

The information contained within 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. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3C8508/WP CAD Drawing

Waterproof IP68 N Male (Plug) to N Female (Jack) Low Loss Cable Using SPO-250 Coax with Times Microwave Components

