

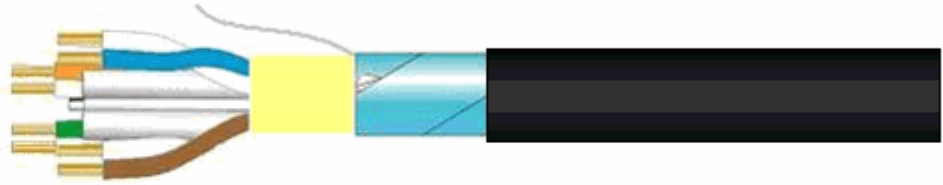
Description

Local Area Network Cable
 Cat. 6 F/UTP 4x2xAWG23/1 PE



Data Sheet

LAN641PE



Ø	0,57	1,10			7,60
	(Cu)	(PE)	(Pet)	(Al/Pet)	(PE)

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+

Standards

EIA-TIA 568-B-2

ISO/IEC 11801

IEC 61156-5

EN50173

EN50288-5-1

Construction data

4 pairs with conductor of bare copper wires	(Cu)	Ø 0,57	mm
Dielectric 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 Polyethylene - black	(PE)	Ø 7,60	mm

Printed each meter by yellow ink-jet :

**CAVEL LAN 641 PE MADE IN ITALY ss/aa F/UTP 4x2xAWG23 - CATEGORY 6 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	19,92	kg/km
Total weight of cable	47,20	kg/km
Minimum bending radius x1/n	35/70	mm
Maximum cable pulling strength	100	N
Maximum tensile strength during the installation	100	N
Installation temperature	+1 / +50	°C
Operating temperature	-20 / +60	°C
Fire Load	1.117 MJ/km	310 kWh/km

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Date

29/02/2016

Responsible

Alberto Scardovi

Description

Local Area Network Cable

Cat. 6 F/UTP 4x2xAWG23/1 PE

Coaxial Cables

CAVEL[®]

since 1968

Data Sheet

LAN641PE**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

Shield 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]	SRL [dB]	NEXT [dB]	ACR [dB]	FEXT [dB]
1	1,80	25,00	100,00	98,20	90,00
10	5,40	25,00	80,00	74,60	70,00
20	7,70	25,00	70,00	62,30	60,00
31,2	9,60	25,00	65,00	55,40	53,00
62,5	13,70	25,00	60,00	46,30	50,00
100	17,40	25,00	60,00	42,60	48,00
155,5	21,90	25,00	55,00	33,10	46,00
200	25,00	20,00	55,00	30,00	44,00
250	28,10	20,00	50,00	21,90	40,00
300	30,80	20,00	45,00	14,20	

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