

**Description**

Local Area Network Cable

Cat. 6 F/UTP 4x2xAWG23/1 LSZH

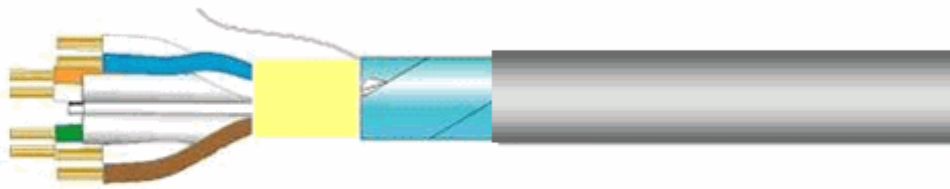
Coaxial Cables

**CAVEL**

since 1968

Data Sheet

**LAN641ZH**



Ø	0,57	1,14		7,80
	(Cu)	(PE)	(Pet) (Al/Pet)	(LSZH)

**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**

ISO/IEC 11801 Class E	EN50288-5-1	EN50173	EIA-TIA 568
CEI-UNEL 36762			

**Reaction to Fire**

EN50575

**Application**

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

IPTV; HbbTV 2.0.n

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

IEEE 802.5 16 MB: ISDN; TPDDI; ATM; PoE

Indoor + Outdoor Installation

**Construction data**

4 pairs with conductor of bare copper wires	(Cu)	Ø 0,57	mm
Dielectric of solid polyethylene	(PE)	Ø 1,14	mm
Polyester film spirally wrapped	(Pet)		

**Composition**

Twisted pairs, coloured by Standard TIA-568A

Drain wire of tinned copper			
Plastic Cross Separator	(PE)		
External Aluminum/Polyester tape	(Al/Pet)		
Outer sheath of Thermoplastic material - grey (RAL 7001) - halogen-free, low smoke, flame retardant and UV-resistant	(LSZH)	Ø 7,80	mm

Printed each meter by blue ink-jet :

**CAVEL LAN 641 ZH MADE IN ITALY CAT 6 F/UTP 4x2xAWG23 Euroclass Eca ISO-IEC 11801 EN50173 CEI-UNEL 36762 C-4 (U0 = 400V) gggaa(n) m**

(gggaan=batch number m=meter marking)

**ITALIANA CONDUTTORI s.r.l.**

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

Date

17/07/2023

Responsible

A. Bergaglio

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## Physical data

Weight of copper conductors	19,92	kg/km
Total weight of cable	58,60	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	0 / +50	°C
Operating temperature	-20 / +80	°C

## Electrical data

Characteristic impedance	100 MHz	100 ± 5	Ohm
Capacitance of Twisted Pair (@800Hz)		48	pF/m
Velocity Ratio		67 %	
DC Conductor Resistance		73	Ohm/km
Loop resistance		146	Ohm/km
Insulation resistance		> 5000	MOhm x km
Sheath Insulation Voltage (DC, 1 min)		1	kV
Coupling Attenuation		> 45	dB

## Screening Attenuation (SA)

30 - 250 MHz &gt; 50 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]	ACR-F [dB]
1	1,80	25,00	100,00	98,20	85,00
10	5,40	25,00	80,00	74,60	75,00
20	7,70	25,00	70,00	62,30	65,00
31,2	9,60	25,00	65,00	55,40	60,00
62,5	13,70	25,00	60,00	46,30	55,00
100	17,40	25,00	60,00	42,60	50,00
155,5	21,90	25,00	55,00	33,10	48,00
250	28,10	20,00	50,00	21,90	40,00

## Connectors

<b>KJ641AA</b>	Socket RJ45 FTP, Cat.6 toolless Alu, Socket RJ45
<b>PF-24PN</b>	Patch panel, ?Pannello 19" 24 Porte Vuoto per RJ45 FTP 1 HE con, Patch panel UTP -
<b>PLUG6F</b>	Plug RJ45, Plug RJ45 FTP Cat. 6, Plug RJ45 -

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