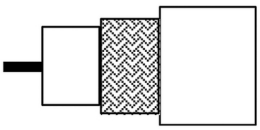
BELDEN
SENDING ALL THE RIGHT SIGNALS



Part Number: MRG5800

COAX RF RG58 PVC

Product Description

COAX RF [0.9/2.95] RG58 STRANDED PVC

Technical Specifications

Product Overview

Environmental Space:	Indoor - Euroclass Eca
Suitable Applications:	Coaxial communication cable based on MIL-C-17

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Construction n x D	Diameter +/- Tolerance	No. of Coax
21	Stranded	TC - Tinned Copper	19x0.18 mm	0.02 mm	1

Conductor Count:	1

Insulation

Type	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	Polyethylene	2.95 mm	0.15 mm

Outer Shield Material

Type	Material	Coverage [%]	Nominal Diameter	Diameter +/- Tolerance	Coverage +/- Tolerance
Braid	TC - Tinned Copper	93 %	3.5 mm	0.2 mm	4 %

Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance
PVC - Polyvinyl Chloride	4.95 mm	0.2 mm

OuterJacket1, Table Note:	According to EN 50290-2-20

Construction and Dimensions

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

Electrical Characteristics

Conductor DCR

Max. Conductor DCR
40.6 Ohm/km

Capacitance

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

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance	Regularity of Impedance
50 Ohm	2 Ohm	Min. 40 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
10 MHz	4.7 dB/100m
200 MHz	23 dB/100m
400 MHz	34 dB/100m
1000 MHz	60 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 - 1000 MHz	18 dB

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

Voltage

Voltage Rating [V]
4000 DC / 2000 V RMS

Temperature Range

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

Mechanical Characteristics

Min Bend Radius (W/o Pulling Strength):	25 mm
Crush Resistance:	Max. 1% (load of 700N) N

Standards

CPR Euroclass:	Eca
CENELEC Compliance:	EN 50290-2-20 and EN 50289
RG Type:	58/U Type
MIL Spec Rating:	MIL-C-17

Applicable Environmental and Other Programs

EU RoHS Compliance Date (yyyy-mm-dd):	1998-01-01

Flammability, LS0H, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-1-2

Part Number

Variants

Item #	Color	Length
MRG5800.00500	Black	500 m
MRG5800.00B200	Black	200 m
MRG5800.01500	Black	500 m
MRG5800.10100	Black	100 m
MRG5800.02500	White	500 m
MRG5800.12100	White	100 m

History

Update and Revision:	Revision Number: 0.143 Revision Date: 08-22-2019

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