

Description

50 Ohm Coaxial cable

low loss for wireless communication systems



Data Sheet

WL195N

Ø	1,00	2,80	2,90	3,38	4,95
	(Cu)	(PEG)	(Al/Pet/Al)	(CuSn)	(PVC)

Standards

CEI-UNEL 36762

Application

Indoor Installation

Construction data

Inner conductor of plain copper	(Cu)	Ø 1,00 ± 0,02	mm
Dielectric of physical foam polyethylene + outer PE skin	(PEG)	Ø 2,80 ± 0,10	mm
Outer Aluminum/Polyester/Aluminum tape longitudinally overlapped	(Al/Pet/Al)		
Water repellent sealing (dielectric)	(Jelly1)		
Braid of tinned copper wires	(CuSn)		
Braid optical coverage (IEC 96-1)		82	%
Diameter over Braid		Ø 3,38	mm
Outer sheath of Polyvinylchloride - black (RAL 9011) - lead-free	(PVC)	Ø 4,95 ± 0,10	mm
Printed each meter by yellow ink-jet :			

CAVEL WL195 N 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	16,70	kg/km
Total weight of cable	34,30	kg/km
Minimum bending radius (single/repeated bending)	25 / 50	mm
Maximum cable pulling strength	180	N
Minimum installation temperature	-5	°C
Operating temperature	-20 / +70	°C

Electrical data

Characteristic impedance	50 ± 2	Ohm
Capacitance	82	pF/m
Velocity Ratio	80 %	
Inner conductor resistance	22,10	Ohm/km
Outer conductor resistance	15,30	Ohm/km
Loop resistance	37,40	Ohm/km
Sheat Insulation voltage (spark test)	3	kV
Maximum current (I _{eff})	6	A

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Date

03/08/2023

Responsible

A. Bergaglio

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Coaxial Cables

CAVEL®

since 1968

Data Sheet

WL195N**Structural return loss (SRL)**

5 - 470 MHz	>30 dB
470 - 1000 MHz	>28 dB
1000 - 2000 MHz	>26 dB
2000 - 3000 MHz	>22 dB

Max. power

30 MHz	880 W	50 MHz	680 W
150 MHz	390 W	220 MHz	320 W
450 MHz	220 W	900 MHz	160 W
1500 MHz	120 W	1800 MHz	110 W
2000 MHz	100 W	2500 MHz	90 W
4800 MHz	60 W		

Screening Attenuation (SA)

30 - 1000 MHz	>90 dB
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Attenuation (at 20°C)

Frequency [MHz]	Attenuation [dB/100m]	Frequency [MHz]	Attenuation [dB/100m]
50	8,00	2000	49,80
150	13,00	2500	56,00
220	15,80	3000	61,00
450	22,70	4000	72,50
900	32,20	4800	80,50
1500	42,50	5800	92,00
1800	47,00		

Connectors

NF195	Series NF Crimp, Crimp, for INDOOR installation, nitin-plated brass
NM195	Series NM Crimp, Crimp, for INDOOR installation, nitin-plated brass
SMAF195	Series SMA female, Crimp, for INDOOR installation
SMAM195	Series SMA male, Crimp, for INDOOR installation

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