

## Description

50 Ohm Coaxial cable

low loss for wireless communication systems

Coaxial Cables

CAVEL®

since 1968

Data Sheet

WL240ZHN



Ø	1,40	3,80	3,90	4,38	6,10
	(Cu)	(PEG)	(Al/Pet/Al)	(CuSn)	(LSZH)

## Construction data

Inner conductor of plain copper	(Cu)	Ø 1,40 ± 0,02	mm
Dielectric of physical foam polyethylene	(PEG)	Ø 3,80 ± 0,10	mm
Outer Aluminum/Polyester/Aluminum tape longitudinally overlapped	(Al/Pet/Al)		
Braid of tinned copper wires	(CuSn)		
Braid optical coverage (IEC 96-1)		78	%
Diameter over Braid		Ø 4,38	mm
Outer sheath of Thermoplastic material - black - halogen-free, low smoke, flame retardant and UV-resistant	(LSZH)	Ø 6,10 ± 0,10	mm

Printed each meter by yellow ink-jet :

CAVEL WL 240 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	25,34	kg/km
Total weight of cable	49,40	kg/km
Minimum bending radius	60	mm
Maximum cable pulling strength	360	N
Minimum installation temperature	-5	°C
Operating temperature	-40 / +80	°C

## Electrical data

Characteristic impedance	50 ± 2	Ohm
Capacitance	82	pF/m
Velocity Ratio	80 %	
Inner conductor resistance	11,20	Ohm/km
Outer conductor resistance	12,40	Ohm/km
Loop resistance	23,60	Ohm/km
Sheat Insulation voltage (spark test)	5	kV
Maximum current (I <sub>eff</sub> )	12	A
Structural return loss (SRL)	Max. power	
5 - 470 MHz	>30 dB	30 MHz 1.410 W
470 - 1000 MHz	>28 dB	50 MHz 1.090 W
1000 - 2000 MHz	>24 dB	150 MHz 620 W
2000 - 3000 MHz	>20 dB	220 MHz 510 W

ITALIANA CONDUTTORI s.r.l.

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

Date

19/05/2021

Responsible

A. Bergaglio

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Screening Attenuation (SA)

&gt;90 dB

## Attenuation (at 20°C )

Frequency [MHz]	Attenuation [dB/100m]	Frequency [MHz]	Attenuation [dB/100m]
50	6,00	1800	35,20
150	9,90	2000	37,30
220	11,80	2500	42,00
450	16,90	3000	47,00
900	24,00	4000	55,00
1500	32,00	4800	62,00

**Connectors**

- NF240** Series NF Crimp, Crimp, for INDOOR installation, nitin-plated brass
- NM240** Series NM Crimp, Crimp, for INDOOR installation, nitin-plated brass
- SMAF240** Series SMA female, Crimp, for INDOOR installation
- SMAM240** Series SMA male, Crimp, for INDOOR installation

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