

Fire Rated TNC Male Right Angle to TNC Male Low Loss Cable Using LMR-100-FR Coax



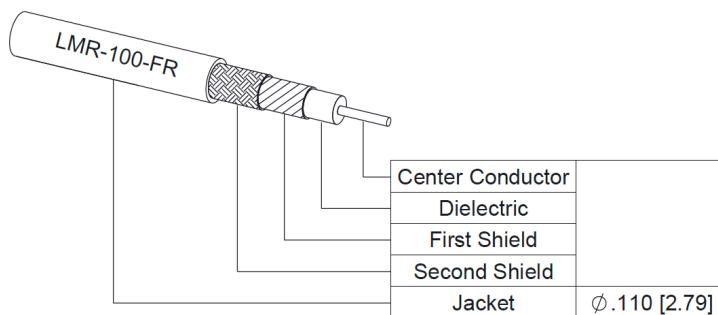
PE3W15769

Configuration

- Connector 1: TNC Male Right Angle
- Connector 2: TNC Male
- Cable Type: LMR-100A-FR
- Coax Cable Group: 8
- Coax Flex Type: Flexible

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W15769 TNC male right angle to TNC male cable using LMR-100-FR coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack TNC to TNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-100A-FR coax. The PE3W15769 TNC male to TNC male cable assembly operates to 3 GHz. The right angle TNC interface on the LMR-100A-FR cable allows for easier connections in tight spaces. The double shielding of this Pasternack 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 available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Minimum	Typical	Maximum	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]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical					Maximum	Units
Jacket Spark						2,000		Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
PE3W15769	Custom Lengths Available	Insertion Loss (Typ.)	0.07	0.115	0.165	0.24	0.432	dB/ft	
			0.23	0.38	0.55	0.79	1.42	dB/m	
PE3W15769-24	24 in	Insertion Loss (Typ.)	0.59	0.68	0.78	0.93	1.32	dB	0.102
PE3W15769-36	36 in	Insertion Loss (Typ.)	0.66	0.8	0.95	1.17	1.75	dB	0.111
PE3W15769-48	48 in	Insertion Loss (Typ.)	0.73	0.91	1.11	1.41	2.18	dB	0.12
PE3W15769-100CM	100 CM	Insertion Loss (Typ.)	0.68	0.83	1	1.24	1.87	dB	0.114
PE3W15769-200CM	200 CM	Insertion Loss (Typ.)	0.91	1.21	1.54	2.03	3.29	dB	0.144

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.2 dB
Loss due to Connector 2:	0.25 dB
Base Weight:	0.093 pounds
Additional Weight per Inch:	0.00075 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.093 lbs [42.18 g]

Cable

Cable Type	LMR-100A-FR
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper
Jacket Material	FRPE, 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]

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Connectors

Description	Connector 1	Connector 2
Type	TNC Male Right Angle	TNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification		30 μ in minimum
Dielectric Type	POM	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification		100 μ in minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 μ in minimum

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

Compliance Certifications

(see [product page](#) for current document)

Plotted and Other Data

Notes:

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PE3W15769

Typical Performance Data

How to Order

Part Number Configuration:

PE3W15769 - xx uu

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: PE3W15769-12 = 12 inches long cable
PE3W15769-100cm = 100 cm long cable

Fire Rated TNC Male Right Angle to TNC Male Low Loss Cable Using LMR-100-FR 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.

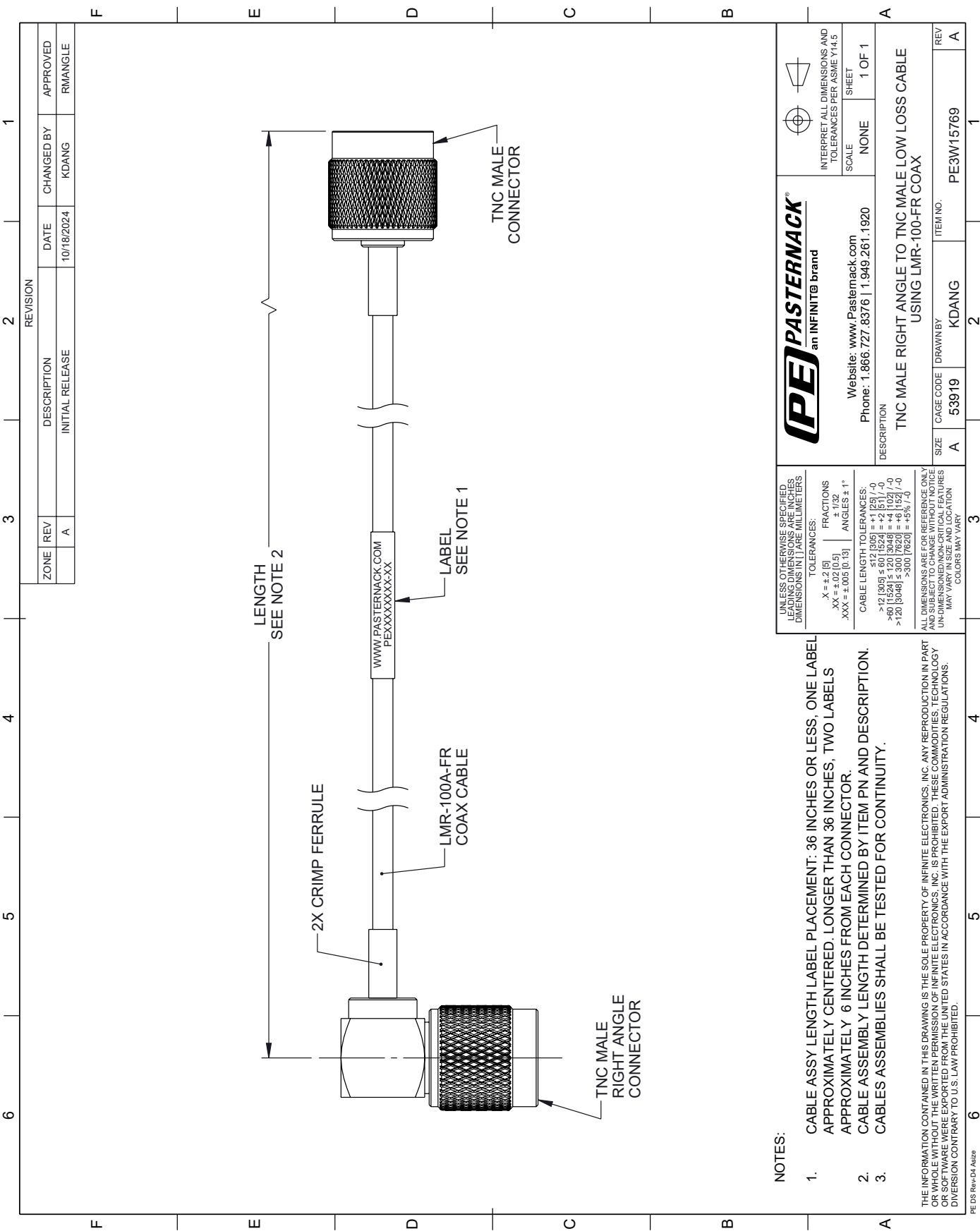
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated TNC Male Right Angle to TNC Male Low Loss Cable Using LMR-100-FR Coax PE3W15769](#)

URL: <https://www.pasternack.com/fire-rated-tnc-male-right-angle-to-tnc-male-low-loss-cable-using-lmr-100-fr-pe3w15769-p.aspx>

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PE3W15769 CAD Drawing

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NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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PASTERNACK® an INFINITE® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
Website: www.Pasternack.com Phone: 1.866.727.8326 1.949.261.1920		SCALE NONE
DESCRIPTION TNC MALE RIGHT ANGLE TO TNC MALE LOW LOSS CABLE USING LMR-100-FR COAX		SHOOT 1 OF 1
<small>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN ITARE MILLIMETERS.</small>		
<small> X = ± 2.15 XX = $\pm 0.210.5$ XXX = $\pm .005.0.131$ </small>		<small> FRACTIONS $\pm 1/32$ ANGLES $\pm 1^\circ$ </small>
<small> CABLE LENGTH TOLERANCES: $>12.305 \pm 60.1524$ = $+1.25/-0$ $>60.1524 \pm 20.3548$ = $+4.102/-0$ $>20.3548 \pm 10.7622$ = $+6.152/-0$ $>20.7622 \pm 5.000.7722$ = $+4.56/-0$ </small>		