

# Part Number: H155A01

# COAX RF H155 PE



## Product Description

COAX RF [1.4/3.9] H155 STRANDED PE

## **Technical Specifications**

## **Product Overview**

Environmental Space:	Outdoor
Suitable Applications:	50 Ohm low loss coaxial transmission cable designed according European Standard EN 50117-1; Operating Frequencies between 5 and 6000 MHZ

## **Physical Characteristics (Overall)**

#### Conductor

Stranding	Material	Construction n x D	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
Stranded	BC - Bare Copper	19x0.28 mm	1.41 mm	0.03 mm	1
Conductor Count: Conductor Size:		1			
		16 AWG			

#### Insulation

Туре	Material	Nominal Diameter	Diameter +/- Tolerance	
Dielectric	FPE - Foamed Polyethylene	3.9 mm	0.15 mm	
Insulation, Table Note:		Cen	tricity min. 85%	

#### **Outer Shield Material**

Туре	Layer	Material	Coverage [%]	Min. Overlap	Nominal Diameter	Diameter +/- Tolerance	Coverage +/- Tolerance
Таре	1	Aluminum/Polyester/Aluminum		2 mm			
Braid	2	TC - Tinned Copper	80 %		4.5 mm	0.25 mm	5 %

### Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance
PE - Polyethylene	5.4 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. Conductor Loop	Max. Shield DCR
15.4 Ohm/km	32.4 Ohm/1000ft	17 Ohm/km

#### Capacitance

Nom. Capacitance	Capacitance Tolerance
84 pF/m	3 pF/m

#### Impedance

Nominal Characteristic Impedance Nominal Characteristic Tolerance Regularity of Impedance

50 Ohm	3

3 Ohm

Min. 40 dB

#### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
5 MHz	2.5 dB/100m
50 MHz	6.9 dB/100m
100 MHz	9.1 dB/100m
230 MHz	13.4 dB/100m
400 MHz	18 dB/100m
800 MHz	26.1 dB/100m
862 MHz	27.3 dB/100m
1000 MHz	29.6 dB/100m
1350 MHz	34.9 dB/100m
1750 MHz	40.3 dB/100m
2150 MHz	46 dB/100m
2400 MHz	49.1 dB/100m
3000 MHz	56.3 dB/100m
3600 MHz	62.9 dB/100m
4200 MHz	69.1 dB/100m
4800 MHz	75.1 dB/100m
5400 MHz	80.8 dB/100m
6000 MHz	86.5 dB/100m

## Delay

Nominal Velocity of Propagation (VP) [%]	Velocity of Propagation Tolerance
80 %	2 %

## High Freq

Frequency [MHz]	Min. RL (Return Loss) [dB]	
5 - 30 MHz	20 dB	
30 - 470 MHz	20 dB	
470 - 1000 MHz	18 dB	
1000 - 2000 MHz	16 dB	
2000 - 3000 MHz	15 dB	
3000 - 6000 MHz	15 dB	
High Freq Table Note:		

In each frequency band, 3 peak values up to 4 dB lower are allowed, values above 3000 MHZ for information only

#### Screening

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

#### Voltage

Voltage Test Dielectric 2.0 kV DC

## **Temperature Range**

Installation Temp Range:	-5°C To +50°C
Storage Temp Range:	-30°C To +70°C
Operating Temp Range:	-30°C To +70°C

## **Mechanical Characteristics**

May Decomposed and Dulling Transient	
Max Recommended Pulling Tension:	100 N
Min Bend Radius (W/o Pulling Strength):	60 mm
Crush Resistance:	Max. 1% (load of 700N) N
Adhesion Dielectric:	5-50 N at 25 mm N
Standards	
CENELEC Compliance:	EN 50117-1, EN 50117-2-5 and EN 50290-2-20
CENELEC Compliance: RG Type:	EN 50117-1, EN 50117-2-5 and EN 50290-2-20 58/U Type
	58/U Type

#### Flammability, LS0H, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-1-2
Amount of Halogen acc. to IEC 60754-1 & EN50267-1:	Zero

## Part Number

#### Variants

Item #	Color	Length
H155A01.001000	Black	1,000 m
H155A01.00B100	Black	100 m

#### History

2				
1	2	2	2	2

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