



**Product:** [H125A01](#)

COAX H125 AL PE CATV

## Product Description

COAX [1.0/4.8] H125 AL PE CATV

## Technical Specifications

### Product Overview

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
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### 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

Conductor Count:	1
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#### Insulation

Type	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	PE - Polyethylene (Foam)	4.8 mm	0.15 mm

#### Outer Shield Material

Type	Layer	Material	Coverage [%]	Min. Overlap	Nominal Diameter	Diameter +/- Tolerance	Coverage +/- Tolerance
Tape	1	Tri-Laminate (Alum+Poly+Alum)	34%	2 mm			
Braid	2	Tinned Copper (TC)	34%		5.34 mm	0.2 mm	4%

#### Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance
PE - Polyethylene	6.8 mm	0.2 mm

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

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	23 dB
30 - 470 MHz	23 dB
470 - 1000 MHz	20 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
100 - 1000 MHz	75 dB

Screening Class: B

### 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. Pull 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

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

## Part Number

### Variants

Item #	Color	Putup Type	Length	EAN
H125A01.00100	Black	Reel	100 m	8719605086495
H125A01.00B100	Black	Flat Box	100 m	8719605086532
H125A01.00250	Black	Reel	250 m	8719605086501
H125A01.00500	Black	Reel	500 m	8719605086518
H125A01.005000	Black	Reel	5,000 m	8719605086525

## History

Update and Revision:	Revision Number: 0.173 Revision Date: 09-30-2020
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