

**Part Number: MRG5901**

**COAX RG59 PVC TWIN**



**Product Description**

COAX [0.6/3.7] RG59 PVC TWIN

**Technical Specifications**

**Product Overview**

Environmental Space:	Indoor - Euroclass Eca
Suitable Applications:	Coaxial cables used in cabled distribution networks designed according the European Standard EN 50117; Operating at frequencies between 5 MHz and 860 MHz; The International Standard IEC 1196

**Physical Characteristics (Overall)**

**Conductor**

Stranding	Material	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
Solid	Copper clad steel	0.58 mm	0.02 mm	2

Conductor, Table Note:	Conductivity 40%
Conductor Count:	2
Conductor Size:	23 AWG

**Insulation**

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

**Outer Shield Material**

Type	Material	Coverage [%]	Nominal Diameter	Diameter +/- Tolerance	Coverage +/- Tolerance
Braid	BC - Bare Copper	91 %	4.3 mm	0.2 mm	4 %

**Outer Jacket Material**

Material	Nominal Diameter	Diameter +/- Tolerance
PVC - Polyvinyl Chloride	6.25 mm	0.2 mm

OuterJacket1, Table Note:	According to European Standard HD 624
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**Construction and Dimensions**

OuterJacket1, Form:	Shotgun
OuterJacket1, Nominal Width:	12.5 mm
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

## 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

High Freq Table Note: In each frequency band, 3 peak values up to 4 dB lower are allowed

## 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

Bulk Cable Weight:	100 kg/km
Min Bend Radius (W/o Pulling Strength):	35 mm
Crush Resistance:	Max. 1% (load of 700N) N

## Standards

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

## Applicable Environmental and Other Programs

EU RoHS Compliance Date (yyyy-mm-dd):	1998-01-01
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## Flammability, LSOH, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-1-2
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## Part Number

## Variants

Item #	Color	Length
MRG5901.00100	Black	100 m
MRG5901.00500	Black	500 m
MRG5901.01500	Black	500 m

## History

Revision Number:	3
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