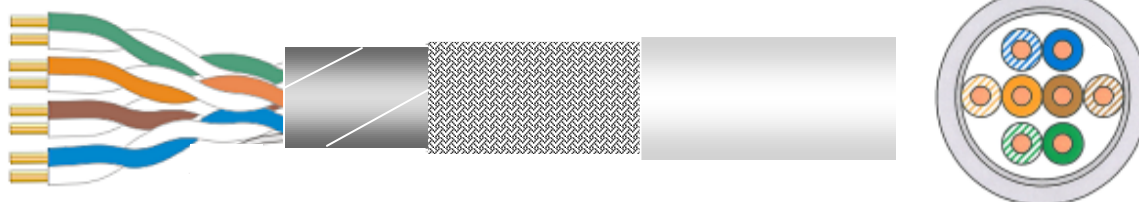


Local Area Network Cable

CAVEL[®]**LAN542**

Cat. 5e SF/UTP 4x2xAWG24/1 PVC

since 1968



∅ 0,51 1,00 6,50
(Cu) (PE) (PVC)

Construction data

4x2xAWG24 foil screened pairs of bare copper wires (Cu) 0,51 mm
Insulation of solid Polyethylene (PE) 1,00 mm

Composition	Sheath Colour	Lay length of pairs [mm]
	white/blu - blu	13,00
	white/green - green	14,20
	white/orange - orange	18,00
	white/brown - brown	20,40

Alluminio/Polyester tape spirally wound (Al/Pet) 23 x 30/19 mm/μm
Braid of tinned copper wires (CuSn) 16 x 6 x 0,12 mm
Lay length of braid 54 mm
Braid Optical Coverage (approx.) 62 %
Outer sheath of Polyvinylchloride - white (PVC) - lead-free (PVC) 6,50 mm

Printed each meter by blue ink-jet :

CAVEL LAN 542 MADE IN ITALY ss/aa SF/UTP 4x2xAWG24 - CATEGORY 5E ISO-IEC 11801 EN50173
CEI-UNEL 36762 C-4 (U0 =400V) - m

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

Electrical data

Characteristic impedance 1 - 100 MHz 100 ± 15 Ohm
Capacitance of Twisted Pair (@800Hz) 48 pF/m
Velocity Ratio 67 %
Conductor resistance @ 20°C 95 Ohm/km
Loop resistance 190 Ohm/km
Insulation resistance > 2.000 MOhm x km
Test voltage (DC, 1 min) 1 kV
Coupling Attenuation tbf

Screening Attenuation (SA)

Transfer impedance

30 - 1000 MHz	> 75 dB	up to	1 MHz	< 20 mOhm/m
	---	up to	10 MHz	< 20 mOhm/m
	---	up to	30 MHz	< 30 mOhm/m
	---	up to	100 MHz	< 60 mOhm/m

ITALIANA CONDUTTORI s.r.l.

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

Date

22/10/2013

Responsible

Alberto Scardovi

Local Area Network Cable

CAVEL[®]**LAN542**

since 1968

Cat. 5e SF/UTP 4x2xAWG24/1 PVC

Frequency [MHz]	Attenuation [dB/100m]	SRL [dB]	NEXT [dB/100m]	ACR [dB]
1	1,90	20,00	71,00	69,10
10	6,00	25,00	56,00	50,00
20	8,50	25,00	51,00	42,50
31,2	10,70	24,00	49,00	38,30
62,5	15,70	22,00	44,00	28,30
100	19,80	20,00	41,00	21,20
155,5	24,20		38,00	13,80
200	27,50		36,00	8,50
250	29,20		35,00	5,80
300	32,00		34,00	2,00

Mechanical data

Weight of copper conductors	24,60	kg/km		
Total weight of cable	48,10	kg/km		
Minimum bending radius (installation/operation)	50/25	mm		
Maximum pulling strength during the installation	100	N		
Working temperature	-20 / +60	°C		
Lay out temperature	0 / +50	°C		
Fire Load	468	MJ/km	130	kWh/km

Standards

IEC 60332-1
 EIA-TIA 568B.2
 ISO/IEC 11801; IEC 61156-5
 EN50173; EN50288-2-1

Applications:

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)
 IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T
 IEEE 802.5 16MB; ISDN; TPDDI; ATM

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