



Product: [MRG5900](#) 

COAX RG59 PVC

Product Description

COAX RG59 PVC

Technical Specifications

Product Overview

Suitable Applications:	Coaxial cable used in cable distribution networks designed according European Standard EN 50117; Operating at frequencies between 5 MHz and 860 MHz; The International Standard IEC 1196
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
23	Solid	BCCS - Bare Copper Covered Steel	0.58 mm	0.02 mm	1

Table Notes:	Conductivity 40%
Conductor Count:	1

Insulation

Type	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	PE - Polyethylene	3.7 mm	0.15 mm

Outer Shield Material

Type	Material	Coverage [%]	Nominal Diameter	Diameter +/- Tolerance	Coverage +/- Tolerance
Braid	Tinned Copper (TC)	85%	4.3 mm	0.2 mm	5%

Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance
PVC - Polyvinyl Chloride	6.1 mm	0.2 mm

Table Notes:	According to European Standard EN 50290-2-20
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Construction and Dimensions

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

Electrical Characteristics

Conductor DCR

Max. Conductor DCR
170 Ohm/km

Capacitance

Nom. Capacitance	Capacitance Tolerance
67 pF/m	2 pF/m

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance	Regularity of Impedance
75 Ohm	3 Ohm	Min. 40 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
5 MHz	2.9 dB/100m
50 MHz	8 dB/100m
100 MHz	11.6 dB/100m
230 MHz	18.3 dB/100m
300 MHz	21.2 dB/100m
400 MHz	25 dB/100m
470 MHz	27.5 dB/100m
860 MHz	39.2 dB/100m
1000 MHz	42.9 dB/100m
1350 MHz	50 dB/100m
1600 MHz	54.5 dB/100m
1750 MHz	57 dB/100m
2150 MHz	63 dB/100m

Table Notes:	Max. attenuation 10% higher
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Delay

Nominal Velocity of Propagation (VP) [%]
66%

High Freq

Frequency [MHz]	Min. RL (Return Loss) [dB]
5 - 30 MHz	20 dB
30 - 470 MHz	20 dB
470 - 862 MHz	18 dB

Table Notes:	In each frequency band, 3 peak values up to 4 dB lower are allowed
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Voltage

Voltage Test Dielectric
2.0 kV DC

Temperature Range

Installation Temp Range:	-5°C To +50°C
Storage Temp Range:	-15°C To +70°C
Operating Temp Range:	-15°C To +70°C

Mechanical Characteristics

Min Bend Radius (W/o Pulling Strength):	35 mm
Crush Resistance:	Max. 1% (load of 700N) N

Standards

IEC Compliance:	IEC 1196
CPR Euroclass:	Eca
CENELEC Compliance:	EN 50117 and EN 50117-1
RG Type:	59/U Type

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Eca
EU RoHS Compliance Date (yyyy-mm-dd):	1998-01-01

Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
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Part Number

Variants

Item #	Color	Putup Type	Length	EAN
MRG5900.00B100	Black	Flat Box	100 m	8719605103291

MRG5900.10100	Black	Reel	100 m	8719605103338
MRG5900.00B200	Black	Flat Box	200 m	8719605103307
MRG5900.00500	Black	Reel	500 m	8719605103284
MRG5900.03500	Black	Reel	500 m	8719605103321
MRG5900.11100	White	Reel	100 m	8719605103345
MRG5900.01500	White	Reel	500 m	8719605103314

History

Update and Revision:	Revision Number: 0.171 Revision Date: 09-30-2020
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