

Description

Local Area Network Cable

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

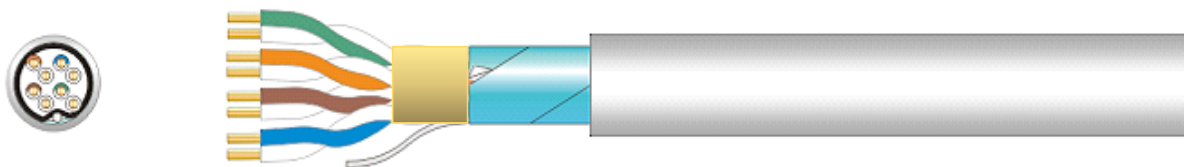
Coaxial Cables

CAVEL®

since 1968

Data Sheet

LAN541



Ø	0,51	1,00	6,20
	(Cu)	(PE)	(PVC)

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

Eca

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

EIA-TIA 568-B-2	ISO/IEC 11801	IEC 61156-5	EN 50173
EN 50288-2-1			

Reaction to Fire

EN50575	IEC 60332-1
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Application

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

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

IEEE 802.5 16 MB: ISDN; TPDDI; ATM

Power over Ethernet (PoE)/PoE+

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	(CuSn)	Ø 0,40	mm
Alluminio/Polyester tape spirally wound	(Al/Pet)	23 x 30/19	mm/µm
Outer sheath of Polyvinylchloride - white (PVC)	(PVC)	Ø 6,20	mm

Printed each meter by blue ink-jet :

CAVEL LAN 541 MADE IN ITALY CAT 5E F/UTP 4x2xAWG24 Euroclass Eca ISO-IEC 11801 EN50173

CEI-UNEL 36762 C-4 (U0 = 400V) gggaan - m

(gggaan=batch number m=meter marking)

ITALIANA CONDUTTORI s.r.l.

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Date

12/05/2016

Responsible

Giuseppe Guastella

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Physical data

Weight of copper conductors	15,60	kg/km
Total weight of cable	35,45	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	-20 / +60	°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		> 2000	MOhm/km
Sheath Insulation Voltage (DC, 1 min)		1	kV
Coupling Attenuation		> 45	dB

Screening Attenuation (SA)

30 - 100 MHz

> 50 dB

Shield 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]	SRL [dB]	NEXT [dB]	ACR [dB]	FEXT [dB]
1	1,90	20,00	71,00	69,10	80,00
10	6,00	25,00	56,00	50,00	62,00
20	8,50	25,00	51,00	42,50	58,00
31,2	10,70	24,00	49,00	38,30	56,00
62,5	15,70	22,00	44,00	28,30	50,00
100	19,80	20,00	41,00	21,20	48,00
155,5	24,20		38,00	13,80	
200	27,50		36,00	8,50	
250	29,20		35,00	5,80	
300	32,00		34,00	2,00	

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