

Description

50 Ohm Coaxial cable
low loss for wireless communication systems



Data Sheet

WL400ZHN



Ø	2,70 (Cu)	7,20 (PEG)	7,37 (Al/Pet/Al/Sur)	7,97 (CuSn)	10,30 (LSZH)
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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.

Construction data

Inner conductor of plain copper	(Cu)	Ø 2,70 ± 0,10	mm
Dielectric of physical foam polyethylene	(PEG)	Ø 7,20 ± 0,15	mm
Aluminum/Polyester/Aluminum/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)		82	%
Diameter over Braid		Ø 7,97	mm
Outer sheath of Thermoplastic material - black - halogen-free, low smoke, flame retardant and UV-resistant	(LSZH)	Ø 10,30 ± 0,20	mm

Printed each meter by yellow ink-jet :

CAVEL WL 400 ZHN 50 Ohm LOW LOSS WI-FI/RF - MADE IN ITALY - gggaan - m

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

Physical data

Weight of copper conductors	80,18	kg/km
Total weight of cable	147,50	kg/km
Minimum bending radius	100	mm
Maximum cable pulling strength	720	N
Minimum installation temperature	-5	°C
Operating temperature	-25 / +80	°C

Electrical data

Characteristic impedance	50 ± 2	Ohm
Capacitance	78	pF/m
Velocity Ratio	86 %	
Inner conductor resistance	3,40	Ohm/km
Outer conductor resistance	5,40	Ohm/km
Loop resistance	8,80	Ohm/km
Sheat Insulation voltage (spark test)	8	kV
Maximum current (I _{eff})	25	A
Structural return loss (SRL)	Max. power	
5 - 470 MHz	>30 dB	
	30 MHz	3.360 W
	50 MHz	2.590 W

ITALIANA CONDUTTORI s.r.l.

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Tel +39-382.815150 Fax +39-0382.814212

Date

17/11/2021

Responsible

A. Bergaglio

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Coaxial Cables

CAVEL

since 1968

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470 - 1000 MHz	>28 dB	150 MHz	1.470 W	220 MHz	1.200 W
1000 - 2000 MHz	>26 dB	450 MHz	820 W	900 MHz	570 W
2000 - 3000 MHz	>22 dB	1500 MHz	430 W	1800 MHz	390 W
		2000 MHz	360 W	2500 MHz	320 W

Screening Attenuation (SA)

>90 dB

Attenuation (at 20°C)

Frequency [MHz]	Attenuation [dB/100m]	Frequency [MHz]	Attenuation [dB/100m]
50	2,60	1500	16,60
150	4,60	1800	18,20
220	5,70	2000	19,30
450	8,70	2500	22,00
900	12,50	4800	29,40

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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