

Description

50 Ohm Coaxial cable

low loss for wireless communication systems

**Data Sheet****WL400**

Ø	2,70	7,20	7,37	7,97	10,30
	(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 2,70 ± 0,10	mm
Dielectric of physical foam polyethylene + outer PE skin	(PEG)	Ø 7,20 ± 0,15	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)		82	%
Diameter over Braid		Ø 7,97	mm
Outer sheath of Polyethylene - black (RAL 9011) - with carbonblack	(PE)	Ø 10,30 ± 0,20	mm
Printed each meter by yellow ink-jet :			

CAVEL WL 400 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	80,40	kg/km
Total weight of cable	128,24	kg/km
Minimum bending radius (single/repeated bending)	52 / 103	mm
Maximum cable pulling strength	720	N
Minimum installation temperature	-5	°C
Operating temperature	-40 / +80	°C

Electrical data

Characteristic impedance	50 ± 2	Ohm
Capacitance	78	pF/m
Velocity Ratio	86 %	
Inner conductor resistance	3,40	Ohm/km

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Date

03/08/2023

Responsible

A. Bergaglio

Description				Data Sheet	
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low loss for wireless communication systems					
Outer conductor resistance		6		Ohm/km	
Loop resistance		9,40		Ohm/km	
Sheat Insulation voltage (spark test)		8		kV	
Maximum current (Ieff)		25		A	
Structural return loss (SRL)		Max. power			
5 - 470 MHz	>30 dB	30 MHz	3.360 W	50 MHz	2.590 W
470 - 1000 MHz	>28 dB	150 MHz	1.470 W	220 MHz	1.200 W
1000 - 2000 MHz	>26 dB				
2000 - 3000 MHz	>22 dB				
Screening Attenuation (SA)					
30 - 1000 MHz	>90 dB				
Attenuation (at 20°C)					
Frequency [MHz]		Attenuation [dB/100m]		Frequency [MHz]	
				Attenuation [dB/100m]	
50		2,80		2000	
150		5,00		2500	
220		6,00		3000	
450		8,70		4000	
900		12,50		4800	
1500		16,60		5800	
1800		18,20			
Connectors					
NF400	Series NF Crimp, Crimp, for INDOOR installation, nitin-plated brass				
NM400	Series NM Crimp, Crimp, for INDOOR installation, nitin-plated brass				
SMAF400	Series SMA female, Crimp, for INDOOR installation				
SMAM400	Series SMA male, Crimp, for INDOOR installation				
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