



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
- PE-C400, PE-B400, PE-B405, LMR-400, LMR-400-DB, LMR-400-UF, 0.400 inch Interface Type
- Crimp/Solder Attachment
- 18 mm Hex

Features

- Max. Operating Frequency 11 GHz
- Gold Plated Brass Contact
- 15 μ m 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 0.400 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

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Material Specifications

| Description | Material | Plating |
|--------------|----------|------------------------|
| Contact | Brass | Gold 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% availability and are part of the broadest selection in the industry.

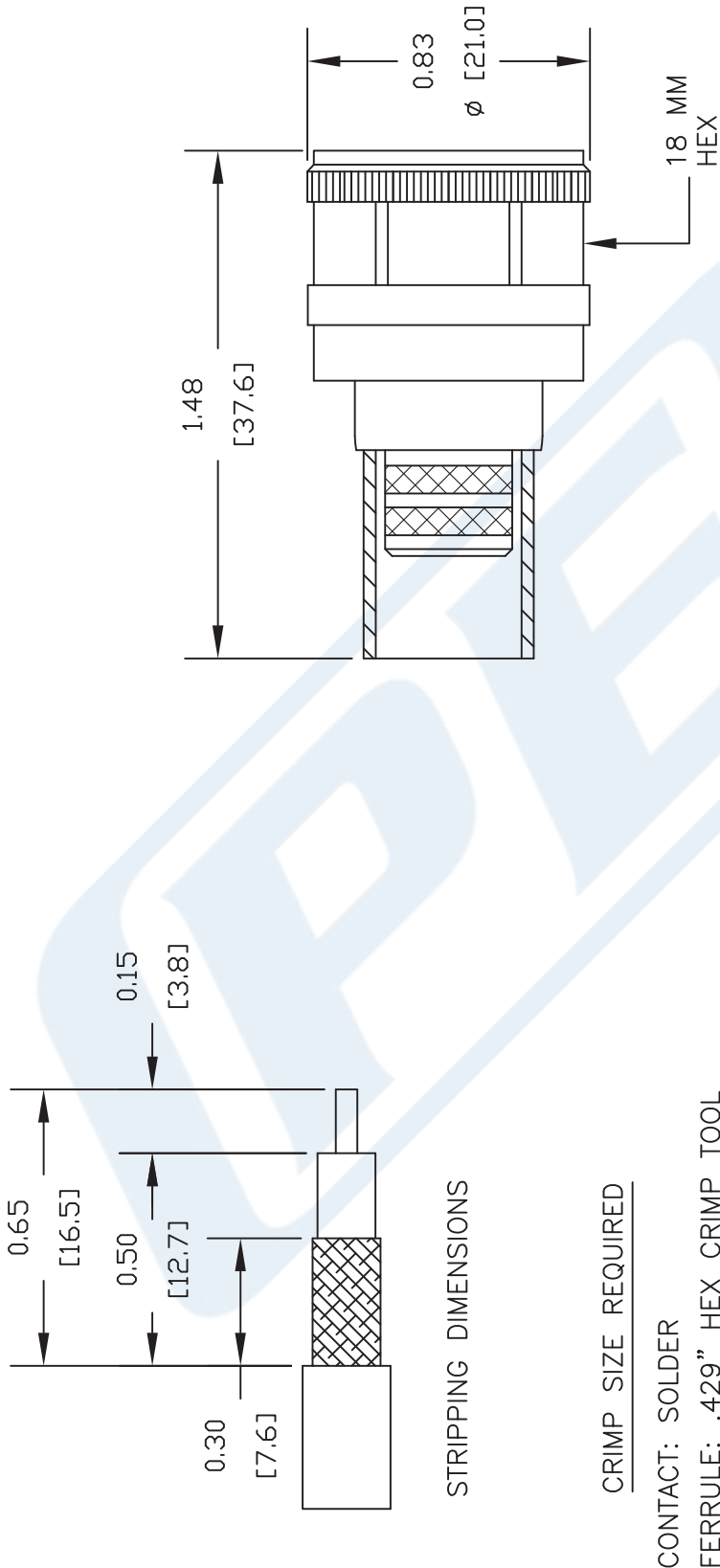
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Connector Crimp/Solder Attachment for PE-C400, PE-B400, PE-B405, LMR-400, LMR-400-DB, LMR-400-UF, 0.400 inch PE44522](#)

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



STRIPPING DIMENSIONS

CRIMP SIZE REQUIRED

CONTACT: SOLDER
FERRULE: .429" HEX CRIMP TOOL

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].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

DWG TITLE
PE44522

PE PASTERNAK®
Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | Fax: (949) 261-7451
Website: www.pasternack.com | E-Mail: sales@pasternack.com

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SIZE A

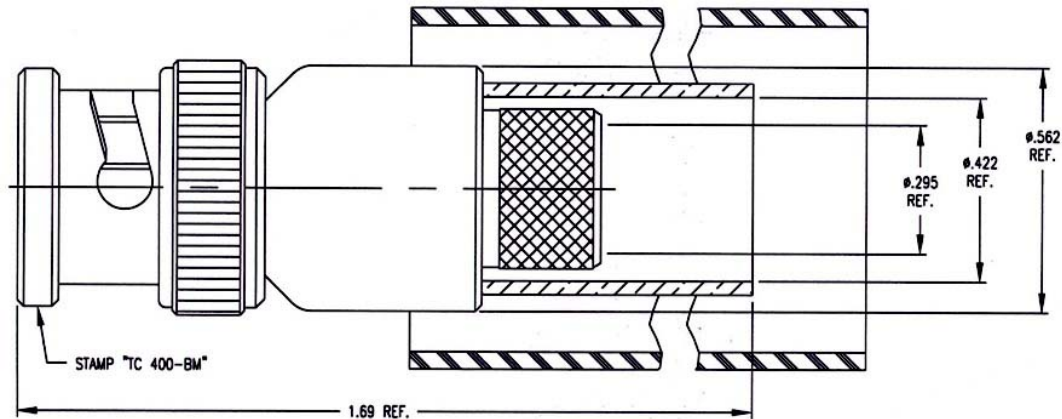
SCALE N/A

CAD FILE 081711

FSCM NO. 53919

REV. C

| LTR | DESCRIPTION | DATE | BY |
|-----|-------------|--------|----|
| A | Released | 6/7/95 | JP |
| | | | |

**I. MATERIALS & FINISHES**

center contact: Nickel Plated Brass
 outer contact: Nickel Plated Brass
 coupling nut: Nickel Plated Brass
 body: Nickel Plated Brass
 crimp sleeve: Nickel Plated Copper
 dielectric: Teflon® PTFE
 gasket: Silicone Rubber
 shrink sleeve: Adhesive Lined Polyolefin
 attachment: braid crimp (.429"hex)

II. ELECTRICAL PROPERTIES

impedance: 50 ohms
 working voltage: 500 vrms (max)
 vswr: 1.25:1 (max) up to 3 GHz
 insertion loss: $0.10 \times \sqrt{F_{\text{ghz}}}$

Unless otherwise specified, dimensions are in inches. Tolerances are applicable when specified.

These drawings and specifications contain proprietary information which is the property of Times Microwave Systems.

Approvals

| | | |
|-------|----|--------|
| Drawn | JP | 6/7/95 |
| | | |
| | | |
| | | |

**TIMES MICROWAVE SYSTEMS**

Wallingford, CT 06492
 (203) 949-8400; (203) 949-8423.Fax
 www.timesmicrowave.com

TC-400-BM

Type-BNC male (plug) – Solder Pin
 for LMR-400 Cable

| | | |
|-----------|---------------------------|---------------------------------|
| Size A | CAGE CODE 68999 | Drawing No.: 3190-318 |
|-----------|---------------------------|---------------------------------|

Scale: NA

Rev. (A)

Sheet: 1 of 1

LMR-®-400-UF UltraFlex Communications Coax

Ideal for...

- Drop-in replacement for RG-8/9913 Air-Dielectric type Cable
- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs
- Any application that requires periodic/repeated flexing



• **LMR® - UltraFlex** has a stranded center conductor and rubber outer jacket designed for multiple bending/flexing cycles. It is used for both indoor and outdoor applications.

• **Flexibility** and bendability are hallmarks of the LMR-400-UF cable design. The flexible outer conductor enables the tightest bend radius available for any cable of similar size and performance.

• **Low Loss** is another hallmark feature of LMR-400-UF. Size for size LMR has the lowest loss of any flexible cable and comparable loss to semirigid hard-line cables.

• **RF Shielding** is 50 dB greater than typical single shielded coax (40 dB). The multi-ply bonded foil outer conductor is rated conservatively at > 90 dB (i.e. >180 dB between two adjacent cables).

• **Weatherability:** LMR-400-UF cables are designed for outdoor exposure and have a life expectancy in excess of 10 years.

• **Connectors:** A wide variety of connectors are available for LMR-400-UF cable, including all common interface types, reverse polarity, and solder-on center pins. Most LMR connectors employ crimp outer attachment using standard hex crimp sizes.

• **Cable Assemblies:** All LMR-400-UF cable types are available as pre-terminated cable assemblies. Refer to the section on FlexTech for further details.

| Part Description | | | | |
|------------------|----------------|--------|-------|------------|
| Part Number | Application | Jacket | Color | Stock Code |
| LMR-400-UF | Indoor/Outdoor | TPE | Black | 54040 |

| Construction Specifications | | | |
|-----------------------------|-------------------------------|-------|---------|
| Description | Material | In. | (mm) |
| Inner Conductor | Stranded BC | 0.108 | (2.74) |
| Dielectric | Foam Polyethylene | 0.285 | (7.24) |
| Outer Conductor | Aluminum Tape | 0.291 | (7.39) |
| Overall Braid | Tinned Copper | 0.320 | (8.13) |
| Jacket | Black Thermoplastic Elastomer | 0.405 | (10.29) |

LMR®-400-UF UltraFlex Communications Coax



Connectors

| Interface | Description | Part Number | Stock Code | VSWR** Freq. (GHz) | Coupling Nut | Inner Contact Attach | Outer Contact Attach | Finish* Body /Pin | Length in (mm) | Width in (mm) | Weight lb (g) |
|-----------------|---------------|-----------------|------------|-----------------------|-----------------|----------------------------|----------------------------|----------------------|-------------------|------------------|------------------|
| 7-16 DIN Female | Straight Jack | TC-400-716-FC | 3190-376 | <1.25:1 (2.5) | NA | Solder | Clamp | S/S | 1.6 (41) | 1.13 (28.7) | 0.281 (127.5) |
| 7-16 DIN Male | Straight Plug | TC-400-716-MC | 3190-279 | <1.25:1 (2.5) | Hex | Solder | Clamp | S/S | 1.4 (36) | 1.40 (35.6) | 0.268 (121.6) |
| BNC Male | Straight Plug | TC-400-BM | 3190-318 | <1.25:1 (2.5) | Knurl | Solder | Crimp | N/S | 1.7 (43) | 0.56 (14.2) | 0.063 (28.6) |
| Mini-UHF | Straight Plug | TC-400-MUHF | 3190-520 | <1.25:1 (2.5) | Knurl | Solder | Crimp | N/G | 1.1 (28) | 0.50 (12.7) | 0.020 (9.1) |
| N Female | Straight Jack | TC-400-NFC | 3190-299 | <1.25:1 (2.5) | NA | Solder | Clamp | N/S | 1.6 (41) | 0.75 (19.1) | 0.119 (54.0) |
| N Male | Straight Plug | SC-400-NM | 3190-1454 | <1.25:1 (2.5) | Knurl | Solder | Crimp | N/G | 1.5 (38) | 0.75 (19.1) | 0.090 (40.8) |
| | Straight Plug | TC-400-NM | 3190-188 | <1.25:1 (2.5) | Knurl | Solder | Crimp | N/G | 1.5 (38) | 0.75 (19.1) | 0.090 (40.8) |
| | Straight Plug | TC-400-NMC | 3190-277 | <1.25:1 (2.5) | Knurl | Solder | Clamp | N/G | 1.5 (38) | 0.75 (19.1) | 0.121 (54.9) |
| | Straight Plug | TC-400-NMH-D | 3190-552 | <1.25:1 (10) | Hex/Knurl | Solder | Crimp | A/G | 1.5 (38) | 0.89 (22.6) | 0.113 (51.3) |
| | Right Angle | TC-400-NMH-RA | 3190-422* | <1.35:1 (6) | Hex | Solder | Crimp | S/G | 1.8 (46) | 1.25 (31.8) | 0.130 (59.0) |
| | Right Angle | TC-400-NMH-RA-D | 3190-2293* | <1.35:1 (6) | Hex/Knurl | Solder | Crimp | A/G | 1.8 (46) | 1.25 (31.8) | 0.130 (59.0) |
| SMA Male | Straight Plug | TC-400-SM | 3190-439 | <1.25:1 (8) | Hex | Solder | Crimp | N/G | 1.2 (29) | 0.50 (12.7) | 0.032 (14.5) |
| TNC Male | Straight Plug | TC-400-TM | 3190-260 | <1.25:1 (2.5) | Knurl | Solder | Crimp | N/S | 1.7 (43) | 0.59 (15.0) | 0.074 (33.6) |
| | Right Angle | TC-400-TM-RA | 3190-442* | <1.35:1 (2.5) | Knurl | Solder | Crimp | N/G | 1.7 (43) | 0.59 (15.0) | 0.085 (38.6) |

* Finish metals: N=Nickel, S=Silver, G=Gold, SS=Stainless Steel, A=Alballoy **VSWR spec based on 3 foot cable with a connector pair *Available in bulk pack

Mechanical Specifications

| Performance Property | Units | US | (metric) |
|---------------------------|----------------|-------|----------|
| Bend Radius: installation | in. (mm) | 1.0 | (25.4) |
| Bend Radius: repeated | in. (mm) | 4.0 | (101.6) |
| Bending Moment | ft-lb (N-m) | 0.375 | (0.51) |
| Weight | lb/ft (kg/m) | .088 | (0.131) |
| Tensile Strength | lb (kg) | 160 | (72.6) |
| Flat Plate Crush | lb/in. (kg/mm) | 20 | (0.36) |

Environmental Specifications

| Performance Property | °F | °C |
|--------------------------------|----------|---------|
| Installation Temperature Range | -40/+185 | -40/+85 |
| Storage Temperature Range | -94/+185 | -70/+85 |
| Operating Temperature Range | -40/+185 | -40/+85 |

Electrical Specifications

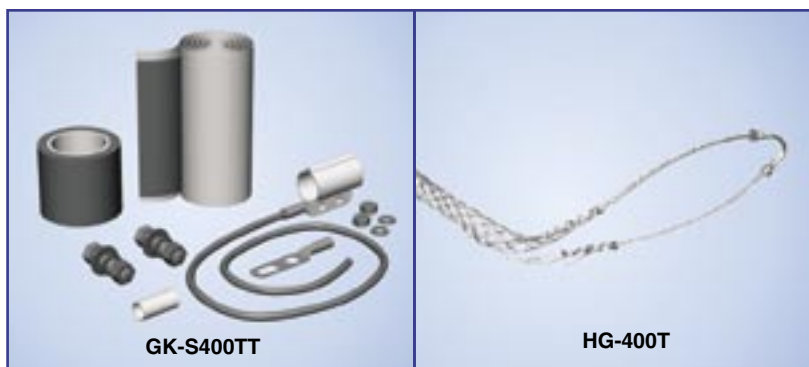
| Performance Property | Units | US | (metric) |
|-------------------------|-------------------|-------|----------|
| Cutoff Frequency | GHz | 16.2 | |
| Velocity of Propagation | % | 85 | |
| Dielectric Constant | NA | 1.38 | |
| Time Delay | nS/ft (nS/m) | 1.20 | (3.92) |
| Impedance | ohms | 50 | |
| Capacitance | pF/ft (pF/m) | 23.9 | (78.40) |
| Inductance | uH/ft (uH/m) | 0.060 | (0.21) |
| Shielding Effectiveness | dB | >90 | |
| DC Resistance | | | |
| Inner Conductor | ohms/1000ft (/km) | 1.07 | (3.51) |
| Outer Conductor | ohms/1000ft (/km) | 1.65 | (5.4) |
| Voltage Withstand | Volts DC | 2500 | |
| Jacket Spark | Volts RMS | 8000 | |
| Peak Power | kW | 16 | |

Attenuation vs. Frequency (typical)



| Frequency (MHz) | 30 | 50 | 150 | 220 | 450 | 900 | 1500 | 1800 | 2000 | 2500 | 5800 |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|
| Attenuation dB/100 ft | 0.8 | 1.1 | 1.8 | 2.2 | 3.3 | 4.7 | 6.2 | 6.8 | 7.2 | 8.1 | 13.0 |
| Attenuation dB/100 m | 2.7 | 3.5 | 6.1 | 7.4 | 10.7 | 15.4 | 20.2 | 22.3 | 23.6 | 26.6 | 42.6 |
| Avg. Power kW | 2.77 | 2.14 | 1.22 | 1.00 | 0.69 | 0.48 | 0.36 | 0.33 | 0.31 | 0.28 | 0.17 |

Calculate Attenuation = $(0.146748) \cdot \sqrt{\text{FMHz}} + (0.000312) \cdot \text{FMHz}$ (interactive calculator available at http://www.timesmicrowave.com/cable_calculators)
 Attenuation: VSWR=1.0; Ambient = +25°C (77°F) Power: VSWR=1.0; Ambient = +40°C; Inner Conductor = 100°C (212°F);
 Sea Level; dry air; atmospheric pressure; no solar loading



Hardware Accessories

| Type | Part Number | Stock Code | Description |
|---------------|-------------|------------|-------------------------------|
| Ground Kit | GK-S400TT | GK-S400TT | Standard Grounding Kit (each) |
| Hoisting Grip | HG-400T | HG-400T | Laced Type (each) |



Install Tools

| Type | Part Number | Stock Code | Description |
|-------------------|-------------|------------|--|
| Crimp Tool | HX-4 | 3190-200 | Crimp Handle |
| Crimp Dies | Y1719 | 3190-202 | .429" Hex Dies |
| Crimp Tool | CT-400/300 | 3190-666 | Crimp tool for LMR 400 connectors |
| Crimp Rings | CR-400 | 3190-830 | Crimp rings for TC/EZ-400 connectors (package of 10) |
| Cutting Tool | CCT-01 | 3190-1544 | Cable end flush cut tool |
| Replacement Blade | RB-01 | 3190-1609 | Replacement blade for cutting tool |