

Description

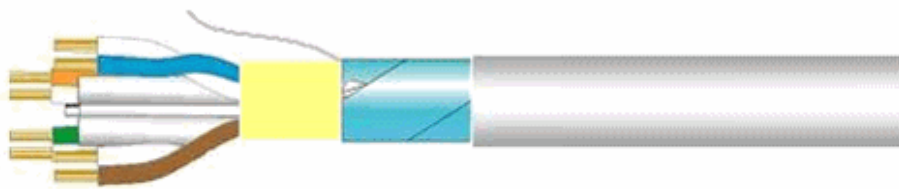
Local Area Network Cable

Cat. 6 F/UTP 4x2xAWG23/1 PVC

Coaxial Cables

CAVEL®

since 1968

Data Sheet**LAN641**

| | | | | | |
|---|------|------|-------|----------|-------|
| Ø | 0,57 | 1,10 | | | 7,80 |
| | (Cu) | (PE) | (Pet) | (Al/Pet) | (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 50173-1

EN 50288-5-1

NF C 15-100

XP C 90-483

XP C 93-531-16

Reaction to Fire

IEC 60332-1

EN50575

Application

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

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

IEEE 802.5; ATM

Power over Ethernet (PoE)/PoE+

Construction data

| | | | |
|---|-------|--------|----|
| 4 pairs with conductor of bare copper wires | (Cu) | Ø 0,57 | mm |
| Insulation of solid Polyethylene | (PE) | Ø 1,10 | mm |
| Polyester film spirally wrapped | (Pet) | | |

Composition

Twisted pairs, coloured by Standard TIA-568A

| | | | |
|---|----------|------------|-------|
| Drain wire of tinned copper | (CuSn) | Ø 0,40 | mm |
| Cross separator in Polyethylene | (PE) | | |
| External Aluminium/Polyester tape | (Al/Pet) | 27 x 30/19 | mm/µm |
| Outer sheath of Polyvinylchloride - white (PVC) - lead-free | (PVC) | Ø 7,80 | mm |

Printed each meter by blue ink-jet :

CAVEL LAN 641 MADE IN ITALY CAT 6 F/UTP 4x2xAWG23 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

11/05/2020

Responsible**A. Bergaglio**

Description

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Data Sheet

LAN641

Physical data

| | | |
|--|-----------|-------|
| Weight of copper conductors | 19,92 | kg/km |
| Total weight of cable | 54,20 | kg/km |
| Minimum bending radius x1/n | 35/70 | mm |
| Maximum tensile strength during the installation | 100 | N |
| Minimum 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 | | 80 | Ohm/km |
| Loop resistance | | 160 | Ohm/km |
| Insulation resistance | | > 5000 | MOhm/km |
| Sheath Insulation Voltage (DC, 1 min) | | 1 | kV |
| Coupling Attenuation | | > 45 | dB |

Screening Attenuation (SA)

| | |
|----------------|---------|
| 30 - 250 MHz | > 50 dB |
| 250 - 1000 MHz | > 45 dB |

Transfer Impedance (Zt)

| | |
|---------|--------------|
| 1 MHz | < 35 mOhm/m |
| 10 MHz | < 41 mOhm/m |
| 30 MHz | < 110 mOhm/m |
| 100 MHz | < 150 mOhm/m |

Transmission-Characteristic (at 20°C)

| Frequency [MHz] | Attenuation [dB/100m] | RL [dB] | NEXT [dB] | ACR-N [dB/100m] |
|--------------------|--------------------------|------------|--------------|--------------------|
| 1 | 1,80 | 25,00 | 100,00 | 98,20 |
| 10 | 5,40 | 25,00 | 80,00 | 74,60 |
| 20 | 7,70 | 25,00 | 70,00 | 62,30 |
| 31,2 | 9,60 | 25,00 | 65,00 | 55,40 |
| 62,5 | 13,70 | 25,00 | 60,00 | 46,30 |
| 100 | 17,40 | 25,00 | 60,00 | 42,60 |
| 155,5 | 21,90 | 25,00 | 55,00 | 33,10 |
| 200 | 25,00 | 20,00 | 55,00 | 30,00 |
| 250 | 28,10 | 20,00 | 50,00 | 21,90 |
| 300 | 30,80 | 20,00 | 45,00 | 14,20 |

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