

## Description

Local Area Network Cable

Cat. 5e F/UTP 4x2xAWG24 PVC

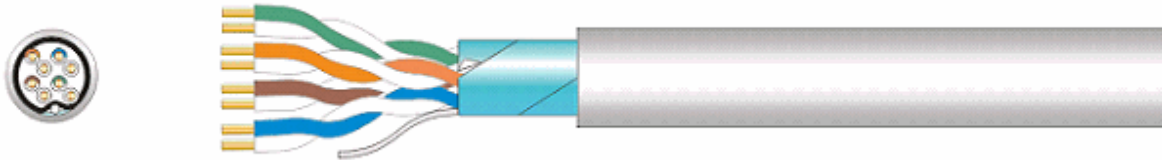
Coaxial Cables

CAVEL®

since 1968

## Data Sheet

LAN\_541

0,51  
(Cu)1,00  
(PE)6,00  
(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

Drain wire of tinned copper

(CuSn)

0,40

mm

Outer sheath of Polyvinylchloride - white (PVC)

(PVC)

6,00 mm

Printed each meter by blue ink-jet :

**CAVEL LAN 541 PE MADE IN ITALY ss/aa F/UTP 4x2xAWG24 - CATEGORY 5E ISO-IEC 11801 EN50173****CEI-UNEL 36762 C-4 (U0 =400V) - m**

(ss=week , aaa=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	30 - 100 MHz	> 45 dB	
Screening Attenuation (SA)	30 - 100 MHz	> 40 dB	
		---	
		---	
		up to	Transfer impedance
		1 MHz	< 25 mOhm/m
		up to	10 MHz
		30 MHz	< 8 mOhm/m
			< 10 mOhm/m

**ITALIANA CONDUTTORI s.r.l.**Viale Zanotti 90 I - 27027 Gropello Cairoli  
Tel +39-382.815150 Fax +39-0382.814212

Date

03/10/2013

Responsible

Giuseppe Guastella

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Frequency [MHz]	Attenuation [dB/100m]	SRL [dB]	NEXT [dB/100m]	ACR [dB]	FEXT [dB]
1	1,90	20,00	71,00	69,10	80,00
10	6,00	25,00	56,00	50,00	62,00
20	8,50	25,00	51,00	42,50	58,00
31,2	10,70	24,00	49,00	38,30	56,00
62,5	15,70	22,00	44,00	28,30	50,00
100	19,80	20,00	41,00	21,20	48,00
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	15,72	kg/km		
Total weight of cable	35,45	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	457	MJ/km	127	kWh/km

**Standards**

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

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