

Description

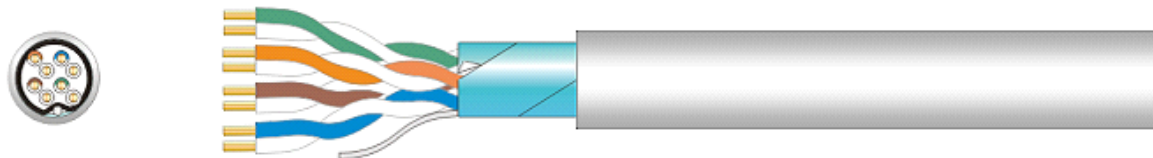
Local Area Network Cable

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

Coaxial Cables

CAVEL®

since 1968

Data Sheet**LAN541**

Ø	0,51 (Cu)	1,00 (PE)	6,00 (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

EN 50173

EN 50288-2-1

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

Alluminio/Polyester tape spirally wound

(Al/Pet)

Composition

Twisted pairs, coloured by Standard TIA-568A

Drain wire of tinned copper

(CuSn)

Ø 0,40

mm

Outer sheath of Polyvinylchloride - white (PVC)

(PVC)

Ø 6,00

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

Electrical data

Characteristic impedance

100 MHz

100 ± 5

Ohm

Capacitance of Twisted Pair (@800Hz)

48

pF/m

ITALIANA CONDUTTORI s.r.l.

Viale Zanotti 90 I - 27027 Gropello Cairoli

Tel +39-382.815150 Fax +39-0382.814212

Date

04/10/2013

Responsible

Giuseppe Guastella

Description				Data Sheet	
Local Area Network Cable				LAN541	
Cat. 5e F/UTP 4x2xAWG24/1 PVC					
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	
Screening Attenuation (SA)		Shield Transfer Impedance (Zt)			
30 - 100 MHz		> 40 dB		1 MHz	
				10 MHz	
				30 MHz	
				< 25 mOhm/m	
				< 8 mOhm/m	
				< 10 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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