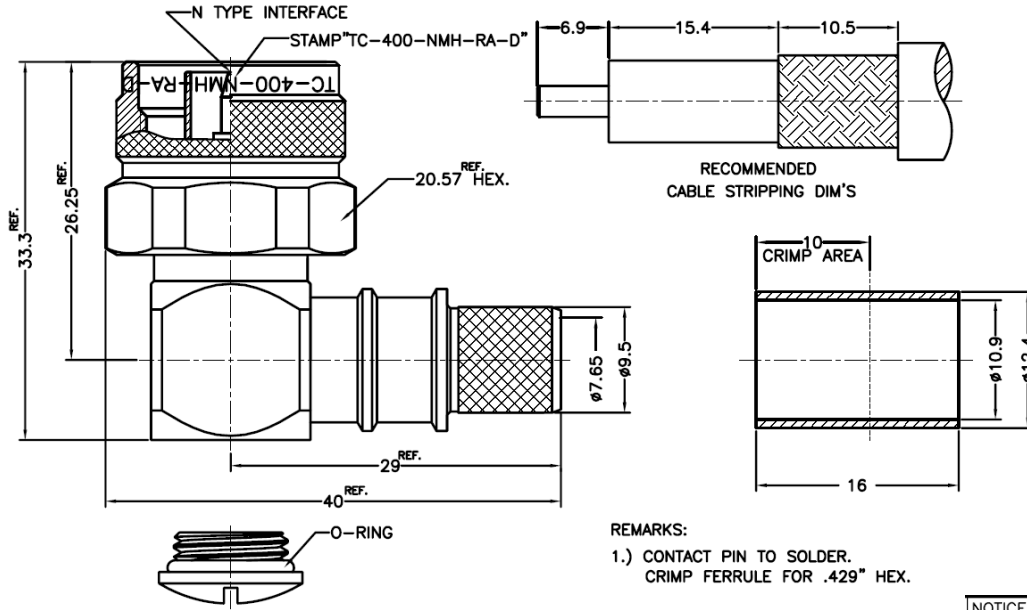


**NOTICE OF PROPRIETARY RIGHTS** THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA, INCLUDING TRADE SECRETS, PROPRIETARY TO TIMES MICROWAVE SYSTEMS. DISCLOSURE OF THIS DATA IS EXPRESSLY CONDITIONED UPON YOUR ASSENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY. ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF TIMES MICROWAVE SYSTEMS.

| SYM | REVISION DESCRIPTION    | DFTM     | DATE    | APPD     | DATE     |
|-----|-------------------------|----------|---------|----------|----------|
| A   | RELEASED FOR PRODUCTION | D. J. H. | 5/30/07 | J. D. B. | 5/30/07  |
| B   | CHANGED PER CDC #27394  | D. J. H. | 10/2/07 | J. D. B. | 10/2/07  |
| C   | CHANGED PER CDC #27653  | D. J. H. | 12/6/07 | J. D. B. | 12/10/07 |
| D   | CHANGED PER CDC #28404  | D. J. H. | 5/27/08 | J. D. B. | 5/27/08  |

THIS CONNECTOR IS INDIVIDUALLY PACKAGED. FOR BULK PACKAGING, SEE 3190-2293BLK.



REMARKS:  
1.) CONTACT PIN TO SOLDER.  
CRIMP FERRULE FOR .429" HEX.

NOTICE: ALL PARTS MUST MEET TO RoHS REQUIREMENTS

| MATERIALS AND PLATING UNIT: MICRO-INCHES  |                    |                                      | ELECTRICAL CHARACTERISTICS      |   |
|---|--------------------|--------------------------------------|---------------------------------|---|
| BODY, SHELL   | BRASS C3604        | ALBALOY (COPPER-TIN-ZINC) PL.80 MIN. | Impedance                       | 50 Ω  |
| CONTACT PIN   | BRASS C3604        | GOLD 50/ COPPER                      | Voltage rating                  | 1000V(rms)                                    |
| INSULATOR   | TEFLON MIL-P-19468 | RED                                  | Frequency range                 | 0~11GHz                                       |
| FERRULE   | COPPER             | ALBALOY (COPPER-TIN-ZINC) PL.80 MIN. | Dielectric withstanding voltage | 1500V   |
| GASKET  | SILICONE           | RED                                  | Contact resistance              | Center contact: ≤1mΩ<br>Outer contact ≤0.25mΩ |
| <b>(MECHANICAL CHARACTERISTICS)</b><br>Force to engage and disengage: 6 lbs MAX.<br>Center contact retention force: 6 lbs MIN.<br>Coupling torque: 30 in-lbs MIN.<br>Coupling nut retention force: 100 lbs MIN.<br>Durability: ≥ 500 cycles |                    |                                      | Insulation resistance           | ≥5000MΩ                                       |
|   |                    |                                      | Insertion loss                  | According as the cable                        |
|   |                    |                                      | RF- leakage                     | -90 dB up to 3 GHz                            |
|   |                    |                                      | VSWR                            | ≤1.25 (DC-2.5GHz)                             |
|   |                    |                                      | 3rd Intermodulation             | -   |
|   |                    |                                      | ENVIRONMENTAL CHARACTERISTICS   |   |
|   |                    |                                      | Temperature range               | -55° C - +155° C                              |
|   |                    |                                      | Thermal shock                   | US MIL- STD 202, Meth. 107, Cond. B           |
|   |                    |                                      | Vibration                       | US MIL- STD 202, Meth. 204, Cond. B           |
|   |                    |                                      | Shock                           | US MIL- STD 202, Meth. 213, Cond. I           |
|   |                    |                                      | Climatic class                  | IEC 60068 65/165/21                           |

|                                      |   |                |  |
|--------------------------------------|---|----------------|--|
| MATERIAL: UNLESS OTHERWISE SPECIFIED | ALL DIMENSIONS ARE IN INCHES<br>MACHINED SURFACES FINISH N/A RMS MAX.<br>REMOVE ALL BURRS .005 MAX. BREAK<br>MACHINE CORNERS .005 MAX. FILLET R.<br>TOLERANCES ON DECIMALS<br>.XX ± 0.2 .XXX ± 0.1<br>ANGLES ± 3° FRACTIONS ± N/A | DFTM: D. J. H. | TIMES MICROWAVE SYSTEMS  |
|                                      |   | DATE: 5/30/07  |  |
| USED ON: 0                           |   | CHKD: J. D. B. | <b>TC-400-NMH-RA-D</b><br>90° N MALE (INDIVIDUALLY PACKAGED)<br>FOR LMR400 CABLE |
|                                      |   | DATE: 5/30/07  |  |
| SCALE: N/A                           | DWG. SIZE: A  | APPD: J. D. B. |  |
| DO NOT SCALE DRAWING                 | CODE IDENT: 68999   | DATE: 5/30/07  | 1 of 1 SD3190-2293 REV: D  |



N Male Connector Crimp/Solder Attachment for PE-C400, PE-B400, PE-B405, LMR-400, LMR-400-DB, LMR-400-UF, 0.400 inch

RF Connectors  
Technical Data Sheet

PE44522

**Configuration**

- N Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-C400, PE-B400, PE-B405, LMR-400, LMR-400-DB, LMR-400-UF, .400 inch
- 18 mm Hex

**Features**

- Max. Operating Frequency 11 GHz
- Gold Plated Brass Contact
- 15 µin minimum contact plating

**Applications**

- General Purpose Test
- Custom Cable Assemblies

**Description**

Pasternack's PE44522 type N male connector with crimp/solder attachment for PE-C400, PE-B400, PE-B405, LMR-400, LMR-400-DB, LMR-400-UF and .400 inch 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 11 GHz.

Our type N male connector PE44522 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      |         | 11      | GHz   |

**Mechanical Specifications**

| Size       |                     |
|------------|---------------------|
| Length     | 1.48 in [37.59 mm]  |
| Width/Dia. | 0.83 in [21.08 mm]  |
| Weight     | 0.075 lbs [34.02 g] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Connector Crimp/Solder Attachment for PE-C400, PE-B400, PE-B405, LMR-400, LMR-400-DB, LMR-400-UF, 0.400 inch PE44522](#)



N Male Connector Crimp/Solder Attachment for PE-C400, PE-B400, PE-B405, LMR-400, LMR-400-DB, LMR-400-UF, 0.400 inch

RF Connectors  
Technical Data Sheet

PE44522

**Material Specifications**

| Description  | Material | Plating                |
|--------------|----------|------------------------|
| Contact      | Brass    | Gold<br>15 µin minimum |
| Insulation   | PTFE     |                        |
| Body         | Brass    | Tri-Metal              |
| Coupling Nut | Brass    | Tri-Metal              |

**Environmental Specifications**

**Temperature**

Operating Range -65 to +165 deg C

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

**Plotted and Other Data**

Notes:

N Male Connector Crimp/Solder Attachment for PE-C400, PE-B400, PE-B405, LMR-400, LMR-400-DB, LMR-400-UF, 0.400 inch 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 Connector Crimp/Solder Attachment for PE-C400, PE-B400, PE-B405, LMR-400, LMR-400-DB, LMR-400-UF, 0.400 inch PE44522](#)

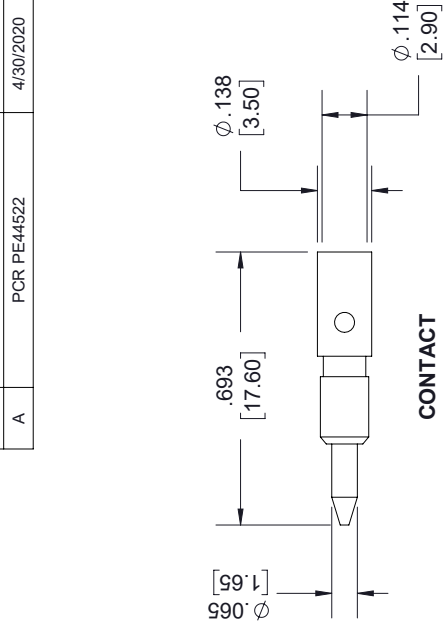
URL: <https://www.pasternack.com/n-male-standard-pe-c400-0.400-connector-pe44522-p.aspx>

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. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

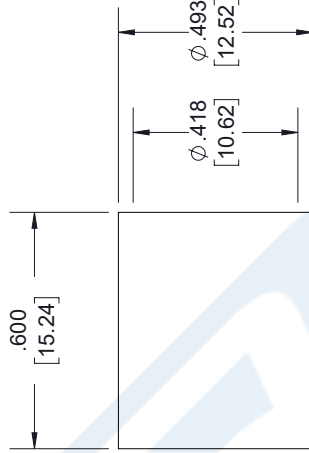
# PE44522 CAD Drawing

N Male Connector Crimp/Solder Attachment for PE-C400, PE-B400, PE-B405, LMR-400, LMR-400-DB, LMR-400-UF, 0.400 inch

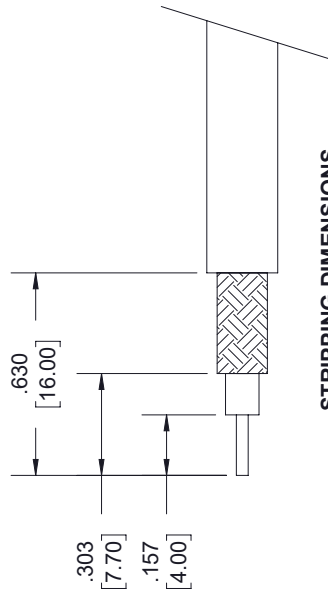
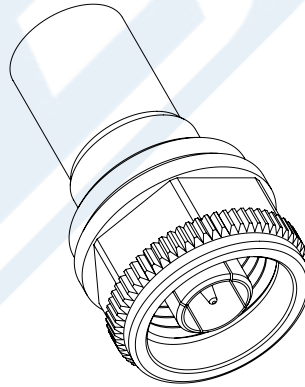
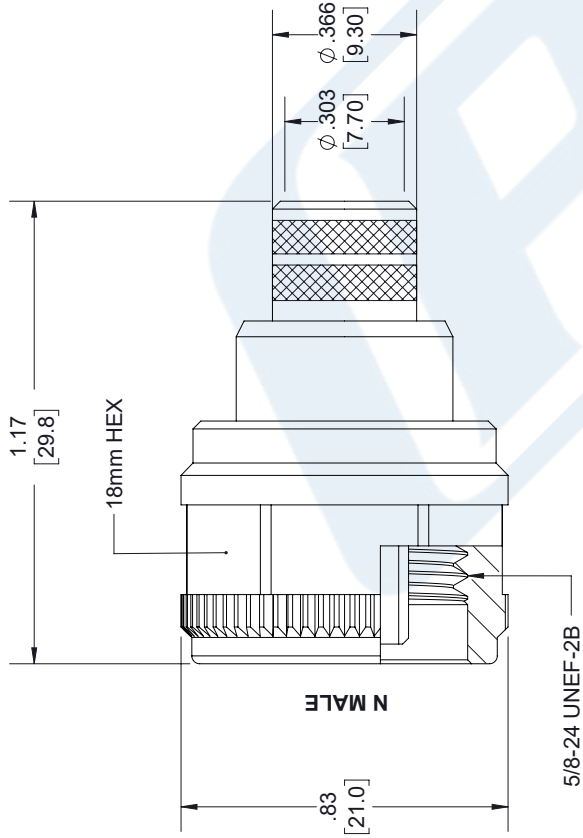
| REVISIONS |             |           |          |
|-----------|-------------|-----------|----------|
| REV.      | DESCRIPTION | DATE      | APPROVED |
| A         | PCR PE44522 | 4/30/2020 | S. ELLIS |



**CONTACT**



**FERRULE**



**STRIPPING DIMENSIONS**

**NOTES:**

- CABLE ATTACHMENT:
  - OUTER: CRIMP.
  - INNER: SOLDER/CRIMP.
- CRIMP SIZE REQUIRED:
  - FERRULE: .429 [10.90] HEX. CRIMP TOOL.
  - CONTACT: .118 [3.00] HEX. CRIMP TOOL.

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

**TOLERANCES:**  
 .X = ±.2 [5.08]    FRACTIONS ± 1/32  
 .XX = ±.02 [.51]    ANGLES ± 1°  
 .XXX = ±.005 [.13]  
**CABLE LENGTH (L) TOLERANCES:**  
 L ≤ 12 [305] = +1 [25] / -0  
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
 300 [7620] < L = +5% / L / -0  
 ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.



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SHEET 1 OF 1

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**PASTERNAK**  
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 CAGE CODE A 53919  
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## LMR-400-FR Fire Rated version of the 400 series Low Loss Coax

### Times Microwave Systems Coax Cable Specification

#### Configuration

- Low Loss, Outdoor Flexible Cable
- 2 Shield(s)

#### Features

- CMR Riser Rated Coax
- Non-Halogen, Low Smoke FRPE Jacket
- Max Operating Frequency of 5.8 GHz
- Phase Velocity 84% VoP
- Max Operating Temperature +85°C
- Min Install Bend Radius of 1 inches

#### Applications

- In-Building Riser Runs
- Short Antenna Installs
- RF Test Systems
- General Purpose RF Interconnect
- Laboratory Applications

#### Description

LMR-400-FR Fire Rated version of the 400 series Low Loss Coax from Times Microwave is part of the large product offering by Pasternack of radio frequency coaxial cable types specifically stocked to be ready for same-day shipment. Pasternack LMR-400-FR coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This low loss and CMR riser rated 50 Ohm coax cable LMR-400-FR is constructed with a 0.405 inch diameter and Black FRPE jacket.

LMR-400-FR flexible 50 Ohm coax cable with FRPE jacket is rated for a 5.8 GHz maximum operating frequency. This 50 Ohm 0.405 inch diameter and low loss fire rated coax cable is built with an aluminum double shield count and RF shielding of 90 dB. Times Microwave LMR-400-FR FRPE coax is constructed with Foam PE dielectric and a maximum operating temperature of 85 degrees C. Pasternack's offering of LMR-400-FR coax cable provides specs for this wire on its RF coax cable LMR-400-FR datasheet.

LMR-400-FR cable is part of more than one million RF, microwave parts in stock at Pasternack. This Times Microwave low loss flexible LMR-400-FR coax cable is ready to buy and can be shipped worldwide. Pasternack also maintains a wide selection of other radio frequency coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave components.

\* LMR™ is a trademark of Times Microwave Systems.

#### Electrical Specifications

| Description                          | Minimum | Typical  | Maximum | Units      |
|--------------------------------------|---------|----------|---------|------------|
| Frequency Range                      | DC      |          | 5.8     | GHz        |
| Impedance                            |         | 50       |         | Ohms       |
| Velocity of Propagation              |         | 84       |         | %          |
| Time Delay                           |         | 1.2 3.94 |         | ns/ft ns/m |
| Shielding Effectiveness              | 90      |          |         | dB         |
| Dielectric Withstanding Voltage (DC) |         |          | 2,500   | Vdc        |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-400-FR Fire Rated version of the 400 series Low Loss Coax LMR-400-FR](#)



## LMR-400-FR Fire Rated version of the 400 series Low Loss Coax

### RF Cables Technical Data Sheet



LMR-400-FR

|                               |              |              |
|-------------------------------|--------------|--------------|
| Jacket Spark                  | 8,000        | Vrms         |
| Inner Conductor DC Resistance | 1.39         | Ohms/1000ft  |
| Outer Conductor DC Resistance | 1.65         | Ohms/1000ft  |
| Nominal Capacitance           | 23.9 [78.41] | pF/ft [pF/m] |
| Nominal Inductance            | 0.06 [0.2]   | uH/ft [uH/m] |
| Input Power (Peak)            | 16           | kWatts       |

#### Performance by Frequency Band

| Description           | F1    | F2    | F3    | F4   | F5   | Units    |
|-----------------------|-------|-------|-------|------|------|----------|
| Frequency             | 50    | 150   | 220   | 450  | 900  | MHz      |
| Attenuation, Typ      | 0.9   | 1.5   | 1.9   | 2.7  | 3.9  | dB/100ft |
|                       | 2.95  | 4.92  | 6.23  | 8.86 | 12.8 | dB/100m  |
| Input Power (CW), Max | 2,570 | 1,470 | 1,200 | 830  | 580  | Watts    |

| Description           | F6    | F7   | F8    | F9    | F10   | Units    |
|-----------------------|-------|------|-------|-------|-------|----------|
| Frequency             | 1.5   | 1.8  | 2     | 2.5   | 5.8   | GHz      |
| Attenuation, Typ      | 5.1   | 5.7  | 6     | 6.8   | 10.8  | dB/100ft |
|                       | 16.73 | 18.7 | 19.69 | 22.31 | 35.43 | dB/100m  |
| Input Power (CW), Max | 440   | 400  | 370   | 330   | 210   | Watts    |

#### Mechanical Specifications

|                                 |                         |
|---------------------------------|-------------------------|
| Diameter                        | 0.405 in 10.29 mm       |
| Weight                          | 0.068 lbs/ft [0.1 Kg/m] |
| Min. Bend Radius (Installation) | 1 in [25.4 mm]          |
| Min. Bend Radius (Repeated)     | 4 in [101.6 mm]         |
| Bending Moment                  | 0.5 lbs-ft [0.68 N-m]   |
| Tensile Strength                | 160 lbs [72.57 kg]      |
| Flat Plate Crush                | 40 lbs/in [0.71 Kg/mm]  |

#### Construction Specifications

| Description     | Material and Plating | Diameter           |
|-----------------|----------------------|--------------------|
| Inner Conductor | Copper, 1 Strand     | 0.108 in [2.74 mm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-400-FR Fire Rated version of the 400 series Low Loss Coax LMR-400-FR](#)



LMR-400-FR Fire Rated version of the 400 series Low Loss Coax

RF Cables  
Technical Data Sheet



LMR-400-FR

|                |               |                     |
|----------------|---------------|---------------------|
| Conductor Type | Solid         |                     |
| Dielectric     | Foam PE       | 0.285 in [7.24 mm]  |
| First Shield   | Aluminum Tape | [ ]                 |
| Second Shield  | Tinned Copper | [ ]                 |
| Jacket         | FRPE, Black   | 0.405 in [10.29 mm] |

**Environmental Specifications**

**Temperature**

|                    |                  |
|--------------------|------------------|
| Operating Range    | -40 to +85 deg C |
| Installation Range | -40 to +85 deg C |
| Storage Range      | -70 to +85 deg C |

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

**Plotted and Other Data**

Notes:

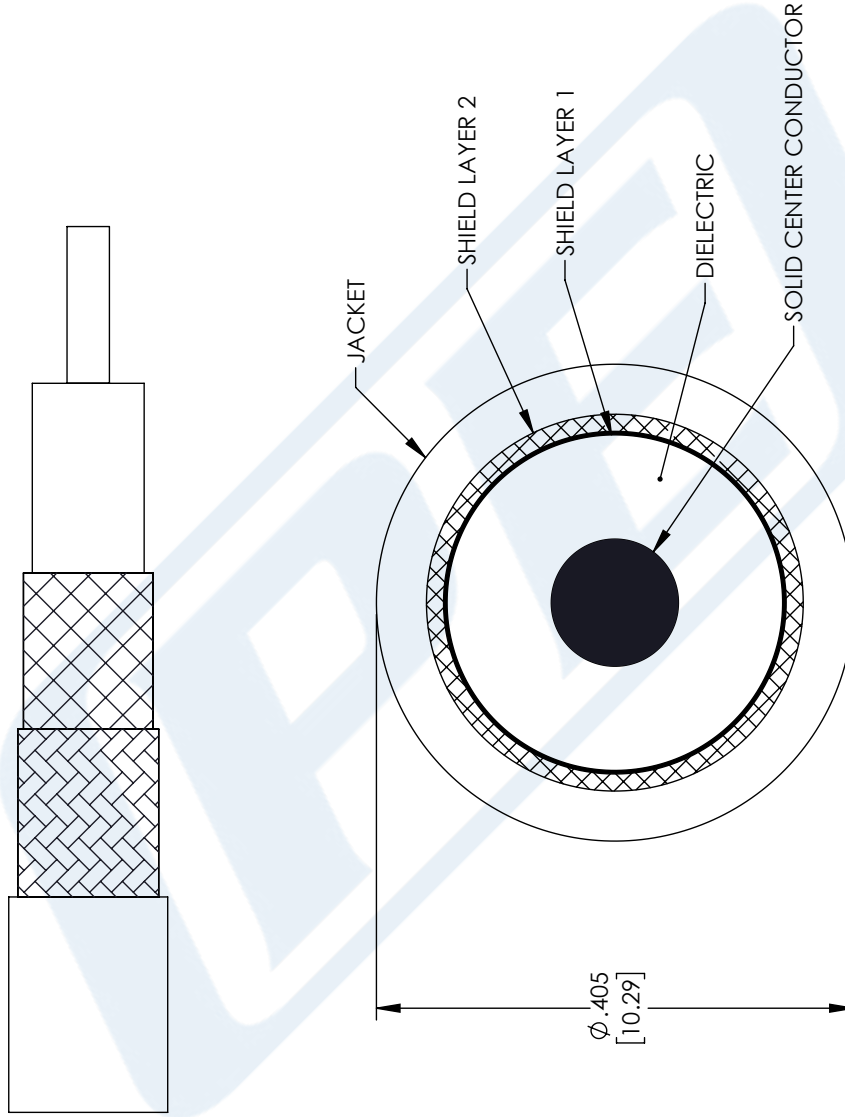
LMR-400-FR Fire Rated version of the 400 series Low Loss Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: <https://www.pasternack.com/low-loss-flexible-lmr-400-fr-frpe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-400-fr-p.aspx>

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| REVISIONS |                 |            |
|-----------|-----------------|------------|
| REV.      | DESCRIPTION     | DATE       |
| A         | INITIAL RELEASE | 06-04-2021 |
|           |                 | APPROVED   |
|           |                 | SELLIS     |



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 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
 300 [7620] < L = +5% / -0

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**PE PASTERNAK**  
 an INFINITI brand

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ITEM NO. LMR-400-FR

SIZE A CAGE CODE 53919 DRAWN BY MVEERAPPAN

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

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