

Description

Local Area Network Cable

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

Coaxial Cables

CAVEL

since 1968

Data Sheet**LAN540**

Ø 0,51 0,90 5,10
 (Cu) (PE) (PVC)

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 568A

ISO/IEC 11801 2° ed.

IEC 61156-5

EN 50173

EN 50288-3-1

IEEE 802.3at

Fire-Resistance Rating

IEC 60332-1

Construction data

4 pairs with conductor of bare copper wires	(Cu)	Ø 0,51	mm
Insulation of solid Polyethylene	(PE)	Ø 0,90	mm

Composition

Twisted pairs, coloured by Standard TIA-568A

Outer sheath of Polyvinylchloride - white (PVC)	(PVC)	Ø 5,10	mm
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Printed each meter by blue ink-jet :

CAVEL LAN 540 MADE IN ITALY ss/aa U/UTP 4x2xAWG24 - CATEGORY 5E ISO-IEC 11801 EN50173**CEI-UNEL 36762 C-4 (U0 =400V) - m**

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

Physical data

Weight of copper conductors	14,32	kg/km
Total weight of cable	31,01	kg/km
Minimum bending radius x1/n	20/40	mm
Maximum tensile strength during the installation	100	N
Installation temperature	0 / +50	°C
Operating temperature	-20 / +60	°C
Fire Load	398 MJ/km	111 kWh/km

Electrical data

Characteristic impedance	100 MHz	100 ± 5	Ohm
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ITALIANA CONDUTTORI s.r.l.

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

Date

29/02/2016

Responsible

Alberto Scardovi

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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

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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