



#### MRG2142

Part Number: MRG2142

COAX RF RG214 FRNC/LSNH

# **Product Description**

COAX RF RG214 FRNC/LSNH

# **Product Specifications**

## **Application**

Application 1:	Coaxial cables used for Radio-Frequency designed according the International Standard IEC 1196
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## **Technical Specifications**

## **Bend Radius**

Min Bend Radius (W/o Pulling Strength):	110 mm
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## **CCB-Sub-Crush Resistance**

Crush Resistance:	Max. 1% (load of 700N) N
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## **CCB-Sub-Material**

Min Elongation at Breakof Jacket:	150 MPa
Min Tensile Strength of Jacket:	12.5 lbs

#### **Environmental Characteristics**

Operating Temp Range:	-40 to +70 °C
Storage Temp Range:	-40 to +70 °C
Installation Temp Range:	-5 to +50 °C

## **General Electrical Parameters**

Min Insulation Resistance:	10000 mOhm/1000ft
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# **Global Standard**

ISO/IEC Compliance:	IEC 1196
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## History

Revision Date:	2011-11-28
Revision Number:	1

# Safety

ISO/IEC Flammability:	IEC 60332-1-2
Amt of Halogen Acid Gas; MaxConductivity:	10 μS/mm
Amt of Halogen Acid Gas; Min pH:	43
Smoke Density; Min Transmittance:	Zero N

#### Impedance:

Nominal Characteristic Impedance	
50 mOhm/ft	2 Ohm

#### **Conductor DCR:**

Max. Conductor DCR	Max. Conductor Loop	Max. Shield DCR
6 Ohm/100m	9.1 Ohm/1000ft	3.1 Ohm/km

## **Power Rating:**

Frequency [MHz]	Nominal Power Rating [W]
100 MHz	760 W
1,000 MHz	175 W

## Delay:

Nominal Velocity of Propagation (VP)	Velocity of Propagation Tolerance
66 ns/100m	2 %

## Voltage:

#### Voltage Test Dielectric

3 kV DC

## High Freq:

Frequency [MHz]	Min. RL (Return Loss)	
100 - 1000 MHz	23 dB	

## Capacitance:

Capacitance Tolerance	Nominal Capacitance
3 pF/m	100 pF/m

## High Frequency (Nominal/Typical):

Element	Frequency (MHz)	Nom. Insertion Loss		
	50 MHz	4.3 db/100m		
	230 MHz	9.9 db/100m		
	470 MHz	14.9 db/100m		
	860 MHz	21.3 db/100m		
	1000 MHz	23.3 db/100m		
Max. attenuation 10% higher				

#### Insulation:

Туре	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	Polyethylene	7.25 mm	0.2 mm

## Outerjacket 1:

Element	Material	Nominal Diameter	Diameter +/- Tolerance
	FRNC / LSNH	10.8 mm	0.2 mm
According to EN 5	0290-2-20		

#### Conductor:

Stranding	Material	ConstructionNXD	Nominal Diameter	Diameter +/- Tolerance
Stranded	Silver plated copper	7x0.75 mm	2.25 in	0.03 mm

#### Outershield 1:

Туре	Layer	Material	Coverage	Nominal Diameter	Diameter +/- Tolerance	Coverage +/- Tolerance
Braid	1	Silver plated copper	68 %	8 mm	0.25 mm	4%
Braid	2	Silver plated copper	90 %	8.7 mm	0.25 mm	4 %

#### **Product Variants**

Part Number	Color	Put-Up Type	Length
MRG2142.00100	BLACK	Reel	100 m
MRG2142.00500	BLACK	Reel	500 m

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