

Description

Local Area Network Cable

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

Coaxial Cables

CAVEL®

since 1968

Data Sheet**LAN745BU**

Ø	0,57	1,35	8,00
	(Cu)	(PEG)	(PVC)

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 1,35	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

Description		Coaxial Cables CAVEL® since 1968		Data Sheet	
Local Area Network Cable				LAN745BU	
Cat. 7A S/FTP (PiMF mode) 4x2xAWG23/1 PVC					
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)		Shield Transfer Impedance (Zt)			
30 - 100 MHz		> 80 dB		1 MHz	
100 - 1000 MHz		> 85 dB		10 MHz	
				30 MHz	
				< 5 mOhm/m	
				< 3 mOhm/m	
				< 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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