



**Product:** [MRG5900](#) 

COAX RG59 PVC

## Product Description

COAX RG59 PVC

## Technical Specifications

### Product Overview

Environmental Space:	Indoor - Euroclass Eca
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

### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
23	Solid	Copper clad steel	0.58 mm	0.02 mm	1

Conductor, Table Note:	Conductivity 40%
Conductor Count:	1

#### 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	TC - Tinned Copper	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

OuterJacket1, Table Note:	According to European Standard HD 624
---------------------------	---------------------------------------

### 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

#### 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

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
CENELEC 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
---------------------------------------	------------

#### Flammability, LSOH, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-1-2
-----------------------	---------------

#### Part Number

#### Variants

Item #	Color	Length
MRG5900.00500	Black	500 m
MRG5900.00B100	Black	100 m
MRG5900.00B200	Black	200 m

MRG5900.03500	Black	500 m
MRG5900.10100	Black	100 m
MRG5900.01500	White	500 m
MRG5900.11100	White	100 m

## History

Update and Revision: Revision Number: 0.153 Revision Date: 01-31-2020

© 2020 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.