



## 7/16 DIN Male Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2" Superflexible, PE-1/2SFHC

### TECHNICAL DATA SHEET

PE44732

#### 7/16 DIN Male 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	7/16 DIN Male
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	3,000
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]	2.04 [51.82]
Width/Dia., in [mm]	1.25 [31.75]
Weight, lbs [g]	0.28 [127.01]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [7/16 DIN Male Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2" Superflexible, PE-1/2SFHC PE44732](#)

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**Connector**

Type	7/16 DIN Male
Mating Cycles	500
Contact Material and Plating	Spring Copper, Silver
Contact Plating Specification	200 [5] $\mu$ in. [ $\mu$ m] minimum
Outer Conductor Material and Plating	Brass, Tri-Metal
Outer Conductor Plating Specification	78 [2] $\mu$ in. [ $\mu$ m] minimum
Coupling Nut Material and Plating	Brass, Nickel
Coupling Nut Plating Specification	200 [5] $\mu$ in. [ $\mu$ m] minimum
Hex Size, mm	32
Torque, ft-lbs [Nm]	18.417 [24.97]
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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7/16 DIN Male 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.

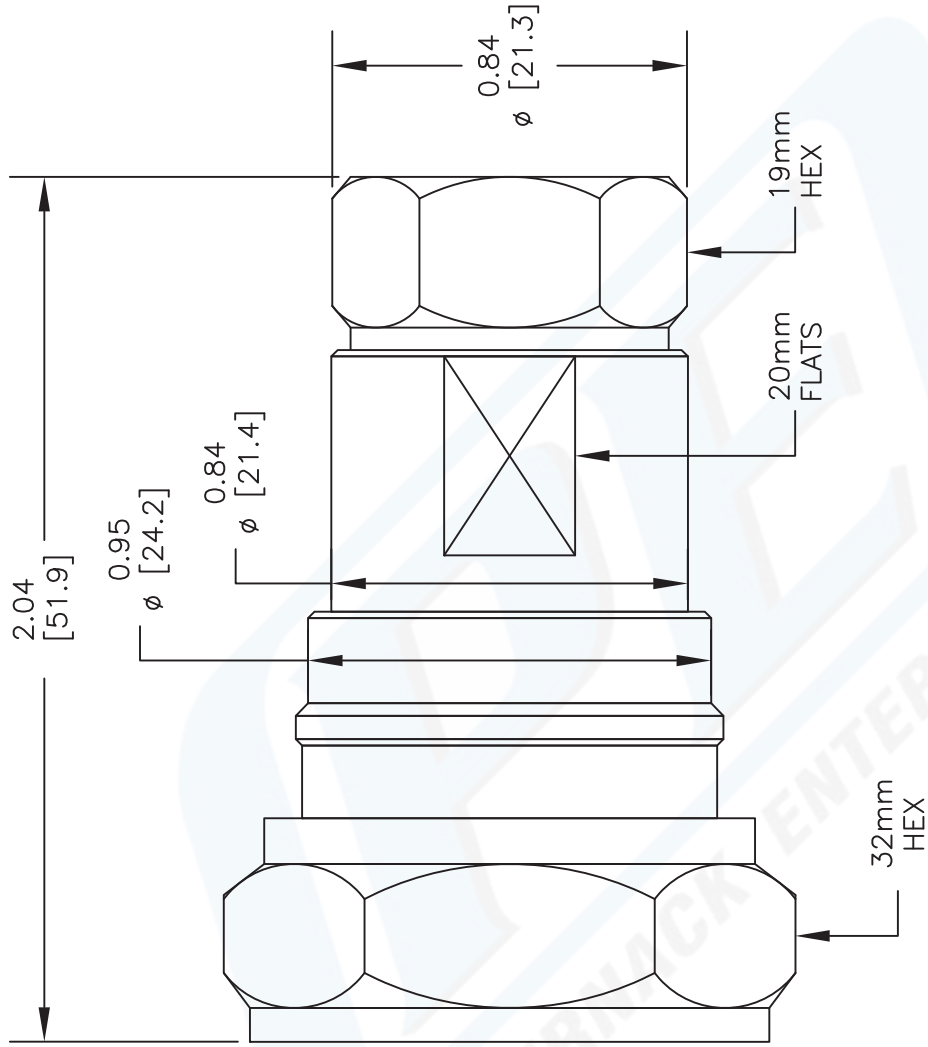
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [7/16 DIN Male Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2" Superflexible, PE-1/2SFHC PE44732](http://www.pasternack.com/7-16-male-standard-1-2-inch-super-flexible-pe-12sfhc-connector-pe44732-p.aspx)

URL: <http://www.pasternack.com/7-16-male-standard-1-2-inch-super-flexible-pe-12sfhc-connector-pe44732-p.aspx>

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# PE44732 CAD Drawing

7/16 DIN Male Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2" Superflexible, PE-1/2SFHC



7/16  
MALE

DWG TITLE

**PE44732**

NOTES:  
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 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
 3. DIMENSIONS ARE IN INCHES [mm].

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COAXIAL & FIBER OPTICS



REV. -

FSCM NO. 53919

DATE 08/14/12

SCALE N/A

SIZE A

2233



7/16 DIN Female Connector Clamp/Solder  
Attachment For 1/2 inch Helical

TECHNICAL DATA SHEET

PE44560

**7/16 DIN Female Connector Clamp/Solder Attachment For 1/2 inch Helical**

**Configuration**

Connector	7/16 DIN Female
Connector Specification	IEC60169-4
Connector Interface Type	1/2 inch Helical
Cable Attachment Method (Shield/Contact)	Clamp/Solder
Body Style	Straight

**Electrical Specifications**

Frequency Range, GHz	DC to 3
Impedance, Ohms	50
Maximum Return Loss, dB	28
Maximum Operating Voltage, Volts	2,700

**Frequency 1**

Frequency, GHz	DC to 2
Insertion Loss, dB	0.05
Power Handling, Watts	400

**Mechanical Specifications**

**Temperature**

Operating Range, deg C	-55 to +155
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**Size**

Length, in [mm]	2 [50.8]
Width/Dia., in [mm]	1.14 [28.96]
Weight, lbs [Kg]	4.1 [1.86]

**Connector**

Type	7/16 DIN Female
Contact Material and Plating	Beryllium Copper, Silver
Contact Plating Specification	5µ in. Minimum
Body Material and Plating	Brass, Tri-Metal
Body Plating Specification	2µ in. Minimum
Dielectric Type	PTFE

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

RoHS Compliant	Yes
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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: [7/16 DIN Female Connector Clamp/Solder Attachment For 1/2 inch Helical PE44560](#)

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7/16 DIN Female Connector Clamp/Solder  
Attachment For 1/2 inch Helical

TECHNICAL DATA SHEET

PE44560

**Plotted and Other Data**

Notes:

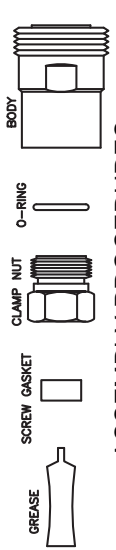
Values at 25 °C, sea level

7/16 DIN Female Connector Clamp/Solder Attachment For 1/2 inch Helical 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.

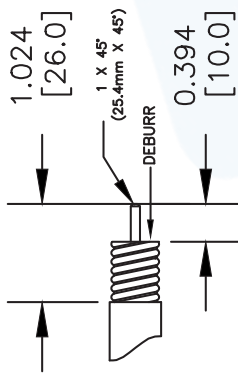
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URL: <http://www.pasternack.com/7-16-female-standard-1-2-inch-helical-connector-pe44560-p.aspx>

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1. STRIP CABLE AS SHOWN, CHAMFER CENTER CONDUCTOR & DEBURR CABLE.

### ASSEMBLY PROCEDURES



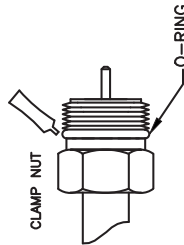
2. PUT THE SCREW GASKET ONTO CABLE, PAY ATTENTION TO THE CORRECT DIRECTION OF THE SCREW GASKET (ANGLE DIRECTION TOWARDS THE FRONT). WIPE THE GASKET WITH GREASE.



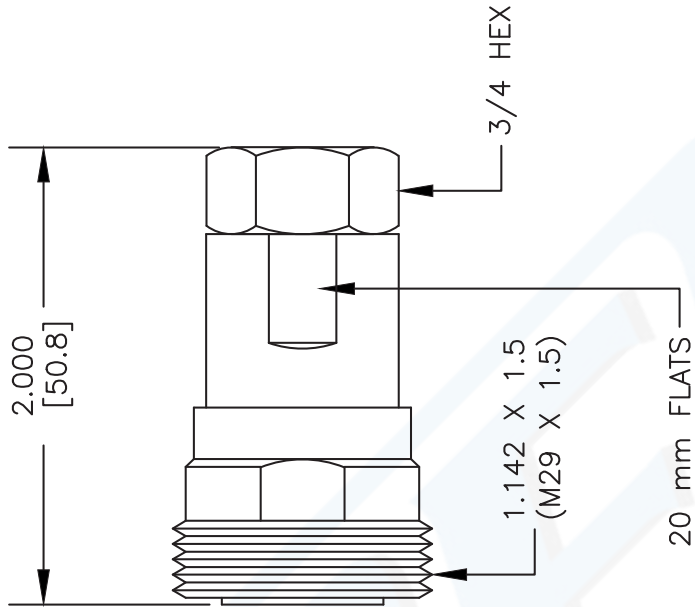
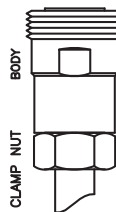
3. SCREW CLAMP NUT ONTO CABLE UNTIL EDGES OF NUT & OUTER CONDUCTOR ARE FLAT.



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

**PE44560**

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 3. DIMENSIONS ARE IN INCHES [mm].  
 4. FITS MIL-C-17 AND EQUIVALENT CABLES.

**FSCM NO. 53919**

CAD FILE 081808

SCALE N/A

SIZE A

147

**PE PASTERNAK®**  
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## Low Loss 1/2 inch Superflexible Corrugated Coax Cable with Black PE Jacket

### RF Cables Technical Data Sheet

PE-1/2SFHC

#### Configuration

- Low Loss Corrugated Cable
- 1 Shield(s)

#### Features

- Low Passive Intermodulation
- Solid copper outer conductor provides the highest possible RF shielding
- Superflexible helically corrugated copper outer conductor enables a small bending radius
- Excellent return loss performance
- Highly foamed dielectric provides low attenuation

#### Description

Our corrugated cables and Low PIM connector combinations result in cable assemblies with excellent Passive Intermodulation performance. Solid copper outer conductors provide the highest possible RF shielding. This Superflexible cable features excellent return loss performance. The highly foamed dielectric and optimized dimensions of these cables result in excellent low attenuation values. The Superflexible helically corrugated copper outer conductor allows for a small bending radius.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		10.2	GHz
Cutoff Frequency		13		GHz
Impedance		50		Ohms
Velocity of Propagation		82		%
Shielding Effectiveness	120			dB
Operating Voltage (AC)			1,000	Vrms
Dielectric Withstanding Voltage (AC)			2,500	Vrms
Inner Conductor DC Resistance			0.91	Ohms/1000ft
Outer Conductor DC Resistance			1.08	Ohms/1000ft
Nominal Capacitance		25.3 [83.01]		pF/ft [pF/m]
Nominal Inductance		0.059 [0.19]		uH/ft [uH/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 1/2 inch Superflexible Corrugated Coax Cable with Black PE Jacket PE-1/2SFHC](#)



## Low Loss 1/2 inch Superflexible Corrugated Coax Cable with Black PE Jacket

### RF Cables Technical Data Sheet

PE-1/2SFHC

#### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.45	0.9	1	1.8	GHz
Attenuation, Typ	1.01	2.22	3.22	3.41	4.72	dB/100ft
	3.31	7.28	10.56	11.19	15.49	dB/100m
Input Power (CW), Max	2,590	1,180	810	770	560	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	2	3	4	5	6	GHz
Attenuation, Typ	5.01	6.3	7.44	8.48	9.44	dB/100ft
	16.44	20.67	24.41	27.82	30.97	dB/100m
Input Power (CW), Max	530	420	350	31	280	Watts

#### Mechanical Specifications

Diameter	0.519 in [13.18 mm]
Weight	0.132 lbs/ft [0.2 Kg/m]
Number of Bends, Min	20
Min. Bend Radius (Installation)	0.6 in [15.24 mm]
Min. Bend Radius (Repeated)	1.18 in [29.97 mm]
Tensile Strength	79 lbs [35.83 kg]

#### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Aluminum <sup>1</sup>	0.141 in 3.58 mm
Conductor Type	Solid	
Dielectric	PE (F)	0.378 in 9.6 mm
Outer Conductor	Helically Corrugated Copper Tube	0.468 in 11.89 mm
Jacket	PE, Black	0.519 in [13.18 mm]

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## Low Loss 1/2 inch Superflexible Corrugated Coax Cable with Black PE Jacket

### RF Cables Technical Data Sheet

PE-1/2SFHC

#### Environmental Specifications

##### Temperature

Operating Range

-55 to +85 deg C

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

#### Plotted and Other Data

Notes:

Low Loss 1/2 inch Superflexible Corrugated Coax Cable with Black PE Jacket 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.

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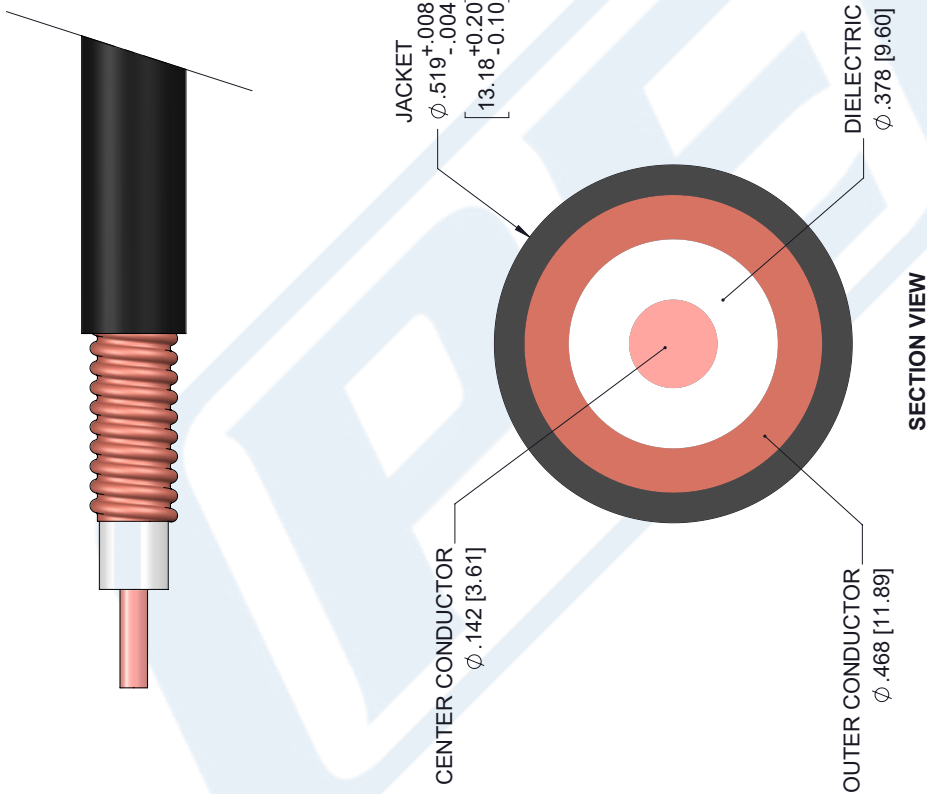
URL: <https://www.pasternack.com/50-ohm-low-loss-corrugated-1-2-superflexible-helical-coax-pe-1-2sfhc-p.aspx>

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# PE-1/2SFHC CAD Drawing

Low Loss 1/2 inch Superflexible Corrugated Coax Cable with Black PE Jacket

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1.1	PCR PE-1/2SFHC 20190708	07/16/19	S.ELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	
X±.2 [5.08]	FRACTIONS ±.132
.XX±.01 [.25]	ANGLES ± 1°
.XXX±.005 [.13]	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

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SIZE A CAGE 53919 DRAWN BY K.DANG	PART NUMBER PE-1/2SFHC		

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