



4.3-10 Male Low PIM Connector Solder Attachment for SPP-500-LLPL, SPO-500, SPF-500

RF Connectors Technical Data Sheet



TC-SPP500-4310M-LP

Times Microwave Systems Connector Specification

Configuration

- 4.3-10 Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: SPP-500-LLPL, SPO-500, SPF-500
- Low PIM Design

Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.25:1
- PIM levels lower than -160 dBc
- Silver Plated Brass Contact
- 200 µin contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies
- Distributed Antenna Systems (DAS)
- Wireless Communications
- Low PIM Applications

Description

Times Microwave's TC-SPP500-4310M-LP 4.3-10 male connector offered by Pasternack with solder/solder attachment for Times' SPP-500-LLPL, SPO-500 and SPF-500 is part of our full line of RF components available for same-day shipping. Times Microwave's 4.3-10 male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.25:1. The Times 4.3-10 male connector also has low passive intermodulation of -160 dBc.

Times Microwave's 4.3-10 male connector TC-SPP500-4310M-LP 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		6	GHz
VSWR			1.25:1	
Insertion Loss			0.25	dB
Passive Intermodulation			-160	dBc
Operating Voltage (DC)			2,500	Vdc
Insulation Resistance	10,000			MOhms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4.3-10 Male Low PIM Connector Solder Attachment for SPP-500-LLPL, SPO-500, SPF-500 TC-SPP500-4310M-LP](#)



4.3-10 Male Low PIM Connector Solder Attachment for SPP-500-LLPL, SPO-500, SPF-500

RF Connectors Technical Data Sheet



TC-SPP500-4310M-LP

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3	3 to 6				GHz
VSWR, Max	1.1:1	1.25:1				

Electrical Specification Notes:
Insertion Loss is $0.1 \times \sqrt{F(\text{GHz})}$

Mechanical Specifications

Size	
Length	1.15 in [29.21 mm]
Mating Torque	44.25 in-lbs [5.00 Nm]

Material Specifications

Description	Material	Plating
Contact	Brass	Silver 200 μ in
Insulation	PTFE	
Body	Brass	Tri-Metal 80 μ in
Coupling Nut	Brass	Tri-Metal 80 μ in
Gasket	Silicone	

Environmental Specifications

Temperature	
Operating Range	-55 to +155 deg C
Shock	US MIL-STD 202G
Vibration	US MIL-STD 202G
Thermal Shock	US MIL-STD 202G

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: [4.3-10 Male Low PIM Connector Solder Attachment for SPP-500-LLPL, SPO-500, SPF-500 TC-SPP500-4310M-LP](#)



4.3-10 Male Low PIM Connector Solder Attachment for SPP-500-LLPL, SPO-500, SPF-500

RF Connectors Technical Data Sheet



TC-SPP500-4310M-LP

4.3-10 Male Low PIM Connector Solder Attachment for SPP-500-LLPL, SPO-500, SPF-500 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.

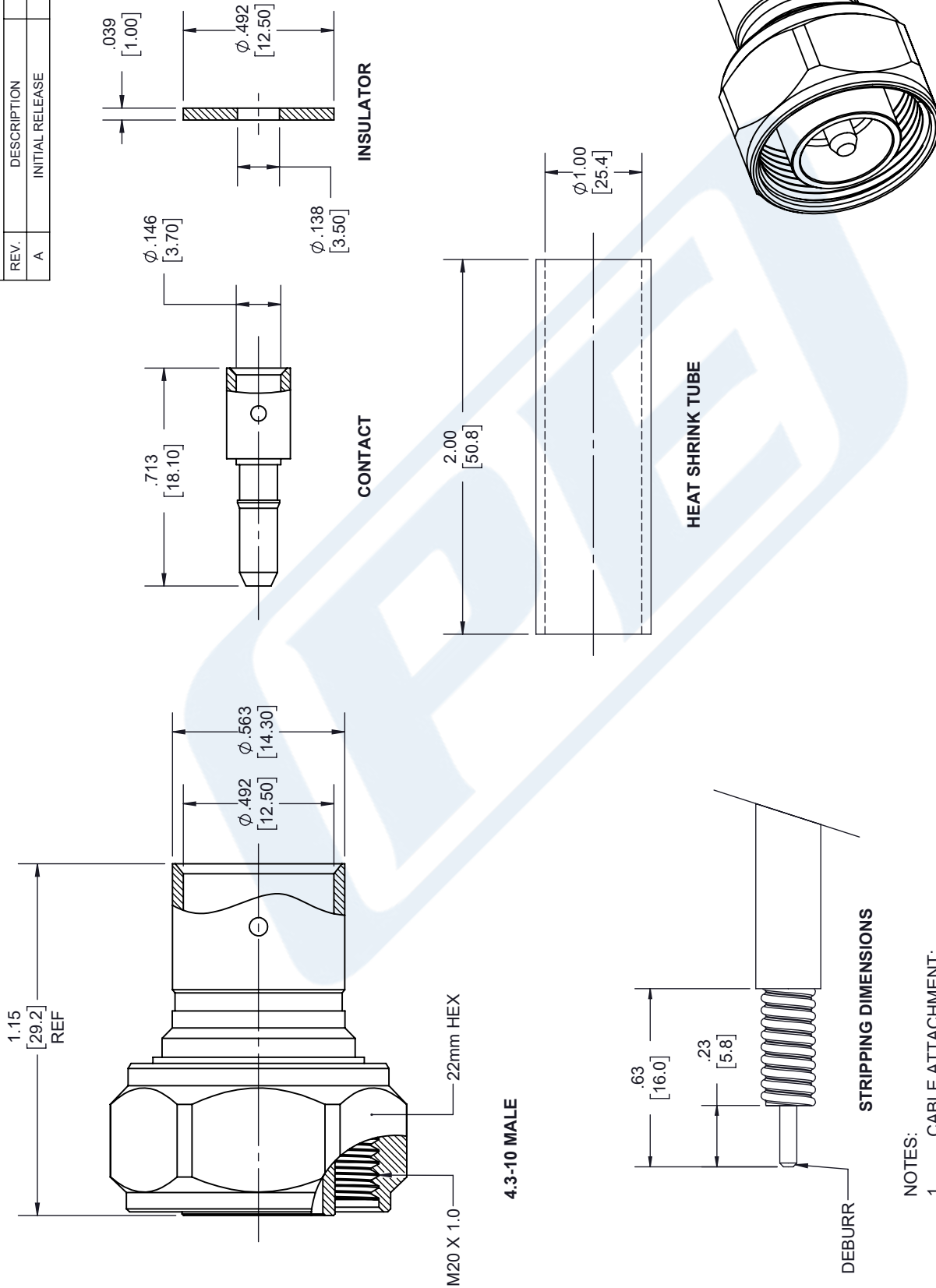
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4.3-10 Male Low PIM Connector Solder Attachment for SPP-500-LLPL, SPO-500, SPF-500

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	03/07/19	S.ELLIS



NOTES:

1. CABLE ATTACHMENT:
 - OUTER: SOLDER.
 - INNER: SOLDER.

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS
TOLERANCES:

$X=\pm 2$	[.08]	FRACTIONS
$XX=\pm .01$	[.25]	$\pm 1/32$
$XXX=\pm .005$	[.13]	ANGLES $\pm 1^\circ$

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION



PE PASTERNAK
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SHEET 1 OF 1

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N Male Low PIM Connector Solder Attachment for SPO-500, SPF-500

RF Connectors Technical Data Sheet



TC-SPO500-NM-LP

Times Microwave Systems Connector Specification

Configuration

- N Male Connector
- 50 Ohms
- Straight Body Geometry
- SPO-500, SPF-500 Interface Type
- Solder/Solder Attachment
- Low PIM Design

Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.25:1
- PIM levels lower than -160 dBc
- Silver Plated Brass Contact
- 200 μ m contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies
- Distributed Antenna Systems (DAS)
- Wireless Communications
- Low PIM Applications

Description

Times Microwave's TC-SPO500-NM-LP type N male connector offered by Pasternack with solder/solder attachment for Times' SPO-500 and SPF-500 is part of our full line of RF components available for same-day shipping. Times Microwave's type N male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.25:1. The Times type N male connector also has low passive intermodulation of -160 dBc.

Times Microwave's type N male connector TC-SPO500-NM-LP 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		6	GHz
VSWR			1.25:1	
Insertion Loss			0.25	dB
Passive Intermodulation			-160	dBc
Operating Voltage (DC)			2,000	Vdc
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 Low PIM Connector Solder Attachment for SPO-500, SPF-500 TC-SPO500-NM-LP](#)



N Male Low PIM Connector Solder Attachment for SPO-500, SPF-500

RF Connectors Technical Data Sheet



TC-SPO500-NM-LP

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3	3 to 6				GHz
VSWR, Max	1.1:1	1.25:1				

Electrical Specification Notes:
Insertion Loss is $0.1 \times \sqrt{F(\text{GHz})}$

Mechanical Specifications

Size

Length 1.24 in [31.5 mm]

Mating Torque 6 to 10 in-lbs [0.68 to 1.13 Nm]

Material Specifications

Description	Material	Plating
Contact	Brass	Silver 200 μ in
Insulation	PTFE	
Body	Brass	Tri-Metal 80 μ in
Coupling Nut	Brass	Tri-Metal 80 μ in
Gasket	Silicone	

Environmental Specifications

Temperature

Operating Range -40 to +125 deg C

Shock US MIL-STD 202G

Vibration US MIL-STD 202G

Thermal Shock US MIL-STD 202G

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 Low PIM Connector Solder Attachment for SPO-500, SPF-500 TC-SPO500-NM-LP](#)



N Male Low PIM Connector Solder Attachment for SPO-500, SPF-500

RF Connectors Technical Data Sheet



TC-SPO500-NM-LP

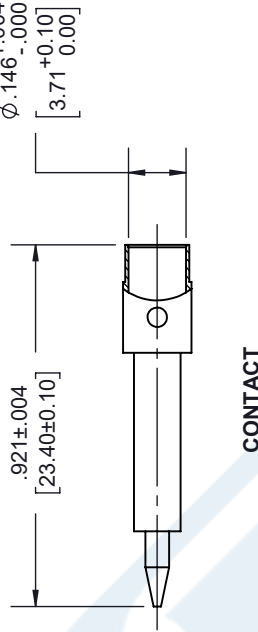
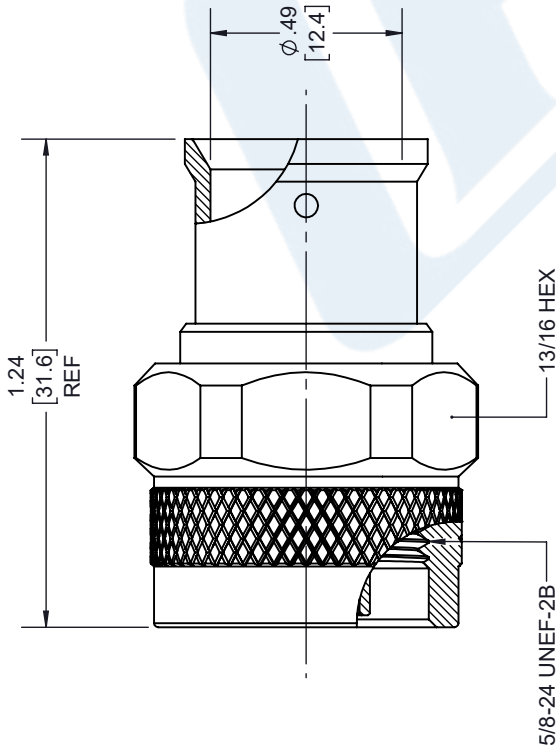
N Male Low PIM Connector Solder Attachment for SPO-500, SPF-500 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Low PIM Connector Solder Attachment for SPO-500, SPF-500 TC-SPO500-NM-LP](https://www.pasternack.com/n-male-spo-500-spf-500-connector-tc-spo500-nm-lp-p.aspx)

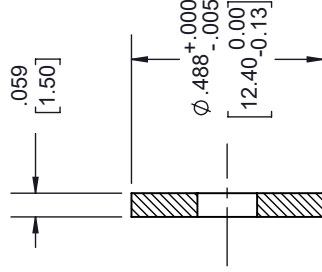
URL: <https://www.pasternack.com/n-male-spo-500-spf-500-connector-tc-spo500-nm-lp-p.aspx>

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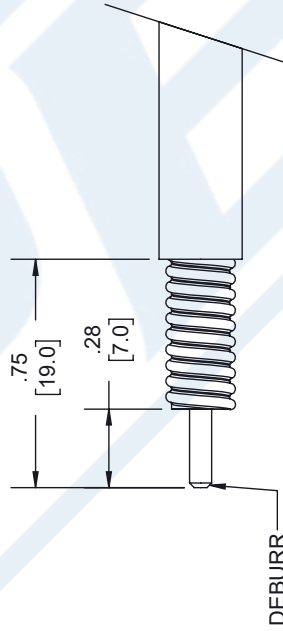
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REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	03/01/19	S. ELLIS



CONTACT

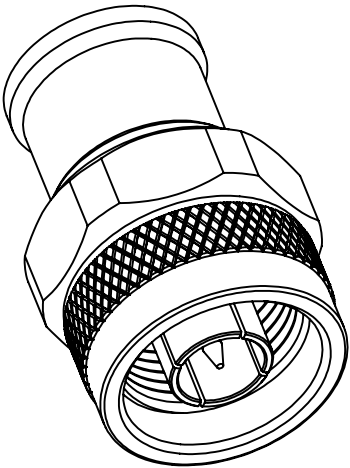


INSULATOR



STRIPPING DIMENSIONS

HEAT SHRINK TUBE



NOTES:

1. CABLE ATTACHMENT:
• OUTER: SOLDER.
• INNER: SOLDER.

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X ± .2 [5.08]	XX ± .01 [.25]
XXX ± .005 [.13]	ANGLES ± 1°
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
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SIZE	CAGE
A	53919
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PART NUMBER	TC-SPO500-NM-LP
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SCALE	N/A



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 ¹	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.

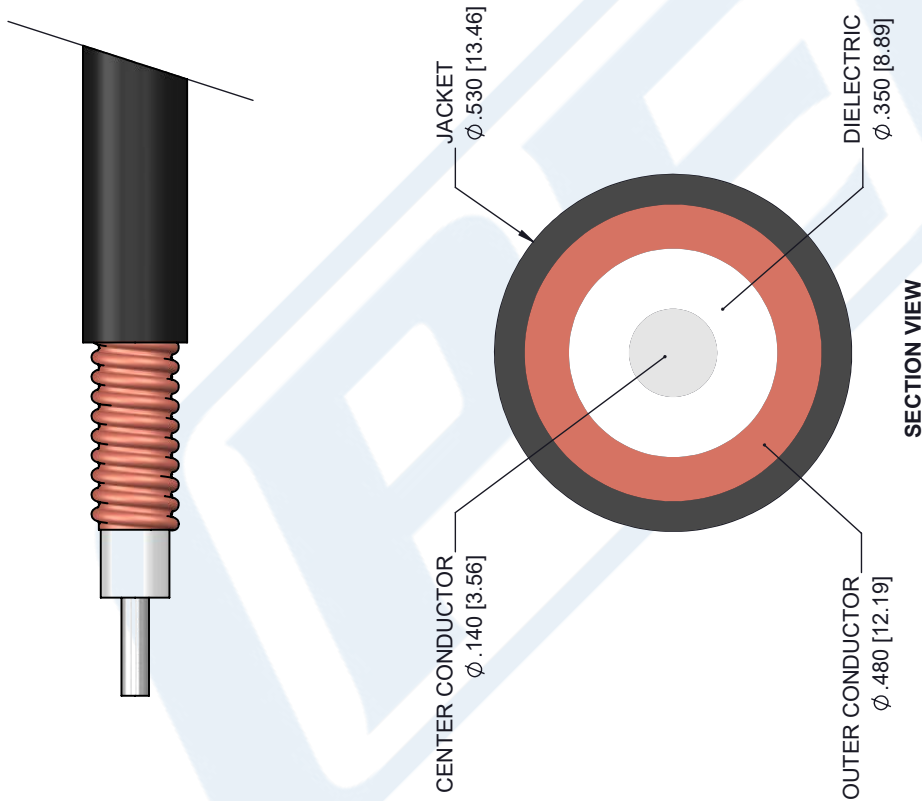
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss SPO-500 Rated Corrugated Coax Cable with Black PE Jacket Superflexible Outdoor Rated SPO-500](#)

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

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS TOLERANCES: X±.2 [5.08] XX±.01 [.25] XXX±.005 [.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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