



Part Number: H125A01

COAX H125 AL PE CATV

# **Product Description**

COAX [1.0/4.8] H125 AL PE CATV

# **Technical Specifications**

## **Product Overview**

Environmental Space:	Outdoor
Suitable Applications:	Coaxial cables used in cabled distribution networks designed according the European Standard EN 50117-2-2 and EN 50117-2-5; Operating at frequencies between 5 MHz and 3000 MHz

# **Physical Characteristics (Overall)**

#### Conductor

AWG	Stranding	Material	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
18	Solid	BC - Bare Copper	1 mm	0.03 mm	1
Condu	uctor Count:		1		

#### Insulation

Туре	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	FPE - Foamed Polyethylene	4.8 mm	0.15 mm

## Outer Shield Material

Type	Layer	Material	Coverage [%]	Min. Overlap	Nominal Diameter	Diameter +/- Tolerance	Coverage +/- Tolerance
Tape	1	Aluminum/Polyester/Aluminum		2 mm			
Braid	2	TC - Tinned Copper	34 %		5.34 mm	0.2 mm	4 %

## Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance
PE - Polyethylene	6.8 mm	0.2 mm
OuterJacket1, Tabl	le Note:	According to European S

## **Construction and Dimensions**

Min Elongation at Breakof Jacket:	300 %
Min Tensile Strength of Jacket:	10 MPa

# **Electrical Characteristics**

#### Conductor DCR

Max. Conductor DCR	Max. Conductor Loop	Max. Shield DCR
23 Ohm/km	50 Ohm/1000ft	27 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. 40 dB

## High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
5 MHz	1.8 dB/100m
50 MHz	4.7 dB/100m
100 MHz	6.5 dB/100m
200 MHz	9.1 dB/100m
230 MHz	9.8 dB/100m
400 MHz	12.9 dB/100m
600 MHz	16 dB/100m
800 MHz	18.6 dB/100m
862 MHz	19.3 dB/100m
1000 MHz	20.9 dB/100m
1350 MHz	24.6 dB/100m
1750 MHz	28.4 dB/100m
2400 MHz	34 dB/100m
3000 MHz	38.6 dB/100m

## Delay

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

#### High Freq

Frequency [MHz]	Min. RL (Return Loss) [dB]
5 - 30 MHz	23 dB
30 - 470 MHz	23 dB
470 - 1000 MHz	20 dB
1000 - 2000 MHz	18 dB
2000 - 3000 MHz	16 dB

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

## Screening

Frequency [MHz]	Min. Screening Attenuation
100 - 1000 MHz	75 dB
Screening Class:	В

## Transfer Impedance

Transfer Impedance
40 mOhm/m

Transfer Impedance Class: C

## Voltage

Voltage Test Dielectric

2.0 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**

Max Recommended Pulling Tension:	55 N
Min Bend Radius (W/o Pulling Strength):	35 mm
Crush Resistance:	Max. 1% (load of 700N) N
Adhesion Dielectric:	7.8-78 N at 25 mm N

# **Standards**

CENELEC Compliance:	EN 50117-2-2, EN 50117-2-5 and EN 50117-1
RG Type:	6/U Type

#### **Applicable Environmental and Other Programs**

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

1998-01-01

#### **Part Number**

#### Variants

Item #	Color	Length
H125A01.00100	Black	100 m
H125A01.00250	Black	250 m
H125A01.00500	Black	500 m
H125A01.005000	Black	5,000 m
H125A01.00B100	Black	100 m

#### History

Update and Revision:

Revision Number: 0.149 Revision Date: 08-22-2019

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