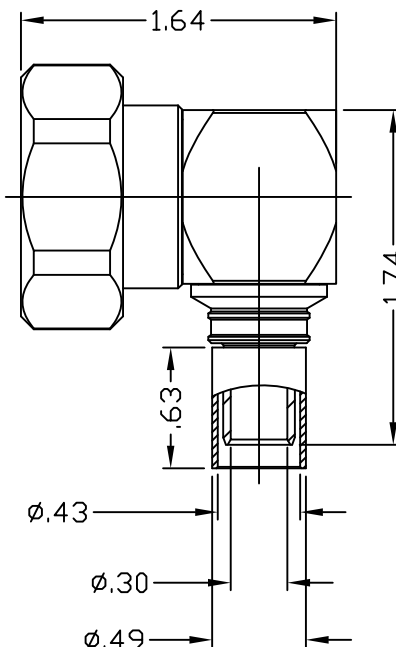
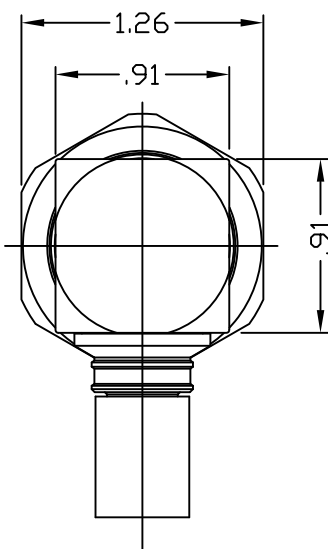


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| SYM | REVISION DESCRIPTION    | DFTM   | DATE    | APPD   | DATE    |
|-----|-------------------------|--------|---------|--------|---------|
| A   | RELEASED FOR PRODUCTION | K.A.M. | 3/31/10 | J.B.D. | 5/17/10 |



Reference standard IEC60169-4

#### I Electric Performance

Nominal Impedance( $\Omega$ ): 50  
Frequency Range: DC-3GHz  
VSWR:  $\leq 1.15$   
INSERT LOSS:  $\leq 0.1$   
Insulation resistance(M $\Omega$ ) 10000  
Proof voltage(V) 2500  
Conductor resistance(m $\Omega$ ) outer conductor  $\leq 0.2$   
inner conductor  $\leq 0.8$

#### II Mechanical Performance

Pin torque 25N.m  
(Nut)Whorl pull 1000N  
Tensile force(cable-connect) 400N  
Torsion(cable-connect) 2N.m

#### III Material and plating

| Component       | Material        |
|-----------------|-----------------|
| Inner conductor | Spring Copper   |
| Outer conductor | Brass           |
| Ferrule         | Copper          |
| Nut             | Brass           |
| Gasket          | Silicone rubber |
| Insulator       | PTFE            |

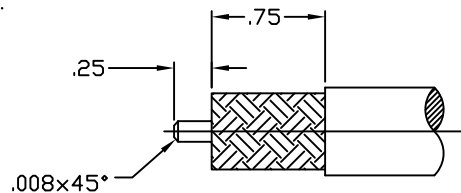
**Plating**  
Ag 200 micro inches  
Copper-tin-zin (Albaloy) 150 micro inches  
Copper-tin-zin (Albaloy) 150 micro inches  
Copper-tin-zin (Albaloy) 150 micro inches

#### IV Environment

Temp.range -55°C~+155°C  
Weather standard IEC 60068 55 / 155/ 56  
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  
Waterproofing standard IP67

V Assembly: inner conductor installed and  
outer conductor crimped

#### VI ROHS Compliant.



Recommended  
cable stripping Dim's

|                      |                              |                  |                |                                   |       |
|----------------------|------------------------------|------------------|----------------|-----------------------------------|-------|
| MATL:                | UNLESS OTHERWISE SPECIFIED   |                  | DFTM. K. A. M. | TIMES MICROWAVE SYSTEMS           |       |
|                      | ALL DIMENSIONS ARE IN INCHES |                  | DATE 3/31/10   |                                   |       |
| USED ON:<br>0        |                              |                  | CHKD. J. D. B. | 90° 7/16 MALE<br>FOR LMR400 CABLE |       |
|                      |                              |                  | DATE 5/17/10   |                                   |       |
| SCALE: ~             | DWG. SIZE A                  |                  | APPD. J. D. B. | 1 of 1 SD3190-2545                |       |
|                      |                              |                  | DATE 5/17/10   |                                   |       |
| DO NOT SCALE DRAWING |                              | CODE IDENT 68999 | DATE 5/17/10   | SH 1 of 1                         | REV 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

|             |                     |
|-------------|---------------------|
| <b>Size</b> |                     |
| 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](#)

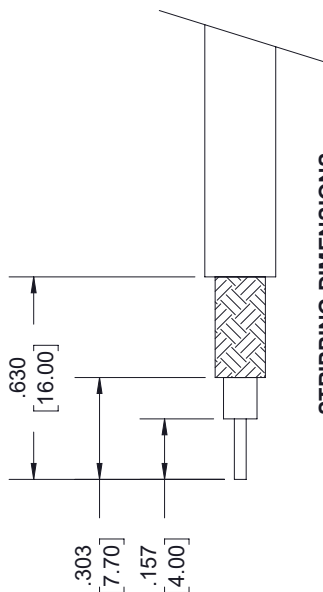
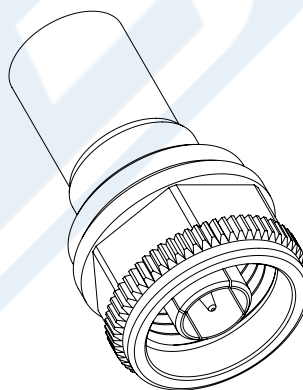
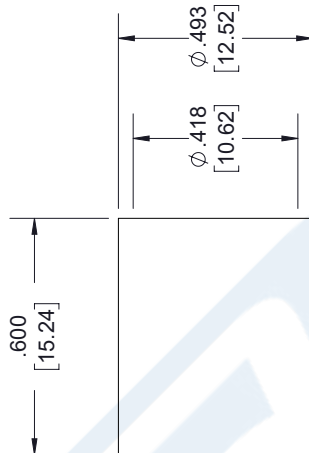
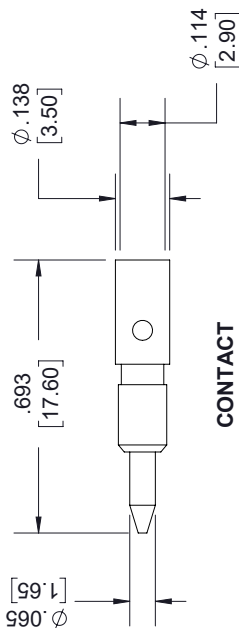
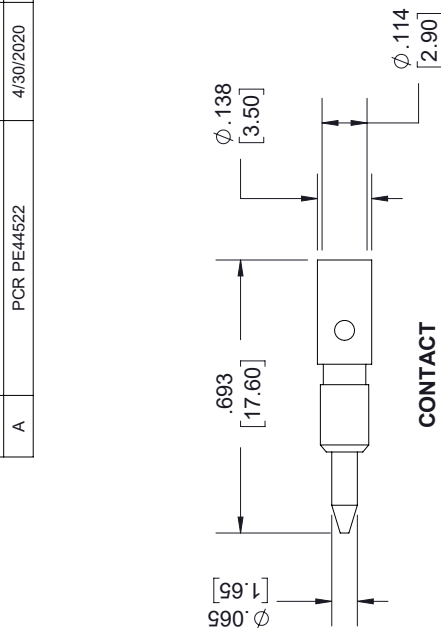
URL: <https://www.pasternack.com/n-male-standard-pe-c400-0.400-connector-pe44522-p.aspx>

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  |



## 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]                 |
| .XX = ± .02                                     | [.51]                  |
| .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% / -0             |
| ALL DIMENSIONS SHOWN<br>ARE FOR REFERENCE ONLY. |                        |



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SHEET 1 OF 1

SCALE N/A

REV A



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Website: www.pasternack.com  
E-mail: sales@pasternack.com

ITEM NO. PE44522

CAGE CODE 53919

DRAWN BY K.DANG

REV A

# LMR®-400 Flexible Low Loss 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 (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable



• **LMR®** standard is a UV Resistant Polyethylene jacketed cable designed for 20-year service outdoor use. The bending and handling characteristics are significantly better than air-dielectric and corrugated hard-line cables.

• **LMR®-DB** is identical to standard LMR plus has the advantage of being watertight. The addition of waterproofing compound in and around the foil/braid insures continuous reliable service should the jacket be inadvertently damaged during installation or in the future.

• **LMR®-FR** is a non-halogen (non-toxic), low smoke, fire retardant cable designed for in-building runs that can be routed anywhere except air handling plenums. LMR-FR is UL/NEC & CSA rated 'CMR' and 'FT4' respectively, meets FAA FAR25 requirements and is MSHA-P for mining applications.

• **LMR®-FR-PVC** is a general-purpose indoor cable and has a UL/NEC & CSA rating of 'CMR' and 'FT4' respectively. It is less expensive than LMR-FR, however it emits toxic fumes (HCL) and greater smoke density when burned.

• **LMR®-PVC** is designed for low loss general-purpose applications and is somewhat more flexible than the standard polyethylene jacketed LMR.

• **LMR®-PVC-W** is a white-jacketed version of LMR-PVC for marine and other applications where color compatibility is desired.

• **Flexibility** and bendability are hallmarks of the LMR-400 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.

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 cables designed for outdoor exposure incorporate the best materials for UV resistance and have life expectancy in excess of 20 years.

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

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

| Part Description |                      |           |       |  | Stock |
|------------------|----------------------|-----------|-------|--|-------|
| Part Number      | Application          | Jacket    | Color |  | Code  |
| LMR-400          | Outdoor              | PE        | Black |  | 54001 |
| LMR-400-DB       | Outdoor/Watertight   | PE        | Black |  | 54091 |
| LMR-400-FR       | Indoor/Outdoor Riser | CMR FRPE  | Black |  | 54030 |
| LMR-400-FR-PVC   | Indoor/Outdoor Riser | CMR FRPVC | Black |  | 54073 |
| LMR-400-PVC      | General Purpose      | PVC       | Black |  | 54218 |
| LMR-400-PVC-W    | General Purpose      | PVC       | White |  | 54204 |

| Construction Specifications |                   |       |         |
|-----------------------------|-------------------|-------|---------|
| Description                 | Material          | In.   | (mm)    |
| Inner Conductor             | Solid BCCAI       | 0.108 | (2.74)  |
| Dielectric                  | Foam PE           | 0.285 | (7.24)  |
| Outer Conductor             | Aluminum Tape     | 0.291 | (7.39)  |
| Overall Braid               | Tinned Copper     | 0.320 | (8.13)  |
| Jacket                      | (see table above) | 0.405 | (10.29) |



# LMR®-400 Flexible Low Loss Communications Coax



## Connectors

|                 |                  |                   |            |             |          |           | Inner         | Outer | Finish* |         |        |      |        |       |         |
|-----------------|------------------|-------------------|------------|-------------|----------|-----------|---------------|-------|---------|---------|--------|------|--------|-------|---------|
| Interface       | Description      | Part Number       | Stock Code | VSWR**      | Coupling | Contact   | Contact       | Body  | Length  | Width   | Weight |      |        |       |         |
|                 |                  |                   |            | Freq. (GHz) | Nut      | Attach    | Attach        | /Pin  | in (mm) | in (mm) | 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    | EZ-400-716M-X     | 3190-2524  | <1.25:1     | (6)      | Hex       | Spring Finger | Crimp | A/G     | 1.6     | (39.5) | 1.38 | (35)   | 0.277 | (126.0) |
| 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) |
| 7-16 DIN Male   | Right Angle      | TC-400-716MC-RA   | 3190-1671  | <1.25:1     | (<3)     | Hex       | Solder        | Clamp | A/S     | 2.4     | (61.5) | 1.88 | (47.8) | 0.35  | (159)   |
| 7-16DIN Male    | Right Angle      | EZ-400-716M-RA-X  | 3190-2545  | <1.35:1     | (6)      | Hex       | Spring Finger | Crimp | A/G     | 1.6     | (41.7) | 1.75 | (44.3) | 0.374 | (0.17)  |
| 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)  |
| HN Male         | Straight Plug    | TC-400-HNM        | 3190-923   | <1.25:1     | (<1)     | Knurl     | Solder        | Clamp | S/G     | 2.3     | (59.2) | 0.88 | (22.4) | 0.25  | (113.4) |
| HN Male         | Right Angle      | TC-400-HNM-RA     | 3190-2541  | <1.25:1     | (2.5)    | Hex       | Solder        | Crimp | A/G     | 1.6     | (41.4) | 1.56 | (39.6) | 0.198 | (90.0)  |
| QDS Male        | Straight Plug    | TC-400-QDSM       | 3190-620   | <1.25:1     | (<3)     | Knurl     | Solder        | Clamp | A/G     | 1.8     | (46.6) | 1.00 | (25.4) | 0.25  | (113.4) |
| 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)  |
|                 | Straight Jack    | EZ-400-NF         | 3190-956   | <1.25:1     | (2.5)    | NA        | Spring Finger | Crimp | N/G     | 1.8     | (45)   | 0.66 | (16.8) | 0.105 | (47.6)  |
|                 | Straight Jack    | TC-400-NF         | 3190-2255  | <1.25:1     | (2.5)    | NA        | Solder        | Crimp | N/G     | 1.8     | (45)   | 0.66 | (16.8) | 0.105 | (47.6)  |
|                 | Bulkhead Jack    | EZ-400-NF-BH      | 3190-518*  | <1.25:1     | (2.5)    | NA        | Spring Finger | Crimp | N/G     | 1.8     | (46)   | 0.88 | (22.4) | 0.102 | (46.3)  |
|                 | Bulkhead Jack    | TC-400-NFC-BH (A) | 3190-872   | <1.25:1     | (2.5)    | NA        | Solder        | Clamp | A/G     | 1.8     | (46)   | 0.88 | (22.4) | 0.145 | (65.8)  |
| 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-NMC        | 3190-277   | <1.25:1     | (2.5)    | Knurl     | Solder        | Clamp | N/G     | 1.5     | (38)   | 0.70 | (17.8) | 0.121 | (54.9)  |
|                 | Straight Plug    | EZ-400-NMC-2      | 3190-2640  | <1.25:1     | (2.5)    | Hex/Knurl | Spring Finger | Crimp | N/G     | 1.5     | (38)   | 0.75 | (19.1) | 0.121 | (54.9)  |
|                 | Straight Plug    | EZ-400-NMH-X      | 3190-2590  | <1.25:1     | (10)     | Hex/Knurl | Spring Finger | Crimp | A/G     | 1.5     | (38)   | 0.89 | (22.6) | 0.103 | (46.8)  |
|                 | Straight Plug    | TC-400-NMH-X      | 3190-2626  | <1.25:1     | (10)     | Hex/Knurl | Solder        | Crimp | A/G     | 1.5     | (38)   | 0.89 | (22.6) | 0.113 | (51.3)  |
|                 | Straight Plug    | EZ-400-NMK        | 3190-661   | <1.25:1     | (10)     | Knurl     | Spring Finger | Crimp | S/G     | 1.5     | (38)   | 0.75 | (22.6) | 0.113 | (51.3)  |
|                 | Right Angle      | EZ-400-NMH-RA-X   | 3190-2638  | <1.35:1     | (6)      | Hex/Knurl | Spring Finger | Crimp | A/G     | 1.87    | (47)   | 1.42 | (36.0) | 0.177 | (80.2)  |
|                 | 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)  |
|                 | Right Angle      | TC-400-NMC-RA (A) | 3190-870   | <1.35:1     | (2.5)    | Hex       | Solder        | Clamp | A/G     | 1.8     | (46)   | 1.25 | (31.8) | 0.150 | (68.0)  |
|                 | Reverse Polarity | TC-400-NM-RP      | 3190-960   | <1.25:1     | (2.5)    | Knurl     | Solder        | Crimp | N/G     | 1.5     | (38)   | 0.75 | (19.1) | 0.090 | (40.8)  |
| 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 Female      | Reverse Polarity | TC-400-TF-RP      | 3190-1063  | <1.25:1     | (2.5)    | NA        | Solder        | Crimp | N/G     | 1.8     | (46)   | 0.55 | (14.0) | 0.074 | (33.6)  |
|                 | Reverse Polarity | EZ-400-TF-RP      | 3190-795   | <1.25:1     | (2.5)    | NA        | Spring Finger | Crimp | A/G     | 1.8     | (46)   | 0.55 | (14.0) | 0.074 | (33.6)  |
| TNC Male        | Straight Plug    | TC-400-TM-X       | 3190-2532  | <1.25:1     | (6)      | Hex/Knurl | Solder        | Crimp | A/G     | 1.9     | (48)   | 0.67 | (17.5) | 0.075 | (34.3)  |
|                 | Straight Plug    | EZ-400-TM-X       | 3190-2533  | <1.25:1     | (6)      | Hex/Knurl | Spring Finger | Crimp | A/G     | 1.9     | (48)   | 0.67 | (17.5) | 0.075 | (34.3)  |
|                 | 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)  |
|                 | Reverse Polarity | TC-400-TM-RP      | 3190-1062  | <1.25:1     | (2.5)    | Knurl     | Solder        | Crimp | N/G     | 1.7     | (43)   | 0.59 | (15.0) | 0.074 | (33.6)  |
|                 | Reverse Polarity | EZ-400-TM-RP      | 3190-794   | <1.25:1     | (2.5)    | Knurl     | Spring Finger | Crimp | A/G     | 1.7     | (43)   | 0.59 | (15.0) | 0.074 | (33.6)  |