



Fire Rated BNC Male Right Angle to BNC Male Right Angle
Low Loss Cable Using LMR-200-FR Coax

RF Cable Assemblies Technical Data Sheet

PE3W12420

Configuration

- Connector 1: BNC Male Right Angle
- Connector 2: BNC Male Right Angle
- Cable Type: LMR-200-FR

Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 83% Phase Velocity
- Double Shielded
- FRPE Jacket

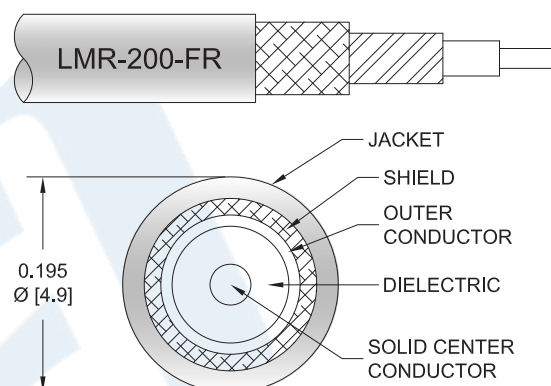
Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W12420 BNC male right angle to BNC male right angle cable using LMR-200-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 BNC to BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-200-FR coax. The PE3W12420 BNC male to BNC male cable assembly operates to 4 GHz. The right angle BNC interfaces on the LMR-200-FR cable allow 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.



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated BNC Male Right Angle to BNC Male Right Angle Low Loss Cable Using LMR-200-FR Coax PE3W12420](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
RF Shielding	90			dB
Group Delay		1.22 [4]		ns/ft [ns/m]
Capacitance		24.5 [80.38]		pF/ft [pF/m]
Inductance		0.061 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		5.36 [17.59]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ω/1000ft [Ω/Km]
Jacket Spark			3,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	4	GHz
Insertion Loss (Typ.)	0.031	0.05	0.073	0.104	0.212	dB/ft
	0.1	0.16	0.24	0.34	0.7	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector.

Mechanical Specifications

Cable Assembly

Weight 0.116 lbs [52.62 g]

Cable

Cable Type LMR-200-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 Braid
Jacket Material FRPE, Black
Jacket Diameter 0.195 in [4.95 mm]

One Time Minimum Bend Radius 0.5 in [12.7 mm]

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Repeated Minimum Bend Radius	2 in [50.8 mm]
Bending Moment	2 lbs-ft [2.71 N-m]
Flat Plate Crush	15 lbs/in [0.27 Kg/mm]
Tensile Strength	40 lbs [18.14 Kg]

Connectors

Description	Connector 1	Connector 2
Type	BNC Male Right Angle	BNC Male Right Angle
Specification	MIL-C-39012	MIL-C-39012
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30µ In. Min	30µ In. Min
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel

Environmental Specifications

Temperature

Operating Range	-40 to +165 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3W12420

- **xx**

uu

Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3W12420-12 = 12 inches long cable
PE3W12420-100cm = 100 cm long cable

Fire Rated BNC Male Right Angle to BNC Male Right Angle Low Loss Cable Using LMR-200-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.

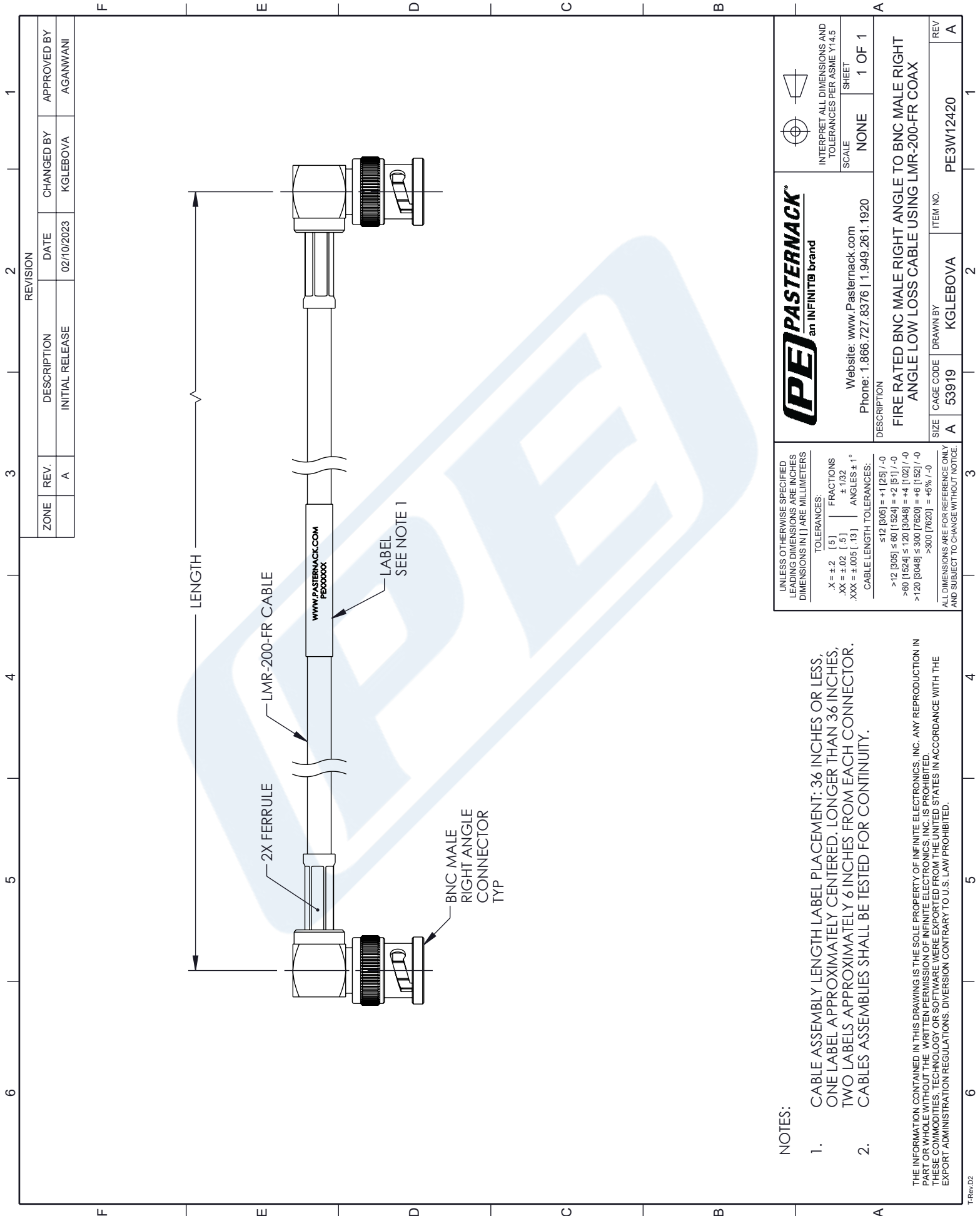
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated BNC Male Right Angle to BNC Male Right Angle Low Loss Cable Using LMR-200-FR Coax PE3W12420](https://www.pasternack.com/fire-rated-bnc-male-right-angle-to-bnc-male-low-loss-cable-using-lmr-200-fr-pe3w12420-p.aspx)

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PE3W12420 CAD Drawing

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NOTES:

- 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. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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

TOLERANCES:

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

CABLE LENGTH TOLERANCES:

SIZE	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
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