

Description

Local Area Network Cable

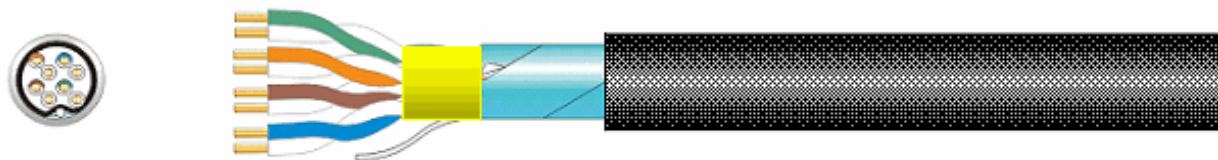
Cat. 5e F/UTP 4x2xAWG24/1 PE

Coaxial Cables

CAVEL®

since 1968

Data Sheet

LAN541PE

Ø	0,51	1,00		6,20
	(Cu)	(PE)	(Pet)	(Al/Pet)
				(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

EN50288-2-1

EN50173

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 foil screened pairs with conductor of bare copper	(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

Drain wire of tinned copper

Aluminum/Polyester tape spirally wound

(Al/Pet)

Outer sheath of Polyethylene - black (RAL 9011)

(PE)

Ø 6,20 ± 0,10 mm

Printed each meter by yellow ink-jet :

CAVEL LAN 541 PE MADE IN ITALY CAT 5E F/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

Description

Local Area Network Cable

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

**Data Sheet****LAN541PE****Physical data**

Weight of copper conductors	15,60	kg/km
Total weight of cable	35,70	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		> 45	dB

Screening Attenuation (SA)

30 - 100 MHz

> 50 dB

Transfer Impedance (Zt)

1 MHz

< 22 mOhm/m

10 MHz

< 10 mOhm/m

30 MHz

< 26 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	60,00
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
PF-24PN	Patch panel, ?Pannello 19" 24 Porte Vuoto per RJ45 FTP 1 HE con, Patch panel UTP -
PLUG5F	Plug RJ45, Plug RJ45 FTP Cat. 5e, Plug RJ45 -
PPF5-24PN	Patch panel, ?Pannello precaricato Cat. 5e FTP 19" 24 porte sis, Patch panel UTP -

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