



## N Female Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2" Superflexible, PE-1/2SFHC

### TECHNICAL DATA SHEET

PE44731

#### N Female Connectors

These Pasternack Enterprises' high performance connectors are designed to fit on most commercially available 1/2" superflexible, spiral corrugated copper cables and aluminum cables. These connectors are perfect for applications requiring low PIM levels, with outstanding RF performance and are easy to install in the field.

Features of the new connectors include:

- Tri-metal coating resulting in a very durable surface with good corrosion protection while providing superior electrical conductivity and exceptional PIM performance
- PIM performance of  $\leq -160$  dBc. VSWR levels of  $\leq 1.10$  up to 3GHz
- Available in 7/16 DIN and Type N series with both male and female interfaces
- O Rings gaskets provide a reliable long term weather seal
- Designed to fit on most commercially available 1/2" corrugated copper and aluminum cables

#### Configuration

Connector	N Female
Connector Interface Type	1/2" Superflexible, PE-1/2SFHC
Cable Attachment Method (Shield/Contact)	Clamp/Non-Solder Contact
Connector Design	Low PIM
Body Style	Straight

#### Electrical Specifications

Frequency Range, GHz	DC to 3
Impedance, Ohms	50
Maximum VSWR	1.1:1
Maximum Insertion Loss, dB	0.1
Dielectric Withstanding Voltage, Vrms	2,500
Maximum Passive Intermodulation (2 x 20 Watts), dBc	-160

#### Mechanical Specifications

##### Temperature

Operating Range, deg C	-40 to +85
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##### Size

Length, in [mm]	2.03 [51.56]
Width/Dia., in [mm]	0.846 [21.49]
Weight, lbs [g]	0.23 [104.33]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Female Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2" Superflexible, PE-1/2SFHC PE44731](#)

The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal.



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**Connector**

Type	N Female
Mating Cycles	500
Contact Material and Plating	Spring Copper, Silver
Contact Plating Specification	200 [5] $\mu$ in. [ $\mu$ m] minimum
Body Material and Plating	Brass, Tri-Metal
Body Plating Specification	78 [2] $\mu$ in. [ $\mu$ m] minimum
Dielectric Type	TPX

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant	Yes
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**Plotted and Other Data**

Notes:	Values at 25 °C, sea level
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N Female Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2" Superflexible, PE-1/2SFHC from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

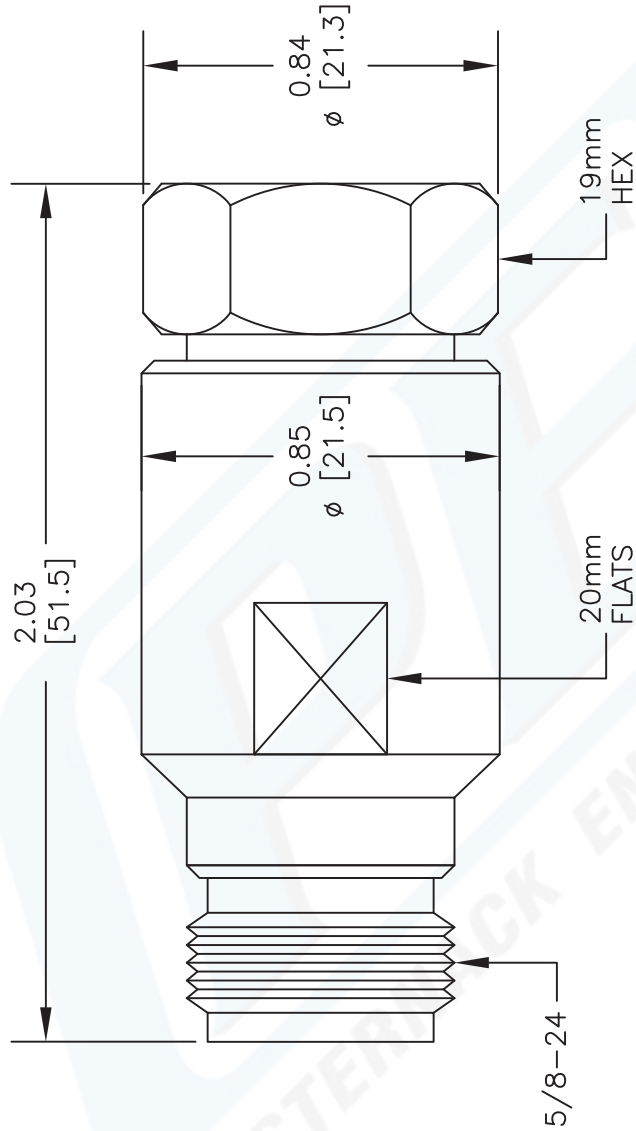
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Female Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2" Superflexible, PE-1/2SFHC PE44731](http://www.pasternack.com/n-female-standard-1-2-inch-super-flexible-pe-1-2sfhc-connector-pe44731-p.aspx)

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# PE44731 CAD Drawing

N Female Low PIM Connector Clamp/Non-Solder Contact  
Attachment For 1/2" Superflexible, PE-1/2SFHC



## NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

## DWG TITLE

**PE44731**

REV. -

FSCM NO. 53919

DATE 081412

SCALE N/A

SIZE A

2233

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**COAXIAL & FIBER OPTICS**





## N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical

### RF Connectors Technical Data Sheet

**PE44554**

#### Configuration

- N Male Connector
- IEC 60169-16
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: 1/2 inch Helical, 1/2 inch Superflexible, PE-1/2 Helical, PE-1/2SFHC
- 3/4 inch Hex
- Low PIM Design

#### Features

- Max. Operating Frequency 3 GHz
- Excellent VSWR of 1.1:1
- PIM levels lower than -160 dBc
- Silver Plated Brass Contact
- 5 µm minimum contact plating
- IP67 Rated

#### Applications

- General Purpose Test
- Custom Cable Assemblies
- Wireless Communications
- Low PIM Applications

#### Description

Pasternack's PE44554 type N Right Angle, N, Low PIM, Connector is part of our full line of RF components available for same-day shipping. Our type N male connector operates up to a maximum frequency of 3 GHz and offers excellent VSWR of 1.1:1. The type N male connector also has low passive intermodulation of -160 dBc. Its right angle body geometry allows for easier connections in tight spaces. The connector has an IP67 rating to protect against dust and temporary moisture protection under immersion conditions.

Our type N male right angle connector PE44554 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.1:1	
Insertion Loss			0.1	dB
Passive Intermodulation using 2x20W tones			-160	dBc
Impedance		50		Ohms
Dielectric Withstanding Voltage (DC)			2,500	Vdc
Inner Conductor DC Resistance			0.8	mOhms
Outer Conductor DC Resistance			0.4	mOhms
Insulation Resistance	5,000			MOhms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical PE44554](#)



N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical

**RF Connectors**  
**Technical Data Sheet**

**PE44554**

**Mechanical Specifications**

**Size**

Length	2.77 in [70.36 mm]
Width	0.75 in [19.05 mm]
Height	1.73 in [43.82 mm]
Weight	0.43 lbs [194.14 g]

**Material Specifications**

Description	Material	Plating
Contact	Brass	Silver 5 µm minimum
Insulation	PTFE	
Body	Brass	Tri-Metal 2 µm minimum
Coupling Nut	Brass	Nickel 5 µm minimum

**Environmental Specifications**

**Temperature**

Operating Range	-55 to +155 deg C
Ingress Protection (IP) Rating	IP67 Rated
Shock	MIL-STD-202, Method 213, Condition I
Vibration	MIL-STD-202, Method 204, Condition B
Thermal Shock	MIL-STD-202, Method 107, Condition B

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

**Plotted and Other Data**

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical PE44554](#)





## N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical

### RF Connectors Technical Data Sheet

**PE44554**

N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical 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.

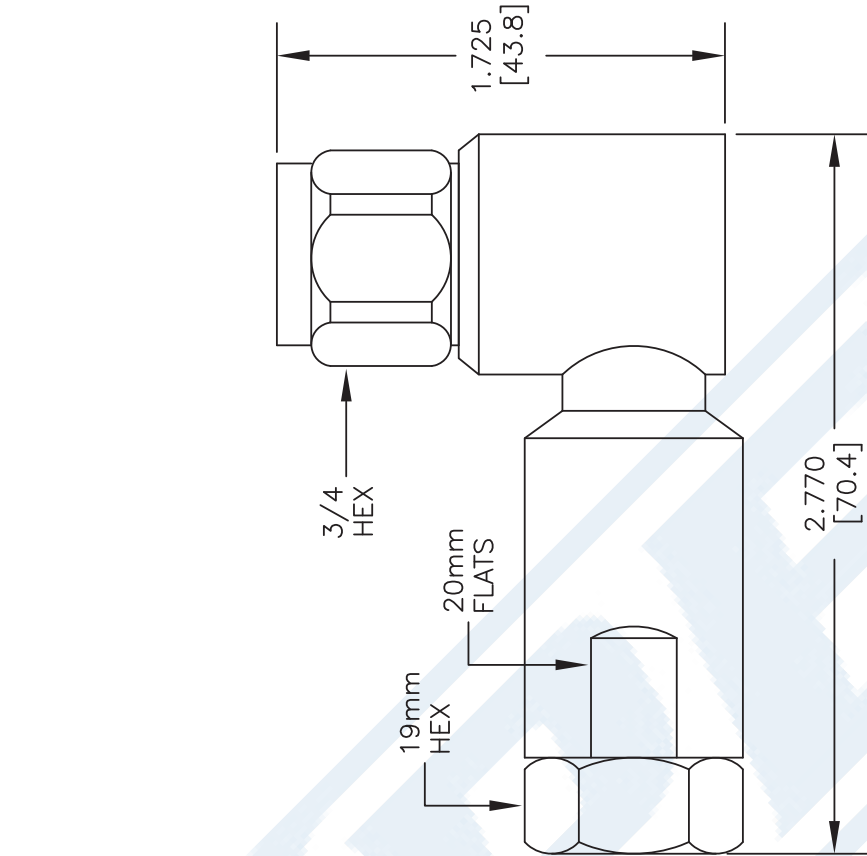
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical PE44554](https://www.pasternack.com/n-male-standard-1-2-inch-helical-connector-pe44554-p.aspx)

URL: <https://www.pasternack.com/n-male-standard-1-2-inch-helical-connector-pe44554-p.aspx>

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PE44554 CAD Drawing

N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical



ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN, CHAMFER CENTER CONDUCTOR & DEBURR CABLE.
2. PUT THE SCREW GASKET ONTO CABLE, PAY ATTENTION TO THE CORRECT DIRECTION OF THE SCREW GASKET (ANGLE DIRECTION TOWARDS THE FRONT). WIPE THE GASKET WITH GREASE.
3. SCREW CLAMP NUT ONTO CABLE UNTIL EDGES OF NUT & OUTER CONDUCTOR ARE FLAT.
4. SLIDE O-RING OVER THREAD AND SEAT INTO PLACE. GREASE O-RING.
5. HOLD CLAMP NUT STEADY & SCREW BODY TIGHTLY ONTO CABLE.

DWG TITLE

PE44554

FSCM NO. 53919

CAD FILE 091813

SCALE N/A

SIZE A

2233

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2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].  
4. FITS MIL-C-17 AND EQUIVALENT CABLES.



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## Low Loss SPO-500 Rated Corrugated Coax Cable with Black PE Jacket Superflexible Outdoor Rated

### RF Cables Technical Data Sheet



SPO-500

#### Times Microwave Systems Coax Cable Specification

##### Configuration

- Low Loss Corrugated Cable
- 1 Shield(s)

##### Features

- PIM < -160 dBc
- Lightweight and Super Flexible
- Low Loss Dielectric 83% VoP
- Shielding > 100 dB
- Durable Black Polyethylene Outer Jacket
- Outdoor Rated

##### Applications

- Distributed Antenna Systems (DAS)
- Antenna Installations
- Small Cell
- Outdoor Applications
- Commutation Tower Install

##### Description

SPO-500 low loss outdoor rated coax cable by Times Microwave is part of our full line of RF components available for same-day shipping. The SPO-500 coaxial cable features a low loss dielectric with an 83% velocity of propagation (VoP), BCCAL center conductor and a helically corrugated, copper outer conductor. These features combine to make the Times Microwave SPO-500 a superflexible, low PIM coax cable that is well suited for use as an antenna jumper cable, Distributed Antenna Systems (DAS), small cell, and other outdoor applications. The tough, black polyethylene jacket provides moisture and UV protection and is suitable for outdoor use.

Our datasheet specifications and drawing with dimensions for Times Microwave SPO-500 coax cable are shown below in this PDF. Whether the need is to provide a low PIM jumper connection, low PIM feeder cable or simply create a custom cable assembly configuration, Pasternack has the right SPO-500 cable assembly for the job. See our web site to find the right connector cable combination for your application.

##### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
Impedance		50		Ohms
Velocity of Propagation		83		%
Passive Intermodulation			-158	dBc
Nominal Capacitance		24 [78.74]		pF/ft [pF/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss SPO-500 Rated Corrugated Coax Cable with Black PE Jacket Superflexible Outdoor Rated SPO-500](#)





## Low Loss SPO-500 Rated Corrugated Coax Cable with Black PE Jacket Superflexible Outdoor Rated

### RF Cables Technical Data Sheet



SPO-500

#### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2	6		GHz
Attenuation, Typ	2.43	3.51	5.12	9.6		dB/100ft
	7.97	11.52	16.8	31.5		dB/100m
Input Power (CW), Max	1,260	900	610	260		Watts

#### Mechanical Specifications

Diameter	0.53 in [13.46 mm]
Weight	0.121 lbs/ft [0.18 Kg/m]
Min. Bend Radius (Installation)	2.25 in [57.15 mm]

#### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Aluminum <sup>1</sup>	0.14 in 3.56 mm
Conductor Type	Solid	
Dielectric	Foam PE	0.35 in 8.89 mm
Outer Conductor	Copper Corrugated	0.48 in 12.19 mm
Jacket	PE, Black	0.53 in [13.46 mm]

#### Environmental Specifications

Temperature Operating Range	-40 to +85 deg C
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Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss SPO-500 Rated Corrugated Coax Cable with Black PE Jacket Superflexible Outdoor Rated SPO-500](#)



## Low Loss SPO-500 Rated Corrugated Coax Cable with Black PE Jacket Superflexible Outdoor Rated

### RF Cables Technical Data Sheet



SPO-500

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

#### Plotted and Other Data

Notes:

Low Loss SPO-500 Rated Corrugated Coax Cable with Black PE Jacket Superflexible Outdoor Rated 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.

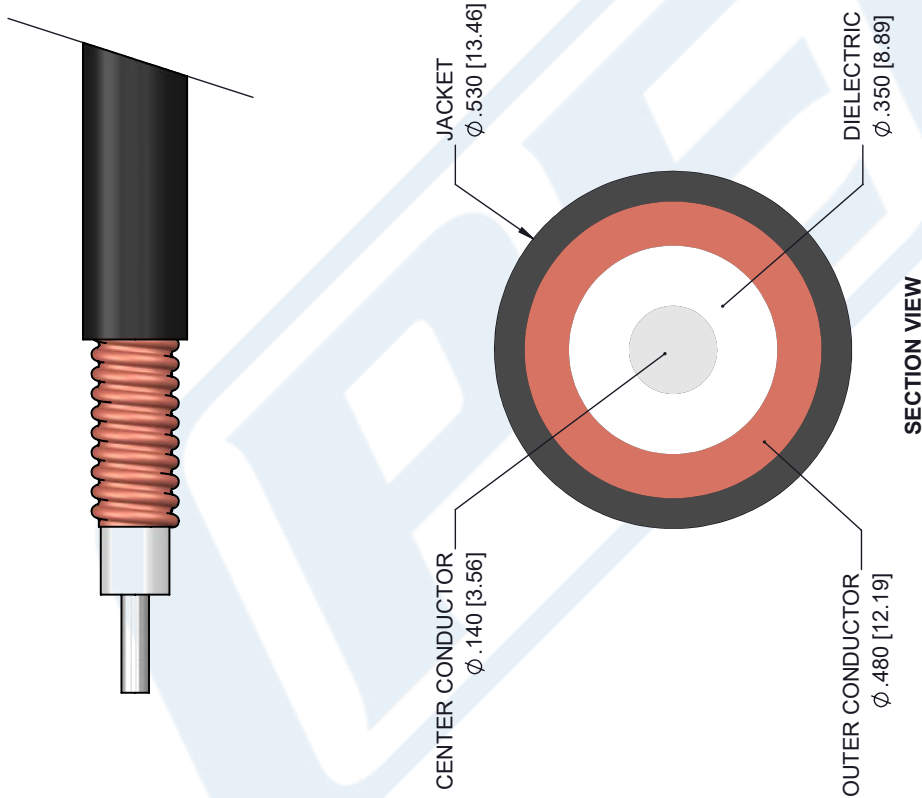
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss SPO-500 Rated Corrugated Coax Cable with Black PE Jacket Superflexible Outdoor Rated SPO-500](#)

URL: <https://www.pasternack.com/low-loss-corrugated-spo500-pe-jacket-spo-500-p.aspx>

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**TIMES** MICROWAVE SYSTEMS **SPO-500 CAD Drawing**  
 Low Loss SPO-500 Rated Corrugated Coax Cable with  
 Black PE Jacket Superflexible Outdoor Rated

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	03/04/19	S. ELLIS



<b>[PE] PASTERNAK</b> an INFINITI brand Pasternack Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920   1.866.727.8376 Fax: 1.949.261.7451 www.pasternack.com   e-mail: sales@pasternack.com		THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED. SHEET 1 OF 1 SCALE N/A	
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS TOLERANCES: X±.2 [5.08] XX±.01 [.25] XXX±.005 [0.13]	FRACTIONS ±1/32 ANGLES ±1° ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	SIZE CAGE A 53919	DRAWN BY K.DANG
THIRD ANGLE PROJECTION 		PART NUMBER SPO-500	REV A

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