

Low Loss SMA Male to TNC Male Weatherproof Cable Assembly with Silicone using LMR-400 Coax with Times Microwave Components



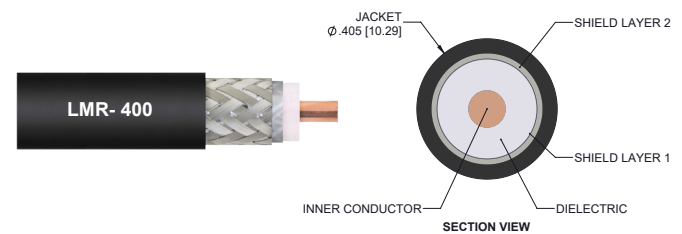
LCCA30293/WP

Configuration

- Connector 1: SMA Male
- Connector 2: TNC Male
- Cable Type: LMR-400
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket
- Silicone Connector Boot
- IP68 Rated



Description

The L-com LCCA30293/WP is a weatherproof low loss cable assembly that comes with SMA male connection with weatherproof boot on one end and TNC male with weatherproof boot on the other. L-com's RF coaxial cable assembly products are designed for typical use, production, laboratory test and measurement, defense/military, aerial antenna towers, etc. The low loss cable has a 50 Ohm impedance and is specifically ready for quicker shipment than most in the industry can provide.

This weatherproof low loss RF cable assembly operates at a maximum frequency of 6 GHz. Our RF cable assembly has a PE jacket with 0.405 inches diameter. The SMA male to TNC male cable assembly LCCA30293/WP is built with LMR-400 coax, which has a flexible design. This RF cable assembly with 0.5 inches diameter has copper clad aluminum as cable's inner conducting material and PE (F) dielectric type. The weatherproof boot low loss cable can operate at a temperature range of -40 to 85 degrees C. Additional dimensions, specifications, and CAD drawings for this LCCA30293/WP low loss RF cable are available on our downloadable PDF datasheet.

L-com stocks a wide selection of weatherproof low loss cable assemblies that ship the same business day as ordered from our warehouse. Make your online purchase right now to take advantage of our same-day shipping. For further information on similar products, our expert technical support and knowledgeable sales team can help you get the ideal SMA male to TNC male cable assembly as per your requirements.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (DC)			2,500	Vdc

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
LCCA30293/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.028	0.041	0.068	0.108	dB/ft	
			0.07	0.1	0.14	0.23	0.36	dB/m	
LCCA30293/WP-FT1	12 In	Insertion Loss (Typ.)	0.22	0.23	0.25	0.27	0.31	dB	0.709
LCCA30293/WP-FT2	24 In	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	0.776
LCCA30293/WP-FT3	36 In	Insertion Loss (Typ.)	0.26	0.29	0.33	0.41	0.53	dB	0.843
LCCA30293/WP-FT4	48 In	Insertion Loss (Typ.)	0.28	0.32	0.37	0.48	0.64	dB	0.91
LCCA30293/WP-FT5	60 In	Insertion Loss (Typ.)	0.3	0.34	0.41	0.54	0.74	dB	0.977

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:	0.1 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.709 pounds
Additional Weight per Inch:	0.00558 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.709 lbs [321.6 g]

Cable

Cable Type	LMR-400
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE
Jacket Diameter	0.405 in [10.29 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]
Repeated Minimum Bend Radius	4 in [101.6 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]
Flat Plate Crush	40 lbs/in [0.71 Kg/mm]
Tensile Strength	160 lbs [72.57 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	TNC Male
Option	Weatherproof Boot	Weatherproof Boot
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	50 µin minimum
Dielectric Type	Teflon	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification		80 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification		80 µin minimum
Boot Material	Silicone	Silicone

Environmental Specifications

Operating Range Temperature	-40 to +85 deg C
Ingress Protection (IP) Rating	IP68

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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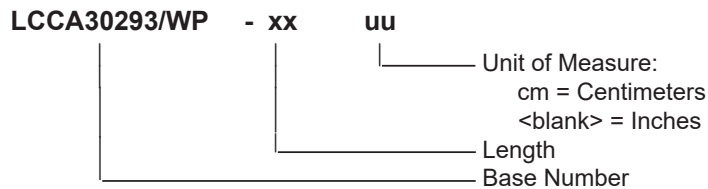


LCCA30293/WP

Typical Performance Data

How to Order

Part Number Configuration:



Example: LCCA30293/WP-12 = 12 inches long cable
LCCA30293/WP-100cm = 100 cm long cable

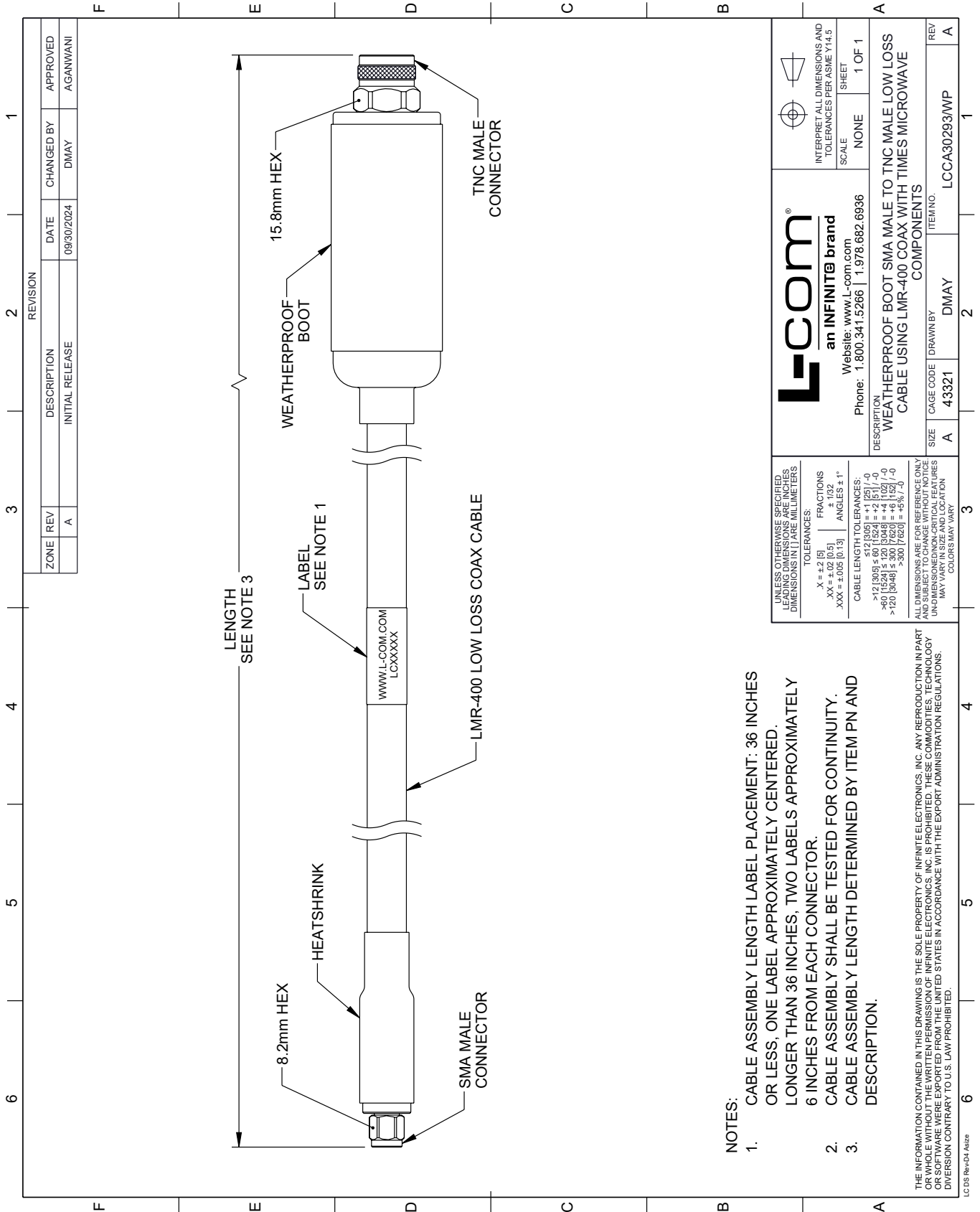
Low Loss SMA Male to TNC Male Weatherproof Cable Assembly with Silicone using LMR-400 Coax with Times Microwave Components from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

URL: <https://www.l-com.com/sma-male-tnc-male-cable-assembly-lcca30293-wp-p.aspx>

The information contained within 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 impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

LCCA30293/WP CAD Drawing

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NOTES:


1. CABLE ASSEMBLY 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 SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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LC 05 Rev-D4 A-size

REVISION		DATE		CHANGED BY		APPROVED	
ZONE	REV	DESCRIPTION	DATE	DMAY	AGANWANI		
A		INITIAL RELEASE	09/30/2024				

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.		 INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
TOLERANCES:		SCALE	
X = ±.2 [5]	FRACTIONS ± 1/32	NONE	
.XX = ±.02 [0.5]	ANGLES ± 1°	SHEET 1 OF 1	
.XXX = ±.005 [0.13]			
CABLE LENGTH TOLERANCES:			
<12 [305]	±.1 [2.5]		
>12 [305] ≤ 60 [1524]	±.2 [5.1]		
>60 [1524] ≤ 120 [3048]	±.4 [10.2]		
>120 [3048]	±.8 [20.3]		
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.			

 an INFINITE brand Website: www.L-com.com		Phone: 1.800.341.5266 1.978.682.6936	
WEATHERPROOF BOOT SMA MALE TO TNC MALE LOW LOSS CABLE USING LMR-400 COAX WITH TIMES MICROWAVE COMPONENTS			
DESCRIPTION	SIZE	CAGE CODE	ITEM NO.
A	A	43321	LCCA30293/WP
REV	REV	REV	REV
A	A	A	A