

## TNC Female Bulkhead to RA Push-On SMP Female Cable LMR-100 Coax in 36 Inch

The TNC female bulkhead to RA SMP female push-on 36 inch cable using LMR-100 coax, part number FMC00328-36, from Fairview Microwave is in-stock and ships same day. This Fairview TNC to SMP cable assembly has a female to female gender configuration with 50 ohm flexible LMR-100A coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00328-36 TNC female to SMP female cable assembly operates to 3 GHz. The right angle SMP interface on the LMR-100A cable allows for easier connections in tight spaces. Our RF cable assembly with TNC bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

### Electrical Specifications

| Description                   | Min | Typ           | Max   | Units                                         |
|-------------------------------|-----|---------------|-------|-----------------------------------------------|
| Frequency Range               | DC  |               | 3     | GHz                                           |
| VSWR                          |     |               | 1.4:1 |                                               |
| Velocity of Propagation       |     | 66            |       | %                                             |
| RF Shielding                  | 90  |               |       | dB                                            |
| Group Delay                   |     | 1.54 [5.05]   |       | ns/ft [ns/m]                                  |
| Capacitance                   |     | 30.8 [101.05] |       | pF/ft [pF/m]                                  |
| Inductance                    |     | 0.077 [0.25]  |       | uH/ft [uH/m]                                  |
| DC Resistance Inner Conductor |     | 81 [265.75]   |       | $\Omega/1000\text{ft}$ [ $\Omega/\text{Km}$ ] |
| DC Resistance Outer Conductor |     | 9.5 [31.17]   |       | $\Omega/1000\text{ft}$ [ $\Omega/\text{Km}$ ] |
| Jacket Spark                  |     | 2,000         |       | Vrms                                          |

### Performance by Frequency

| Description           | F1   | F2   | F3  | F4   | F5  | Units |
|-----------------------|------|------|-----|------|-----|-------|
| Frequency             | 0.1  | 0.25 | 0.5 | 1    | 3   | GHz   |
| Insertion Loss (Typ.) | 0.51 | 0.65 | 0.8 | 1.02 | 1.6 | dB    |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB for the straight connector and 0.2 dB for the right angle connector.

### Mechanical Specifications

#### Cable Assembly

Length\*

36 in [914.4 mm]



### Configuration:

- TNC Female Bulkhead
- Push-OnSMP Female Right Angle
- LMR-100A

### Features:

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

### Applications:

- General Purpose
- Laboratory Use

Diameter 0.68 in [17.27 mm]

**Cable**

|                                      |                        |
|--------------------------------------|------------------------|
| Cable Type                           | LMR-100A               |
| Impedance                            | 50 Ohms                |
| Inner Conductor Type                 | Solid                  |
| Inner Conductor Material and Plating | Copper Clad Steel      |
| Dielectric Type                      | PE                     |
| Number of Shields                    | 2                      |
| Shield Layer 1                       | Aluminum Tape          |
| Shield Layer 2                       | Tinned Copper Braid    |
| Jacket Material                      | PVC, Black             |
| Jacket Diameter                      | 0.11 in [2.79 mm]      |
| One Time Minimum Bend Radius         | 0.25 in [6.35 mm]      |
| Repeated Minimum Bend Radius         | 1 in [25.4 mm]         |
| Bending Moment                       | 0.1 lbs-ft [0.14 N-m]  |
| Flat Plate Crush                     | 10 lbs/in [0.18 Kg/mm] |
| Tensile Strength                     | 15 lbs [6.8 Kg]        |

**Connectors**

| Description                   | Connector 1           | Connector 2            |
|-------------------------------|-----------------------|------------------------|
| Type                          | TNC Female            | SMP Female             |
| Mount Method                  | Bulkhead              |                        |
| Specification                 | MIL-STD-348           | MIL-STD-348A           |
| Impedance                     | 50 Ohms               | 50 Ohms                |
| Connection Method             |                       | Push-On                |
| Contact Material & Plating    | Phosphor Bronze, Gold | Beryllium Copper, Gold |
| Contact Plating Spec.         |                       | 30µ in. minimum        |
| Dielectric Type               | PTFE                  | PTFE                   |
| Outer Cond Material & Plating | Brass, Nickel         | Beryllium Copper, Gold |
| Outer Cond Plating Spec.      |                       | 3µ in. minimum         |
| Body Material & Plating       | Brass, Nickel         | Brass, Gold            |
| Body Plating Spec.            |                       | 3µ in. minimum         |
| Hex Size                      | 8-May in              |                        |

Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8$ ", whichever is greater.

**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:

## How to Order

Part Number Configuration:

**FMC00328 - xx uu**

Length  
cm = Centimeters  
<blank> = Inches

Example: FMC00328-12 = 12 inches long cable  
FMC00328-100cm = 100 cm long cable

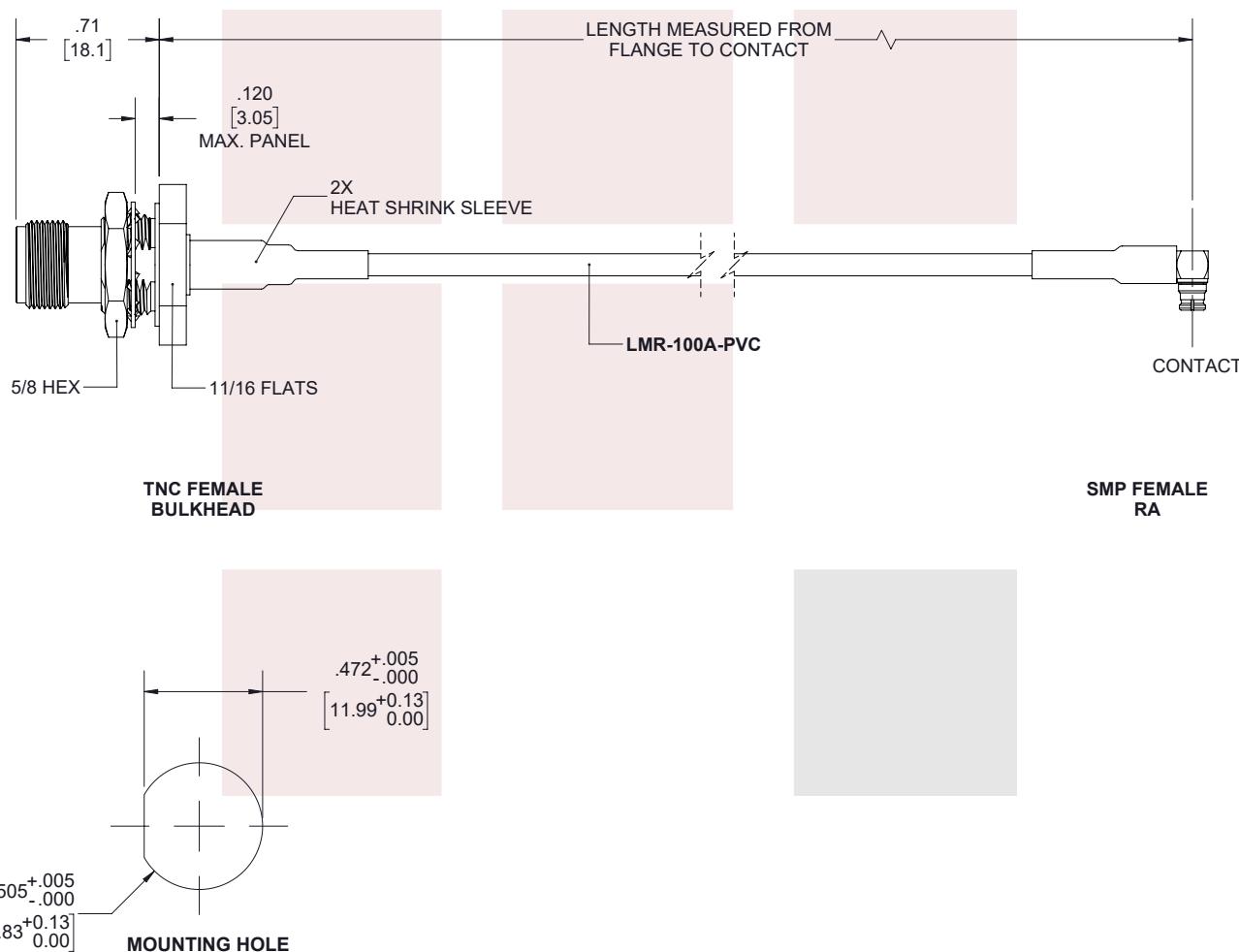
TNC Female Bulkhead to RA Push-On SMP Female Cable LMR-100 Coax in 36 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [TNC Female Bulkhead to RA Push-On SMP Female Cable LMR-100 Coax in 36 Inch FMC00328-36](#)

URL: <https://www.fairviewmicrowave.com/tnc-female-ra-smp-female-cable-lmr100-coax-fmc00328-36-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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

| REVISIONS |                 |           |          |
|-----------|-----------------|-----------|----------|
| REV.      | DESCRIPTION     | DATE      | APPROVED |
| A         | INITIAL RELEASE | 2/19/2020 | S.ELLIS  |



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| TITLE                                           |                 | <b>TOLERANCES:</b><br>$.X = \pm .2$ [5.08] FRACTIONS<br>$.XX = \pm .02$ [.51] $\pm 1/32$<br>$XXX = \pm .005$ [.13] ANGLES $\pm 1^\circ$ | <b>CABLE LENGTH (L) TOLERANCES:</b><br>$L \leq 12$ [305] = $+1$ [25] / -0<br>$60$ [1524] $< L \leq 120$ [3048] = $+4$ [102] / -0<br>$120$ [3048] $< L \leq 300$ [7620] = $+6$ [152] / -0<br>$300$ [7620] $< L = +5\%$ / -0 |
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| SIZE A                                          | CAGE CODE 3FKR5 | DRAWN BY K.DANG                                                                                                                         | ITEM NO. FMC00328 REV A                                                                                                                                                                                                    |

T-Rev.D