

Description

50 Ohm Coaxial cable

low loss for wireless communication systems

**Data Sheet****WL300**

Ø	1,80	4,80	4,97	5,57	7,60
	(Cu)	(PEG)	(Al/Pet/Al+Sur)	(CuSn)	(PE)

Class CPR acc. to UE 305/2011 (DoP)

Fca

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

CEI-UNEL 36762

Application

Exterior and Underground Installation

Construction data

Inner conductor of plain copper	(Cu)	Ø 1,80 ± 0,02	mm
Dielectric of physical foam polyethylene + outer PE skin	(PEG)	Ø 4,80 ± 0,10	mm
Aluminum/Polyester/Aluminum+Surlyn tape longitudinally overlapped and bonded to the dielectric	(Al/Pet/Al+Sur)		
Braid of tinned copper wires	(CuSn)		
Braid optical coverage (IEC 96-1)		84	%
Diameter over Braid		Ø 5,57	mm
Outer sheath of Polyethylene - black (RAL 9011) - with carbonblack	(PE)	Ø 7,60 ± 0,10	mm
Printed each meter by yellow ink-jet :			

CAVEL WL 300 50 Ohm LOW LOSS WI-FI/RF - MADE IN ITALY - gggaa(n) - m

(gggaan=batch number m=meter marking)

Physical data

Weight of copper conductors	43,90	kg/km
Total weight of cable	71,60	kg/km
Minimum bending radius	76	mm
Maximum cable pulling strength	540	N
Minimum installation temperature	-5	°C
Operating temperature	-40 / +80	°C

Electrical data

Characteristic impedance	50 ± 2	Ohm
Capacitance	78	pF/m
Velocity Ratio	85 %	
Inner conductor resistance	7	Ohm/km

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Date**03/08/2023****Responsible****A. Bergaglio**

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Outer conductor resistance		7,30		Ohm/km	
Loop resistance		14,30		Ohm/km	
Sheat Insulation voltage (spark test)		5		kV	
Maximum current (Ieff)		18		A	
Structural return loss (SRL)		Max. power			
5 - 470 MHz	30 dB	30 MHz	2.090 W	50 MHz	1.620 W
470 - 1000 MHz	28 dB	150 MHz	920 W	220 MHz	760 W
1000 - 2000 MHz	26 dB				
Screening Attenuation (SA)					
30 - 1000 MHz	>90 dB				
Attenuation (at 20°C)					
Frequency [MHz]		Attenuation [dB/100m]		Frequency [MHz]	
				Attenuation [dB/100m]	
50		4,10		2000	
150		7,50		2500	
220		9,00		3000	
450		13,00		4000	
900		18,60		4800	
1500		25,50		5800	
1800		27,50			
Connectors					
NF300		Series NF Crimp, Crimp, for INDOOR installation, nitin-plated brass			
NM300		Series NM Crimp, Crimp, for INDOOR installation, nitin-plated brass			
SMAF300		Series SMA female, Crimp, for INDOOR installation			
SMAM300		Series SMA male, Crimp, for INDOOR installation			
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