



7/16 DIN Male Connector Crimp/Solder Attachment for 0.600 inch, LMR-600, LMR-600-DB Cable

RF Connectors Technical Data Sheet

PE4090

Configuration

- 7/16 DIN Male Connector
- IEC 61169-4
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: 0.600 inch, LMR-600, LMR-600-DB

Features

- Max. Operating Frequency 8 GHz
- Silver Plated Brass Contact

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE4090 , 7/16 DIN, Standard, Connector is part of our full line of RF components available for same-day shipping. Our 7/16 DIN male connector operates up to a maximum frequency of 8 GHz.

Our 7/16 DIN male connector PE4090 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		8	GHz
Dielectric Withstanding Voltage (AC)			750	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3	3 to 6				GHz
VSWR, Max	1.15:1	1.25:1				

Mechanical Specifications

Size

Length	1.654 in [42.01 mm]
Width/Dia.	1.38 in [35.05 mm]
Height	1.38 in [35.05 mm]
Weight	0.25 lbs [113.4 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [7/16 DIN Male Connector Crimp/Solder Attachment for 0.600 inch, LMR-600, LMR-600-DB Cable PE4090](#)



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for 0.600 inch, LMR-600, LMR-600-DB Cable

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Technical Data Sheet

PE4090

Material Specifications

Description	Material	Plating
Contact	Brass	Silver
Insulation	PTFE	
Body	Brass	Tri-Metal
Coupling Nut	Brass	Tri-Metal

Environmental Specifications

Temperature

Operating Range -40 to +155 deg C

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

Plotted and Other Data

Notes:

7/16 DIN Male Connector Crimp/Solder Attachment for 0.600 inch, LMR-600, LMR-600-DB Cable 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.

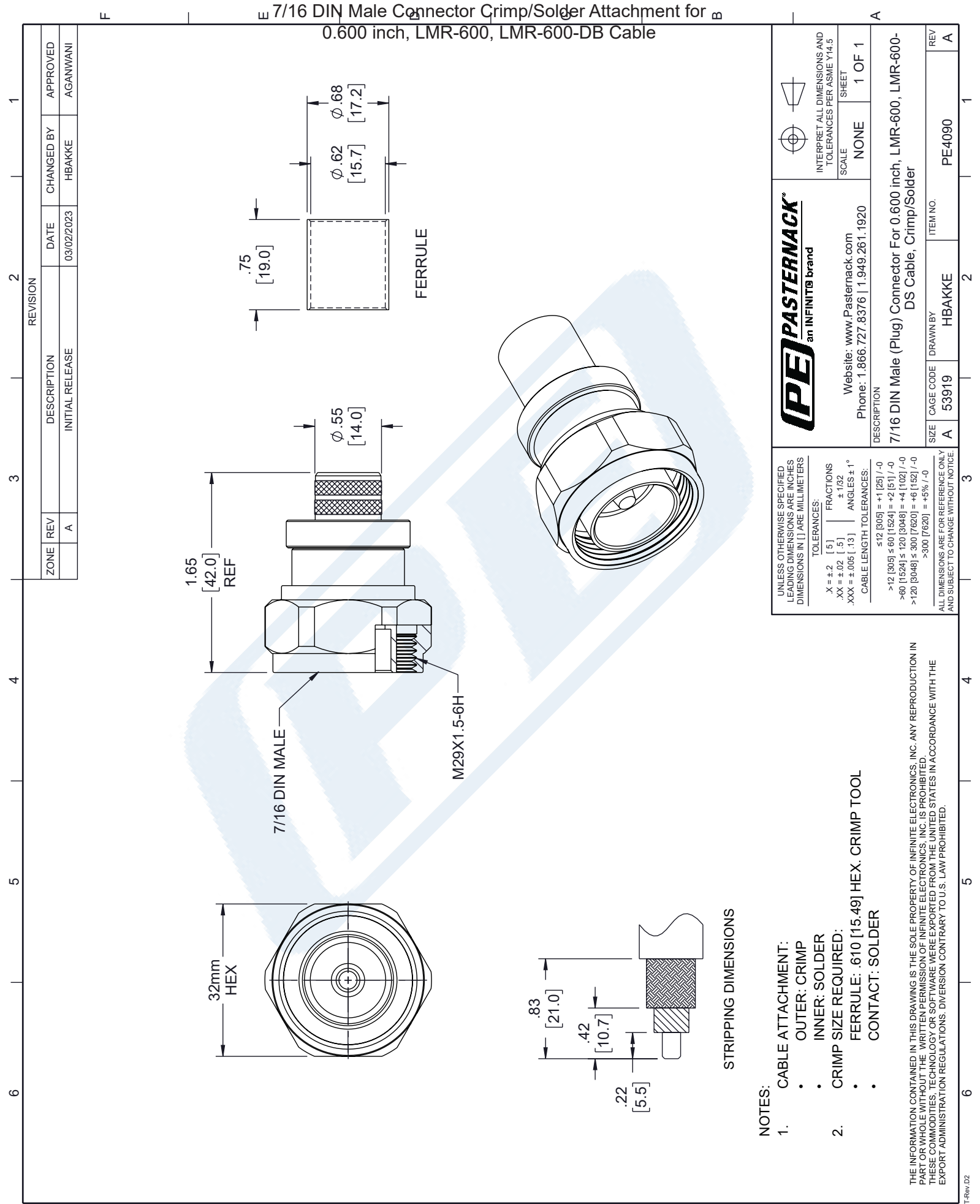
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URL: <https://www.pasternack.com/7-16-din-male-0.600-lmr-600-connector-pe4090-p.aspx>

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.

PE4090 CAD Drawing

7/16 DIN Male Connector Crimp/Solder Attachment for
0.600 inch, LMR-600, LMR-600-DB Cable



STRIPPING DIMENSIONS

NOTES:

- CABLE ATTACHMENT:
 - OUTER: CRIMP
 - INNER: SOLDER
- CRIMP SIZE REQUIRED:
 - FERRULE: .610 [15.49] HEX. CRIMP TOOL
 - CONTACT: SOLDER

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
 X = ±.2 [5] | FRACTIONS ± 1/32
 .XX = ±.02 [.5] | ANGLES ± 1°
 .XXX = ±.005 [.13]

CABLE LENGTH TOLERANCES:
 ≤ 12 [305] = +1 [25] / -0
 > 12 [305] ≤ 60 [1524] = +2 [51] / -0
 > 60 [1524] ≤ 120 [3048] = +4 [102] / -0
 > 120 [3048] ≤ 300 [7620] = +6 [152] / -0
 > 300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE

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Website: www.Pasternack.com
 Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION
 7/16 DIN Male (Plug) Connector For 0.600 inch, LMR-600, LMR-600-DB Cable, Crimp/Solder

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE NONE

SHEET 1 OF 1

ITEM NO. PE4090

DRAWN BY HBAKKE

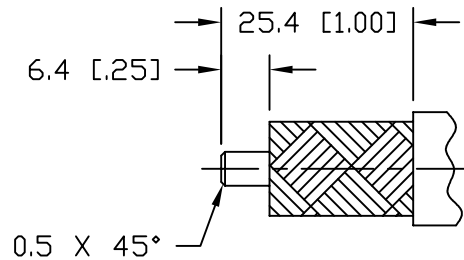
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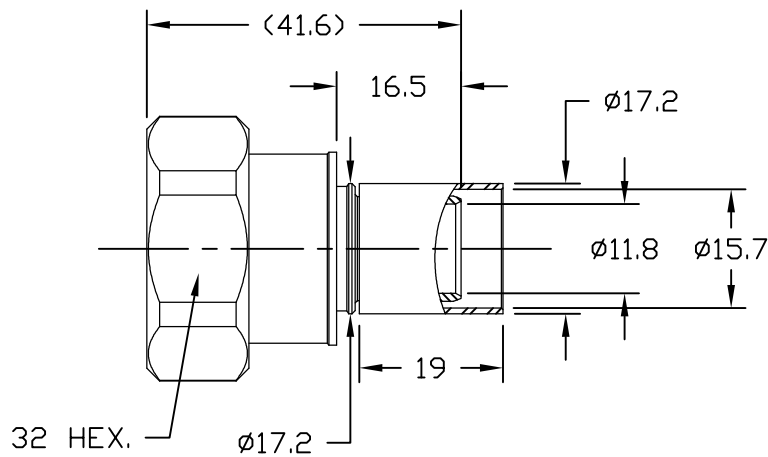
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	03/02/2023	HBAKKE	AGANWANI

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SYM	REVISION DESCRIPTION	DFTM	DATE	APPD	DATE
A	RELEASED FOR PRODUCTION	K.A.M.	5/23/11	J.D.B.	6/9/11
B	CHANGED PER CDC #37302	D.J.H.	3/22/13	J.D.B.	3/25/13



CABLE PREP.
USE CST-600
(3192-052)
.610" HEX.



Reference Standard IEC60169-4

I. Electric Performance

Nominal Impedance(Ω):	50
Frequency Range:	DC-3GHz
VSWR:	≤ 1.15
Insert Loss(dB):	≤ 0.05
Insulation resistance(M Ω)	≥ 10000
Proof Voltage(V)	2500
Conductor resistance(m Ω)	outer conductor <0.2 inner conductor <0.8

II. Mechanical Performance

Nut Torque	25N.m
(Nut)Whorl pull	1000N
Tensile force(cable-connect)	500N
Torsion(cable-connect)	5N.m

III. Material and plating

Component	Material	Plating
Inner conductor	Spring Copper	Ag 5 μ m
Outer conductor	Brass	Copper-tin-zinc 2 μ m
Tube	Copper	Copper-tin-zinc 2 μ m
Nut	Brass	Nickel 5 μ m
Gasket	Silicone Rubber	
Insulator	PTFE	

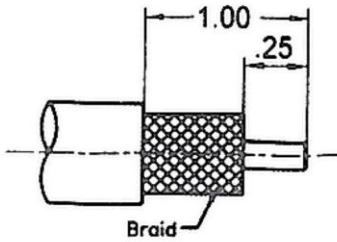
IV. Environment

Temp. range	-55 $^{\circ}$ C~+155 $^{\circ}$ 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	IP68
ROHS Compliant	

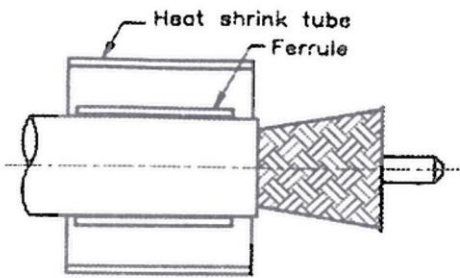
V. Assembly: inner conductor installed and outer conductor crimped

MATL:	UNLESS OTHERWISE SPECIFIED	DFTM. K. A. M.	TIMES MICROWAVE SYSTEMS
	ALL DIMENSIONS ARE IN mm MACHINED SURFACES FINISH N/A RMS MAX. REMOVE ALL BURRS N/A MAX. BREAK MACHINE CORNERS N/A MAX. FILLET R. TOLERANCES ON DECIMALS .XX \pm N/A .XXX \pm N/A ANGLES \pm 1 $^{\circ}$ FRACTIONS \pm N/A	DATE 5/23/11	
USED ON: 0-0	DO NOT SCALE DRAWING	CHKD. J. D. B.	EZ-600-716M-X 7-16 MALE FOR LMR-600 CABLE EZ/CRIMP/NO BRAID TRIM
		DATE 6/9/11	
SCALE: N/A	DWG. SIZE A	APPD. J. D. B.	SHEET 1 of 1 SD3190-2643 REV B
	CODE IDENT 68999	DATE 6/9/11	

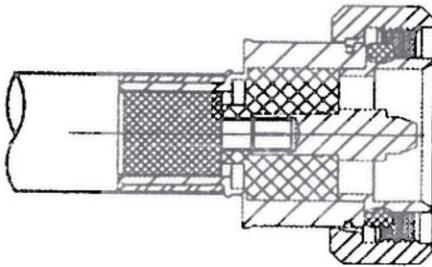
Installation Instruction



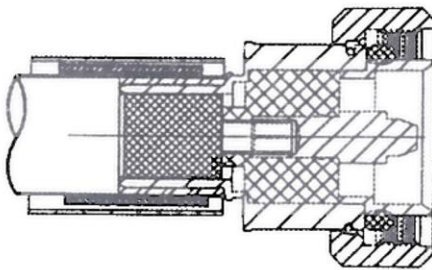
1. A. Trim cable to dimensions shown. Be careful to avoid nicking the braid
B. Remove any residual plastic from center conductor
C. Deburr center conductor using a fine file or Times DBT-U tools
D. Avoid nicking aluminum tape or center conductor



2. A. Slide crimp ferrule and heat shrink tube over the cable
B. Flare the braid



3. A. Insert Cable into connector body until dielectric is seated and center conductor is inserted fully into connector center pin.



4. A. Slide crimp ferrule over braid and crimp as close to body as possible using .429" HEX crimp tooling. Pay attention to the crimp area, do not crimp rear of crimp sleeve
B. Heat shrink tube over rear of connector body and down on to cable jacket using hot air gun



Low Loss Flexible LMR-600-FR Outdoor Rated Coax Cable Double Shielded with Black PE Jacket Fire Rated

RF Cables Technical Data Sheet



LMR-600-FR

Times Microwave Systems Coax Cable Specification

Configuration

- Low Loss, Outdoor Flexible Cable
- 2 Shield(s)

Features

- CMR Riser Rated Coax
- Non-Halogen, Low Smoke PE Jacket
- Max Operating Frequency of 5.8 GHz
- Phase Velocity 85% VoP
- Max Operating Temperature +85°C
- Min Install Bend Radius of 1.5 inches

Applications

- In-Building Riser Runs
- Short Antenna Installs
- RF Test Systems
- General Purpose RF Interconnect
- Laboratory Applications

Description

LMR-600-FR Fire Rated version of the 600 series Low Loss Coax from Times Microwave is part of the large product offering by Pasternack of radio frequency coaxial cable types specifically stocked to be ready for same-day shipment. Pasternack LMR-600-FR coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This low loss and CMR riser rated 50 Ohm coax cable LMR-600-FR is constructed with a 0.590 inch diameter and Black PE jacket.

LMR-600-FR flexible 50 Ohm coax cable with PE jacket is rated for a 5.8 GHz maximum operating frequency. This 50 Ohm 0.590 inch diameter and low loss fire rated coax cable is built with an aluminum double shield count and RF shielding of 90 dB. Times Microwave LMR-600-FR PE coax is constructed with Foam PE dielectric and a maximum operating temperature of 85 degrees C. Pasternack's offering of LMR-600-FR coax cable provides specs for this wire on its RF coax cable LMR-600-FR datasheet.

LMR-600-FR cable is part of more than one million RF, microwave parts in stock at Pasternack. This Times Microwave low loss flexible LMR-600-FR coax cable is ready to buy and can be shipped worldwide. Pasternack also maintains a wide selection of other radio frequency coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave components.

* LMR™ is a trademark of Times Microwave Systems.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
Impedance		50		Ohms
Velocity of Propagation		85		%
Time Delay		1.17 3.84		ns/ft ns/m
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			4,000	Vdc

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss Flexible LMR-600-FR Outdoor Rated Coax Cable Double Shielded with Black PE Jacket Fire Rated LMR-600-FR](#)



Low Loss Flexible LMR-600-FR Outdoor Rated Coax Cable Double Shielded with Black PE Jacket Fire Rated

RF Cables Technical Data Sheet



LMR-600-FR

Jacket Spark	8,000	Vrms
Inner Conductor DC Resistance	0.53	Ohms/1000ft
Outer Conductor DC Resistance	1.2	Ohms/1000ft
Nominal Capacitance	23.4 [76.77]	pF/ft [pF/m]
Nominal Inductance	0.058 [0.19]	uH/ft [uH/m]
Input Power (Peak)	40	kWatts

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	450	900	MHz
Attenuation, Typ	0.5	1	1.2	1.7	2.5	dB/100ft
	1.64	3.28	3.94	5.58	8.2	dB/100m
Input Power (CW), Max	4,240	2,410	1,970	1,350	930	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	3.3	3.7	3.9	4.4	7.3	dB/100ft
	10.83	12.14	12.8	14.44	23.95	dB/100m
Input Power (CW), Max	700	630	590	520	320	Watts

Mechanical Specifications

Diameter	0.59 in [14.99 mm]
Weight	0.131 lbs/ft [0.19 Kg/m]
Min. Bend Radius (Installation)	1.5 in [38.1 mm]
Min. Bend Radius (Repeated)	6 in [152.4 mm]
Bending Moment	2.75 lbs-ft [3.73 N-m]
Tensile Strength	350 lbs [158.76 kg]
Flat Plate Crush	60 lbs/in [1.07 Kg/mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strand	0.176 in [4.47 mm]

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Low Loss Flexible LMR-600-FR Outdoor Rated Coax Cable Double Shielded with Black PE Jacket Fire Rated

RF Cables Technical Data Sheet



LMR-600-FR

Conductor Type	Solid	
Dielectric	Foam PE	0.455 in [11.56 mm]
First Shield	Aluminum Tape	[]
Second Shield	Tinned Copper	[]
Jacket	PE, Black	0.59 in [14.99 mm]

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Installation 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:

Low Loss Flexible LMR-600-FR Outdoor Rated Coax Cable Double Shielded with Black PE Jacket Fire Rated 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.

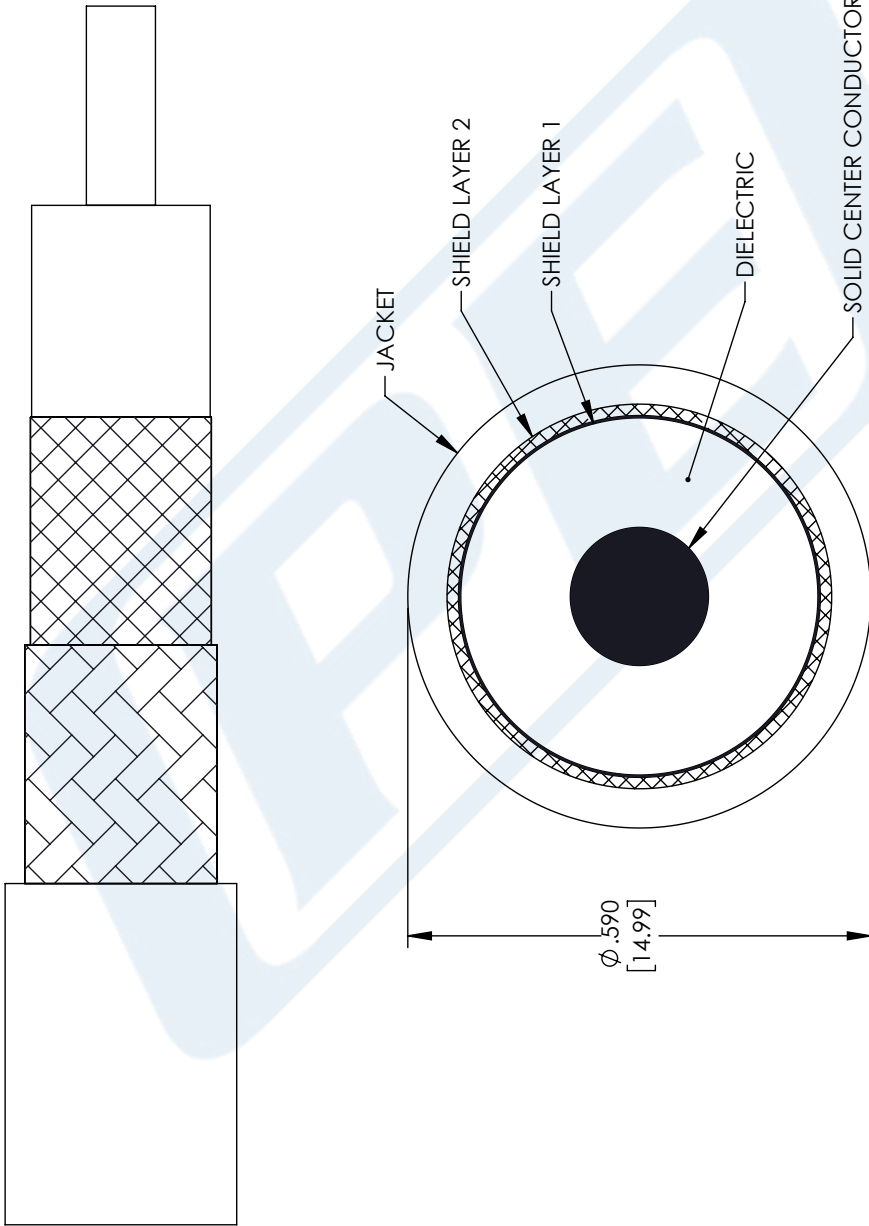
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URL: <https://www.pasternack.com/low-loss-flexible-lmr-600-fr-pe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-600-fr-p.aspx>

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TIMES MICROWAVE SYSTEMS **LMR-600-FR CAD Drawing**
 Low Loss Flexible LMR-600-FR Outdoor Rated Coax Cable
 Double Shielded with Black PE Jacket Fire Rated

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	06-04-2021	SELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
 .X = ±.2 [.508] FRACTIONS ± 1/32
 .XX = ±.02 [.51] ANGLES ± 1°
 .XXX = ±.005 [.13] CABLE LENGTH (L), TOLERANCES:
 L ≤ 12 [305] = +1 [25] / -0
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0
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 300 [7620] < L = +5% / -0

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 Fax: 1.949.261.7451
 Website: www.pasternack.com
 E-mail: sales@pasternack.com

SIZE [CAGE CODE] DRAWN BY ITEM NO.
 A 53919 MVEERAPPAN LMR-600-FR

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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