



**Product:** <u>9116E</u> ☑

COAX RG6 PVC CATV

# **Product Description**

COAX RG6 PVC CATV

## **Technical Specifications**

### **Product Overview**

Suitable Applications: Coaxial cable used in cable broadBand communication networks designed according the European Standard EN 50117-1; Operating at frequencies between 5 and 1000 MHz

# **Physical Characteristics (Overall)**

#### Conductor

AWG	Stranding	Material	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
18	Solid	BCCS - Bare Copper Covered Steel	1.02 mm	0.05 mm	1
Conductor Count:		1			

#### Insulation

Туре	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	PE - Polyethylene (Foam)	4.6 mm	0.2 mm

#### **Outer Shield Material**

Type	Layer	Material	Coverage [%]	Min. Overlap	Coverage +/- Tolerance
Tape	1	Alum / Poly / Alum		1 mm	
Braid	2	Aluminum	56%		5%

# Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance
PVC - Polyvinyl Chloride	6.9 mm	0.2 mm

## **Construction and Dimensions**

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

## **Electrical Characteristics**

#### Conductor DCR

Max. Conductor DCR	Max. Shield DCR
105 Ohm/km	51 Ohm/km

#### Capacitance

Nom. Capacitance 54 pF/m

## Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance
75 Ohm	3 Ohm

## High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
5 MHz	2.8 dB/100m
50 MHz	4.9 dB/100m
100 MHz	6.5 dB/100m
200 MHz	9 dB/100m
400 MHz	13 dB/100m
600 MHz	16.3 dB/100m
800 MHz	18.9 dB/100m
1000 MHz	21.8 dB/100m

### Delay

Nominal Velocity of Propagation (VP) [%]	Velocity of Propagation Tolerance
82%	2%

## High Freq

Frequency [MHz]	Min. RL (Return Loss) [dB]
5 - 470 MHz	20 dB
470 - 1000 MHz	18 dB

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

#### Screening

Frequency [MHz]	Min. Screening Attenuation
50 - 650 MHz	65 dB
650 - 1000 MHz	75 dB

## Voltage

Voltage Test Dielectric

2.0 kV DC

## **Temperature Range**

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):	70 mm
Min Bend Radius During Operation:	31 mm
Crush Resistance:	Max. 1% (load of 700N) N
Adhesion Dielectric:	5 - 80 N at 25 mm N

### **Standards**

IEC Compliance:	IEC 1196
CPR Euroclass:	Eca
CENELEC Compliance:	EN 50117-2-1, EN 50117-1 and EN 50290-2-20
RG Type:	6/U Type

# **Applicable Environmental and Other Programs**

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

# Flammability, LS0H, Toxicity Testing

IEC Flammability:	IEC 60332-1-2	

## **Part Number**

#### Variants

Item #	Color	Putup Type	Length	EAN
9116E.00305	Black	Reel	305 m	8719605020130
9116E.01305	White	Reel	305 m	8719605020147

#### **History**

Update and Revision:

Revision Number: 0.167 Revision Date: 04-08-2020

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