

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



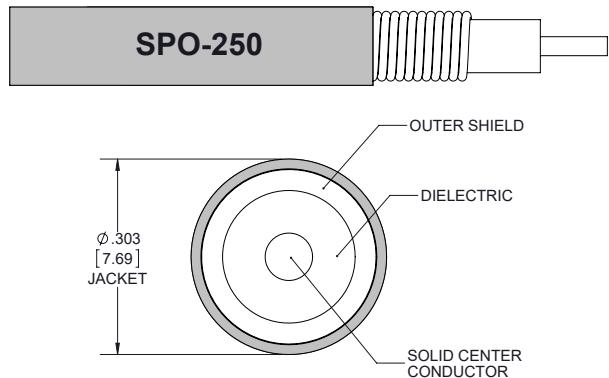
PE3C8509/WP

Configuration

- Connector 1: N Male
- Connector 2: N Female Bulkhead
- 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 PE3C8509/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 PE3C8509/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 PE3C8509/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]

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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	
PE3C8509/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.042	0.06	0.103	0.166	dB/ft	
			0.14	0.2	0.34	0.55		
PE3C8509/WP-12	12 Inch	Insertion Loss (Typ.)	0.22	0.26	0.37	0.52	dB	0.849
PE3C8509/WP-24	24 Inch	Insertion Loss (Typ.)	0.26	0.32	0.47	0.68	dB	0.896
PE3C8509/WP-36	36 Inch	Insertion Loss (Typ.)	0.3	0.38	0.57	0.85	dB	0.943
PE3C8509/WP-60	60 Inch	Insertion Loss (Typ.)	0.39	0.5	0.78	1.18	dB	1.037
PE3C8509/WP-50CM	50 CM	Insertion Loss (Typ.)	0.24	0.3	0.43	0.62	dB	0.88

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 dB

Base Weight: 0.849 pounds

Additional Weight per Inch: 0.00391 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter .5 in [12.7 mm]
Weight 0.849 lbs [385.1 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]

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Connectors

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

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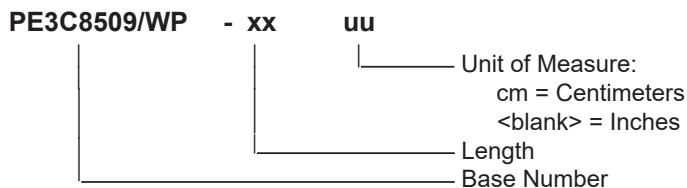


PE3C8509/WP

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3C8509/WP-12 = 12 inches long cable
PE3C8509/WP-100cm = 100 cm long cable

Waterproof IP68 N Male (Plug) to N Female (Jack) Bulkhead 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 \(Jack\) Bulkhead Low Loss Cable Using SPO-250 Coax with Times Microwave Components PE3C8509/WP](#)

URL: <https://www.pasternack.com/waterproof-ip68-n-male-plug-to-n-female-jack-bulkhead-low-loss-cable-using-spo-250-pe3c8509-wp-p.aspx>

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PE3C8509/WP CAD Drawing

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