



Product: [PRG11A3](#) 

COAX PRG11 AL PE CATV

Product Description

COAX [1.55/7.25] PRG11 AL PE CATV

Technical Specifications

Product Overview

| | |
|------------------------|--|
| Suitable Applications: | Coaxial cables used in cabled distribution networks designed according to the European Standard EN 50117; Operating at frequencies between 5 MHz and 2150 MHz; The International Standard IEC 1196 |
|------------------------|--|

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | Nominal Diameter | Diameter +/- Tolerance | No. of Coax |
|-----|-----------|------------------|------------------|------------------------|-------------|
| 15 | Solid | BC - Bare Copper | 1.55 mm | 0.02 mm | 1 |

| | |
|------------------|---|
| Conductor Count: | 1 |
|------------------|---|

Insulation

| Type | Material | Nominal Diameter | Diameter +/- Tolerance |
|------------|--------------------------|------------------|------------------------|
| Dielectric | PE - Polyethylene (Foam) | 7.25 mm | 0.2 mm |

| | |
|--------------|---------------------|
| Table Notes: | Centricity min. 85% |
|--------------|---------------------|

Outer Shield Material

| Type | Layer | Material | Coverage [%] | Min. Overlap | Nominal Diameter | Diameter +/- Tolerance | Coverage +/- Tolerance |
|-------|-------|-------------------------------|--------------|--------------|------------------|------------------------|------------------------|
| Tape | 1 | Tri-Laminate (Alum+Poly+Alum) | 100% | 2 mm | | | |
| Braid | 2 | Tinned Copper (TC) | 45% | | 7.9 mm | 0.25 mm | 5% |

Outer Jacket Material

| Material | Nominal Diameter | Diameter +/- Tolerance |
|-------------------|------------------|------------------------|
| PE - Polyethylene | 10.1 mm | 0.3 mm |

| | |
|--------------|--|
| Table Notes: | According to European Standard EN 50290-2-20 |
|--------------|--|

Construction and Dimensions

| | |
|------------------------------------|--------|
| Min Elongation at Break of Jacket: | 300 % |
| Min Tensile Strength of Jacket: | 10 MPa |

Electrical Characteristics

Conductor DCR

| Max. Conductor DCR | Max. Conductor Loop | Max. Shield DCR |
|--------------------|---------------------|-----------------|
| 9.4 Ohm/km | 22.2 Ohm/1000ft | 12.8 Ohm/km |

Capacitance

| Nom. Capacitance | Capacitance Tolerance |
|------------------|-----------------------|
| 55 pF/m | 2 pF/m |

Impedance

| Nominal Characteristic Impedance | Nominal Characteristic Tolerance | Regularity of Impedance |
|----------------------------------|----------------------------------|-------------------------|
|----------------------------------|----------------------------------|-------------------------|

| | | |
|--------|-------|------------|
| 75 Ohm | 3 Ohm | Min. 46 dB |
|--------|-------|------------|

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 5 MHz | 0.9 dB/100m |
| 50 MHz | 2.9 dB/100m |
| 100 MHz | 4.1 dB/100m |
| 200 MHz | 5.9 dB/100m |
| 400 MHz | 8.6 dB/100m |
| 600 MHz | 10.7 dB/100m |
| 800 MHz | 12.5 dB/100m |
| 1000 MHz | 14.2 dB/100m |
| 1350 MHz | 16.8 dB/100m |
| 1600 MHz | 18.5 dB/100m |
| 1750 MHz | 19.5 dB/100m |
| 2150 MHz | 21.9 dB/100m |
| 2400 MHz | 23.4 dB/100m |
| 3000 MHz | 26.7 dB/100m |

Table Notes: Max. attenuation 10% higher

Delay

| Nominal Velocity of Propagation (VP) [%] | Velocity of Propagation Tolerance |
|--|-----------------------------------|
| 81% | 2% |

High Freq

| Frequency [MHz] | Min. RL (Return Loss) [dB] |
|-----------------|----------------------------|
| 5 - 30 MHz | 26 dB |
| 30 - 470 MHz | 26 dB |
| 470 - 1000 MHz | 23 dB |
| 1000 - 2000 MHz | 18 dB |
| 2000 - 3000 MHz | 16 dB |

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

Screening

| Frequency [MHz] | Min. Screening Attenuation |
|-----------------|----------------------------|
| 30 - 1000 MHz | 85 dB |

Voltage

| Voltage Test Dielectric |
|-------------------------|
| 3.0 kV DC |

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

| | |
|---|--------------------------|
| Bulk Cable Weight: | 78 kg/km |
| Min Bend Radius (W/o Pulling Strength): | 50 mm |
| Crush Resistance: | Max. 1% (load of 700N) N |
| Adhesion Dielectric: | 12-120 N at 25 mm N |

Standards

| | |
|---------------------|-------------------------|
| IEC Compliance: | IEC 1196 |
| CENELEC Compliance: | EN 50117 and EN 50117-1 |
| RG Type: | 11/U Type |

Applicable Environmental and Other Programs

| | |
|---------------------------------------|------------|
| Environmental Space: | Outdoor |
| EU RoHS Compliance Date (yyyy-mm-dd): | 1998-01-01 |

History

Update and Revision:

Revision Number: 0.181 Revision Date: 12-17-2020

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