

Description

Triple shielded coaxial cable for Broadband Distribution Networks
75 Ohm
Class A

Coaxial Cables

CAVEL®

since 1968

Data Sheet

TS61L



Ø	1,00	4,80	4,97	5,37	5,49	6,80
	(Cu)	(PEG)	(Al/Pet/Al/Sur)	(CuSn)	(Al/Pet)	(PVC)

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

EN 50117-2-4

Reaction to Fire

EN50575

Application

DOCSIS 3.1 (Data Over Coax System)

Construction data

Inner conductor of plain copper	(Cu)	Ø 1,00 ± 0,02	mm
Dielectric of physical foam polyethylene	(PEG)	Ø 4,80 ± 0,10	mm
Aluminium/Polyester/Aluminium/Surlyne tape longitudinally overlapped and bonded to the dielectric	(Al/Pet/Al/Sur)		
Braid of tinned copper wires	(CuSn)		
Braid optical coverage (IEC 96-1)		45	%
Outer Aluminium/Polyester tape longitudinally overlapped	(Al/Pet)	23 x 30/19	mm/µm
Diameter over Braid		Ø 5,49	mm
Outer sheath of Polyvinylchloride - white (PVC) - lead-free	(PVC)	Ø 6,80 ± 0,10	mm

Printed each meter by blue ink-jet :

CAVEL TS 61 L MADE IN ITALY 75 Ohm Euroclass Eca EN50117-2-4 Class A CEI-UNEL 36762 C-4 (U0 = 400V) ULTRA HD / 4K gggaa(n) m

(ggg=day)(aa=year)(n=batch) (m=meter marking)

Physical data

Weight of copper conductors	12,58	kg/km
Total weight of cable	43,86	kg/km
Minimum bending radius (single/repeated bending)	35/70	mm
Maximum cable pulling strength	120	N
Minimum installation temperature	-5	°C
Operating temperature	-40 / +80	°C

Electrical data

Characteristic impedance	200 MHz	75 ± 3	Ohm
Capacitance (@1kHz)		54 ± 2	pF/m
Velocity Ratio		82 %	
Inner conductor resistance		22,50	Ohm/km

ITALIANA CONDUTTORI s.r.l.

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

Date

02/07/2018

Responsible

Alberto Scardovi

Description

Triple shielded coaxial cable for Broadband Distribution Networks
75 Ohm
Class A

**Data Sheet****TS61L**

Outer conductor resistance		14	Ohm/km
Loop resistance		36,50	Ohm/km
Sheat Insulation voltage (spark test)		3	kV
Maximum current (Ieff)		6	A
Structural return loss (SRL)			
5 - 470 MHz	>30 dB		
470 - 1000 MHz	>28 dB		
1000 - 2000 MHz	>26 dB		
2000 - 3000 MHz	>22 dB		
Screening Attenuation (SA)	SA-Class A++	Shield Transfer Impedance (Zt)	Zt-Class A
30 - 1000 MHz	>105 dB	5 - 30 MHz	< 6 mOhm/m
1000 - 2000 MHz	>95 dB		
2000 - 3000 MHz	>85 dB		

Attenuation (at 20°C)

Frequency [MHz]	Attenuation [dB/100m]	Frequency [MHz]	Attenuation [dB/100m]
5	2,00	862	18,87
10	2,29	1000	20,44
30	3,47	1350	24,03
50	4,60	1750	27,76
200	8,60	2150	31,09
300	10,78	2400	32,37
470	13,68	3000	37,31
800	18,17		

ITALIANA CONDUTTORI s.r.l.

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

Date**02/07/2018****Responsible****Alberto Scardovi**

Description

Triple shielded coaxial cable for Broadband Distribution Networks
75 Ohm
Class A



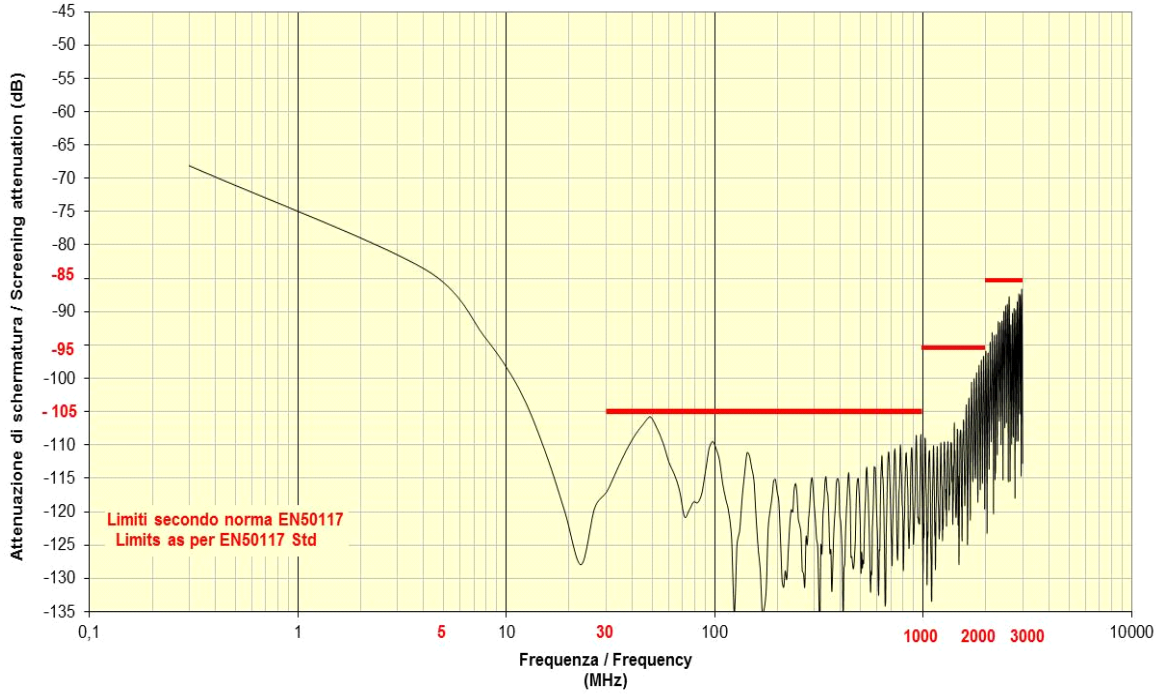
Data Sheet

TS61L

Attenuazione di schermatura / Screening Attenuation

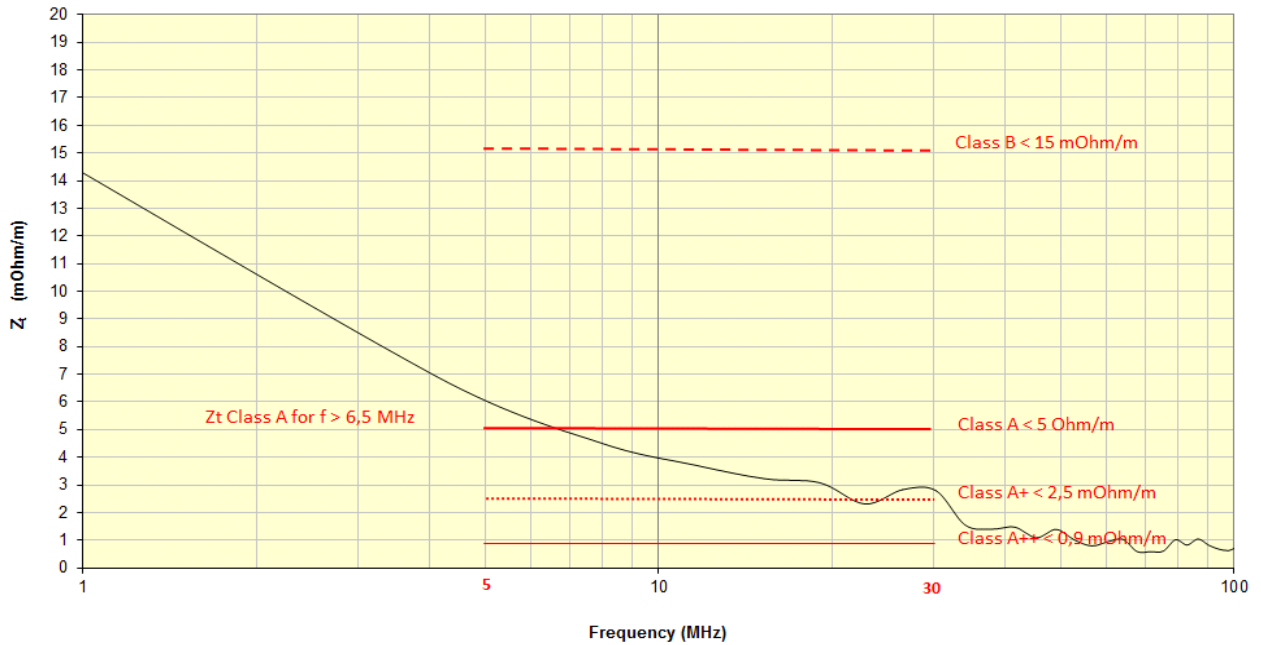
Cavo classe A++ / A++ Class cable

Cavo tipo / Cable type: TS61L



Transfer Impedance

Cable type: TS61L



ITALIANA CONDUTTORI s.r.l.

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

Date

02/07/2018

Responsible

Alberto Scardovi

Description

Triple shielded coaxial cable for Broadband Distribution Networks
 75 Ohm
 Class A

**Data Sheet****TS61L****Connectors**

BNCC703	Series BNC Compression, BNC Compression, for OUTDOOR installation, nitin-plated brass - 35,0 mm x 14,0 mm
F703	Series F Crimp, F Crimp, for INDOOR installation, nitin-plated brass - 21,0 mm x 12,0 mm
FA17	Series F Twist-On, F Twist-On, for INDOOR installation, nitin-plated brass - 21,0 mm x 12,0 mm
FC7.0QM	Series F Compression, Quick Mount, for OUTDOOR installation
FC703	Series F Compression, F Compression, for OUTDOOR installation, nitin-plated brass - 30,0 mm x 12,0 mm
FCEM7.0C	Series F Compression, F Compression, for OUTDOOR installation, nitin-plated brass
FCPO5.1C	Series F Compression, Ø 5,1 Push-On, for OUTDOOR installation, nitin-plated brass
IECF5.1C	Series IEC (toolless), female, no tool, for INDOOR installation
IECF90C	Series IEC (toolless), Ø 5,1 90° female, for INDOOR installation
IECF703	Series IEC Compression, female, no tool, for OUTDOOR installation
IECM5.1C	Series IEC (toolless), male, no tool, for INDOOR installation
IECM90C	Series IEC (toolless), Ø 5,1 90° male, for INDOOR installation
IECM703	Series IEC Compression, male, for OUTDOOR installation
FC703C	Series F Compression, F Compression, for OUTDOOR installation

ITALIANA CONDUTTORI s.r.l.

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

Date

02/07/2018

Responsible

Alberto Scardovi