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. NOTICE OF PROPRIETARY RIGHTS REVISION DESCRIPTION **DFTM** DATE APPD DATE RELEASED FOR PRODUCTION | K. A. M. 2/12/10 3/1/10 Α J.D.B. В CHANGED PER CDC #35214 7/16/12 7/25/12 D. J. H. .D.B. (39.5) -· 19.7 — · 1.1 X 2 13.45 -Ø7.5 Ø9.5 Ø10.9 Ø12.4 16 -5.4 15 - Ø13.4 X 2 Ø12.7 X 2 32 HEX. Ø25 Reference standard IEC60169-4 0.5 X 45° I. Electric Performance CABLE PREP Nominal Impedance( $\Omega$ ): USE CST-400 DC-3GHz Frequency Range: (3192 - 004)**VSWR** ≤1.15 .429" HEX. **INSERT LOSS:** ≤ 0.05 Insulation resistance (M $\Omega$ ) ≥10000 IV Environment Proof voltage (V) 2500 -55°C~+155°C Temp.range Conductor resistance ( $m\Omega$ ) outer conductor < 0.2 Weather standard IEC 60068 55 / 155/ 56 inner conductor < 0.8 US MIL-STD 202, Meth. 107, Cond. B Thermal shock US MIL-STD 202, Meth. 204, Cond. B Vibration II. Mechanical Performance US MIL-STD 202, Meth. 213, Cond. I Shock 25N.m Pin torque Waterproofing standard IP67 1000N (Nut)Whorl pull Tensile force(cable-connect) 400N V. Assembly: inner conductor installed and outer conductor crimped Torsion(cable-connect) 2N.m VI. ROHS Compliant. III. Material and plating Plating Component Material Inner conductor Spring Copper Ag 200 micro inches Copper-tin-zin (Albaloy) 150 micro inches Outer conductor Brass Copper-tin-zin (Albaloy) 150 micro inches Ferrule copper Nut **Brass** Copper-tin-zin (Albaloy) 150 micro inches Silicone rubber Gasket PTFE Insulator DFTM.K.A.M. MATL: UNLESS OTHERWISE SPECIFIED TIMES MICROWAVE SYSTEMS DATE 2/12/10 ALL DIMENSIONS ARE IN mm MACHINED SURFACES FINISHN/A RMS MAX. REMOVE ALL BURRS N/A MAX. BREAK CHKD. J. D. B EZ-400-716M-X MACHINE CORNERS N/A MAX. FILLET R. TOLERANCES ON DECIMALS
XX ± N/A DATE 3/1/10 USED ON: 1 - 17/16 MALE FOR LMR-400 CABLE  $XXX \pm N/A$ APPD. J. D. B EZ/CRIMP/NO BRAID TRIM ANGLES ± N/A FRACTIONS ± N/A DO NOT SCALE DRAWING CODE 68999 DATE 3/1/10 SD3190-2524 SCALE: of N/A





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

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451

Sales@Pasternack.com • Techsupport@Pasternack.com





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
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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.

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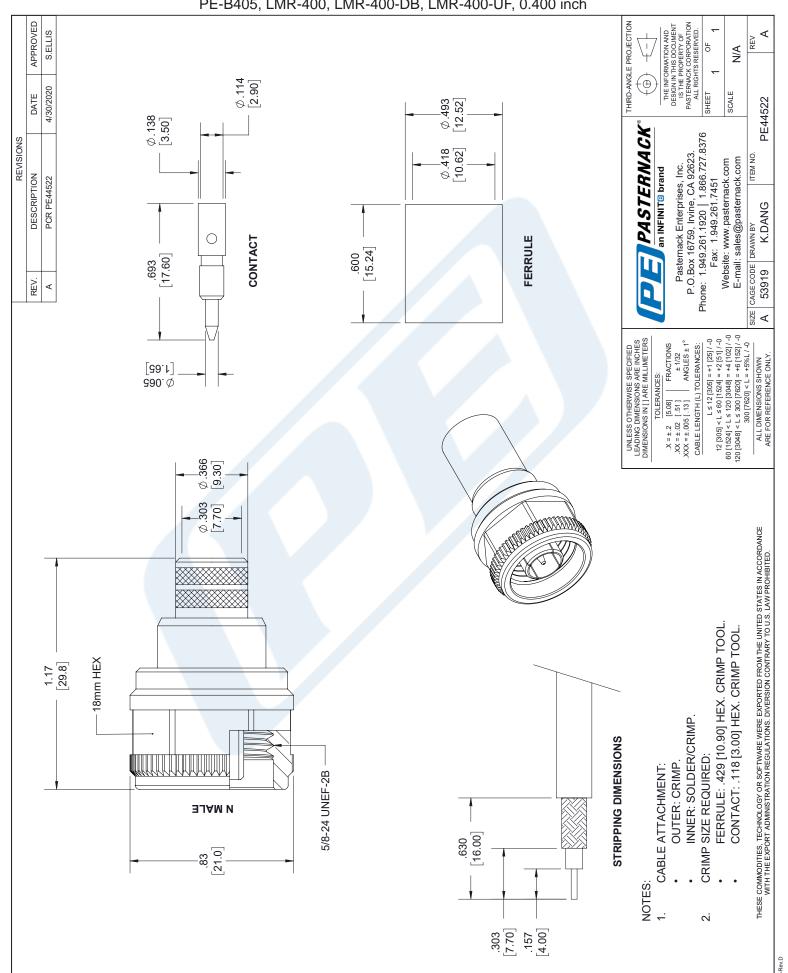
URL: https://www.pasternack.com/n-male-standard-pe-c400-0.400-connector-pe44522-p.aspx

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.

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451

# 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





# Low Loss Flexible LMR-400 Outdoor Rated Coax Cable Double Shielded with Black PE Jacket



# **LMR-400**



# **Times Microwave Systems Connector Specification**

#### Configuration

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

#### **Features**

- · Flexible Low Loss Communications Coax
- · Max Operating Frequency of 8 GHz
- · Replacement for Air Dielectric type RG8 cable

- Double Shields provides RF Shielding in excess of 90 db
- · Low Loss size for size compared to standard flexible cable

#### **Applications**

· Laboratory Applications

· General Purpose RF Interconnect

#### Description

LMR-400 part number from Pasternack is a LMR-400 coax cable that is flexible. Pasternack LMR-400 flexible coax cable is 50 Ohm and has a PE (F) dielectric. Our LMR-400 coax is constructed with a 0.405 jacket made of PE. LMR-400 coax has a shield count of 2, a RF shielding of 90 dB and the maximum frequency for this Pasternack cable is 8 GHz. LMR-400 coax cable has an attenuation at 1 GHz of 4.25 dB.

Pasternack LMR-400 coax cables are part of over 40,000 RF, microwave and millimeter wave components. LMR-400 cables and our other RF parts are available for same day shipping worldwide. Custom RF cable assemblies using LMR-400 or other coax can be built and shipped same day as well.

## **Electrical Specifications**

| Description                          | Minimum | Typical      | Maximum | Units        |
|--------------------------------------|---------|--------------|---------|--------------|
| Frequency Range                      | DC      |              | 8       | GHz          |
| Impedance                            |         | 50           |         | Ohms         |
| Velocity of Propagation              |         | 85           |         | %            |
| Time Delay                           |         | 1.2 [3.94]   |         | ns/ft [ns/m] |
| Shielding Effectiveness              | 90      |              |         | dB           |
| Dielectric Withstanding Voltage (DC) |         |              | 2,500   | Vdc          |
| 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       |

<sup>\*</sup> LMR™ is a trademark of Times Microwave Systems.



# Low Loss Flexible LMR-400 Outdoor Rated Coax Cable Double Shielded with Black PE Jacket



# **LMR-400**

# 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   | 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 Weight

Min. Bend Radius (Installation) Min. Bend Radius (Repeated)

Bending Moment Tensile Strength Flat Plate Crush 0.405 in [10.29 mm] 0.067 lbs/ft [0.1 kg/m]

1 in [25.4 mm] 4 in [101.6 mm]

0.5 lbs-ft [0.68 N-m]

160 lbs [72.57 kg] 40 lbs/in [0.71 kg/mm]

# **Construction Specifications**

| Description     | Material and Plating           | Diameter            |  |
|-----------------|--------------------------------|---------------------|--|
| Inner Conductor | Copper Clad Aluminum, 1 Strand | 0.108 in [2.74 mm]  |  |
| Conductor Type  | Solid                          |                     |  |
| Dielectric      | PE (F)                         | 0.285 in [7.24 mm]  |  |
| First Shield    | Aluminum Tape                  | 0.29 in [7.37 mm]   |  |
| Second Shield   | Tinned Copper Braid            | 0.32 in [8.13 mm]   |  |
| Jacket          | PE, Black                      | 0.405 in [10.29 mm] |  |

## **Environmental Specifications**

**Temperature** 

Operating 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:



# Low Loss Flexible LMR-400 Outdoor Rated Coax Cable Double Shielded with Black PE Jacket



## **LMR-400**

Low Loss Flexible LMR-400 Outdoor Rated Coax Cable Double Shielded 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Low Loss Flexible LMR-400 Outdoor Rated Coax Cable Double Shielded with Black PE Jacket LMR-400

URL: https://www.pasternack.com/50-ohm-low-loss-flexible-lmr400-pe-jacket-double-shielded-black-lmr-400-p.aspx

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