

Description

Local Area Network Cable

Cat. 5e SF/UTP 4x2xAWG24/1 PE

**Data Sheet****LAN542PE**

Ø	0,51	1,00	4,80	4,78	6,50
		(PE)	(Pet)	(Al/Pet)	(CuSn)
					(PE)

Class CPR acc. to UE 305/2011 (DoP)

Fca

The cable can be used in the field of application of the Construction Product Regulation (DoP) UE nr. 305/2011 for the class of performance specified on the related product label.

Standards

ISO/IEC 11801 Class D

EN 50288-2-1

EN 50173

EIA-TIA 568

CEI-UNEL 36762

Reaction to Fire

EN50575

Application

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)

IPTV; HbbTV 2.0.n

IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T

IEEE 802.5 16 MB: ISDN; TPDDI; ATM; PoE

Exterior and Underground Installation

Construction data

4 pairs with conductor of bare copper wires	(Cu)	Ø 0,51	mm
Insulation of solid Polyethylene	(PE)	Ø 1,00	mm
Polyester film spirally wrapped	(Pet)		

Composition

Twisted pairs, coloured by Standard TIA-568A

Braid of tinned copper wires	(CuSn)		
Braid Optical Coverage		61	%
Aluminum/Polyester tape spirally wound	(Al/Pet)		
Outer sheath of Polyethylene - black (RAL 9011)	(PE)	Ø 6,50 ± 0,20	mm
Printed each meter by yellow ink-jet :			

CAVEL LAN 542 PE MADE IN ITALY CAT 5E SF/UTP 4x2xAWG24 Euroclass Fca ISO-IEC 11801 EN50173**CEI-UNEL 36762 C-4 (U0 = 400V) gggaa(n) m**

(gggaan=batch number m=meter marking)

ITALIANA CONDUTTORI s.r.l.

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Date**17/07/2023****Responsible****A. Bergaglio**

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Local Area Network Cable

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**Data Sheet****LAN542PE****Physical data**

Weight of copper conductors	24,18	kg/km
Total weight of cable	44,80	kg/km
Minimum bending radius x1/n	25/50	mm
Maximum tensile strength during the installation	100	N
Installation temperature	0 / +50	°C
Operating temperature	-40 / +80	°C

Electrical data

Characteristic impedance	100 MHz	100 ± 5	Ohm
Capacitance of Twisted Pair (@800Hz)		48	pF/m
Velocity Ratio		67 %	
DC Conductor Resistance		95	Ohm/km
Loop resistance		190	Ohm/km
Insulation resistance		> 5000	MOhm x km
Sheath Insulation Voltage (DC, 1 min)		1	kV
Coupling Attenuation		> 50	dB

Screening Attenuation (SA)

30 - 100 MHz

> 85 dB

Transfer Impedance (Zt)

1 MHz

< 6 mOhm/m

10 MHz

< 1,5 mOhm/m

30 MHz

< 1 mOhm/m

Transmission-Characteristic (at 20°C)

Frequency [MHz]	Attenuation [dB/100m]	RL [dB]	NEXT [dB]	ACR-N [dB/100m]	ACR-F [dB]
1	1,90	20,00	71,00	69,10	75,00
10	6,00	25,00	56,00	50,00	55,00
20	8,50	25,00	51,00	42,50	50,00
31,2	10,70	24,00	49,00	38,30	47,00
62,5	15,70	22,00	44,00	28,30	40,00
100	19,80	20,00	41,00	21,20	40,00

Connectors**KJ541AA** Socket RJ45 FTP, Cat.6 toolless Alu, Socket RJ45**PLUG5F** Plug RJ45, Plug RJ45 FTP Cat. 5e, Plug RJ45 -**ITALIANA CONDUTTORI s.r.l.**

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