

Description

Local Area Network Cable

Cat. 7A S/FTP (PiMF mode) 4x2xAWG23/1 PVC



Data Sheet

LAN745BU



Ø	0,57 (Cu)	1,40 (PEG)	8,00 (PVC)
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Application

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

IEEE 802.5: ISDN; TPDDI; ATM; CATV; Broadband Video

Standards

ISO/IEC 11801 Class Fa	IEC 61156-5	EN 50173	EN 50288-9-1
EIA-TIA 568			

Construction data

Inner conductor of plain copper	(Cu)	Ø 0,57	mm
Insulation of physical foam Polyethylene	(PEG)	Ø 1,40	mm
Al/Pet foil shielded pairs, PiMF mode	(Al/Pet)	14 x 40/23	mm/µm

Composition

Twisted pairs, coloured by Standard TIA-568A

Braid of tinned copper wires	(CuSn)	16 x 5 x 0,10	mm
Lay length of braid		54	mm
Braid Optical Coverage		41	%
Lay Length of Pairs		80	mm
Outer sheath of Polyvinylchloride - white with two blue bands - lead-free	(PVC)	Ø 8,00	mm

Printed each meter by blue ink-jet :

**CAVEL LAN 745 MADE IN ITALY ss/aa S/FTP 4x2xAWG23/1 - CATEGORY 7A ISO-IEC 11801 EN50173-1
CEI-UNEL 36762 C-4 (U0 =400V) - m**

(ss=week, aa=year) (m=meter marking)

Physical data

Weight of copper conductors		27,00	kg/km
Total weight of cable		64,90	kg/km
Minimum bending radius x1/n		40/80	mm
Max.Tensile Strength		150	N
Installation temperature		0 / +50	°C
Operating temperature		-20 / +60	°C
Fire Load	930 MJ/km	258	kWh/km

Electrical data

Characteristic impedance	1 - 100 MHz	100 ± 5	Ohm
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ITALIANA CONDUTTORI s.r.l.

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Tel +39-382.815150 Fax +39-0382.814212

Date

14/12/2016

Responsible

Alberto Scardovi

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Coaxial Cables

CAVEL[®]

since 1968

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Capacitance of Twisted Pair (@800Hz)	43	pF/m
Velocity Ratio	77 %	
DC Conductor Resistance	73	Ohm/km
Loop resistance	146	Ohm/km
Insulation resistance	> 5000	MOhm/km
Sheath Insulation Voltage (DC, 1 min)	1	kV
Coupling Attenuation	> 45	dB

Screening Attenuation (SA)

30 - 100 MHz	> 80 dB
100 - 1000 MHz	> 85 dB

Shield Transfer Impedance (Zt)

1 MHz	< 5 mOhm/m
10 MHz	< 3 mOhm/m
30 MHz	< 3 mOhm/m

Transmission-Characteristic (at 20°C)

Frequency [MHz]	Attenuation [dB/100m]	SRL [dB]	NEXT [dB]	ACR [dB]
1	2,10	25,00	90,00	87,90
4	3,60	25,00	90,00	86,40
10	5,40	25,00	90,00	84,60
16	6,80	25,00	90,00	83,20
20	7,70	25,00	85,00	77,30
31,25	9,60	25,00	85,00	75,40
62,5	13,70	25,00	80,00	66,30
100	17,40	25,00	80,00	62,60
125	19,50	25,00	80,00	60,50
155,5	21,90	25,00	80,00	58,10
175	23,30	25,00	75,00	51,70
200	25,00	25,00	75,00	50,00
250	28,10	25,00	75,00	46,90
300	30,90	25,00	70,00	39,10
450	38,30	25,00	70,00	31,70
600	44,80	20,00	65,00	20,20
750	51,00	20,00	65,00	14,00
900	54,50	20,00	65,00	10,50
1000	58,00	20,00	65,00	7,00
1200	62,00	20,00	60,00	-2,00

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