

Description

Local Area Network Cable

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

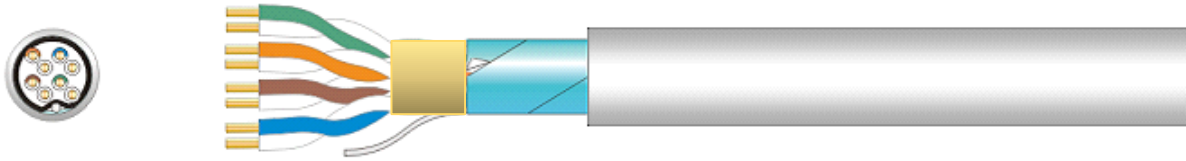
Coaxial Cables

CAVEL

since 1968

Data Sheet

LAN541



Ø	0,51 (Cu)	1,00 (PE)	6,20 (PVC)
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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+

Standards

EIA-TIA 568B.2

ISO/IEC 11801

IEC 61156-5

EN 50173

EN 50288-2-1

Fire-Resistance Rating

IEC 60332-1

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 PE MADE IN ITALY ss/aa F/UTP 4x2xAWG24 - CATEGORY 5E ISO-IEC 11801 EN50173

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

(ss=week , aaaa=year) (m=meter marking)

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
Fire Load	513 MJ/km	143	kWh/km

Electrical data

ITALIANA CONDUTTORI s.r.l.

Viale Zanotti 90 I - 27027 Gropello Cairoli
Tel +39-382.815150 Fax +39-0382.814212

Date

12/05/2016

Responsible

Giuseppe Guastella

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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]	RL [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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