

Description

Local Area Network Cable

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

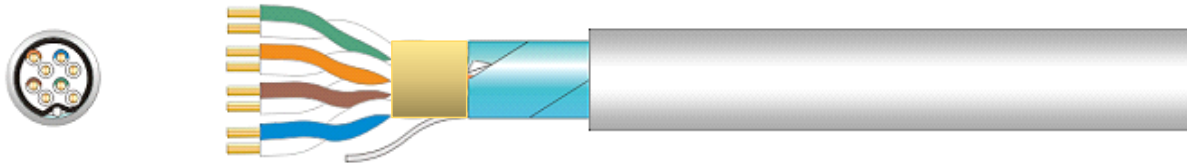
Coaxial Cables

CAVEL®

since 1968

Data Sheet

LAN541



| | | | |
|---|------|------|-------|
| Ø | 0,51 | 1,00 | 6,20 |
| | (Cu) | (PE) | (PVC) |

Standards

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

Fire-Resistance Rating

IEC 60332-1

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)

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

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] | 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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