

**Description**

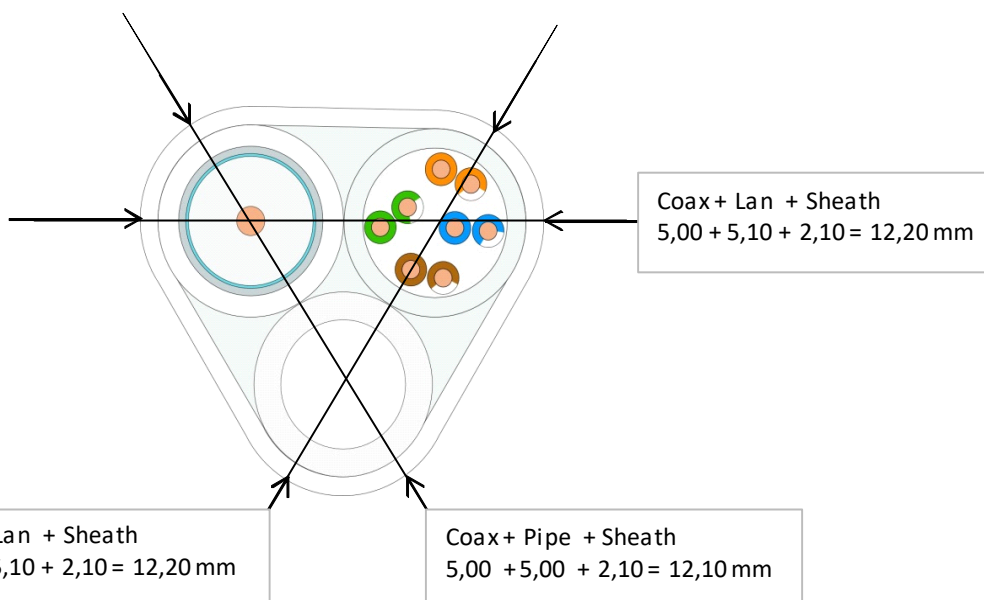
Hybrid multimedia cable

Coaxial, LAN and Loose Tube for Multimedia Applications



**Data Sheet**

**MM8503ZHB**



**Attached Data Sheet**

- DG80ZH
- LAN540ZH
- PIPE1

Outer sheath of Thermoplastic material - white - halogen free and flame retardant (LSZH) Ø 12,20 x 12,10 mm

Printed each meter by blue ink-jet :

**CAVEL MM8503ZHB MADE IN ITALY MULTIMEDIA COAX DG80ZH + LAN540ZH + LOOSE TUBE ss/aa m**

(ss=week, aa=year) (m=meter marking)

**Physical data**

Weight of copper conductors	25,60	kg/km
Total weight of cable	133,00	kg/km
Minimum installation temperature	-5	°C
Operating temperature	-25 / +80	°C

**ITALIANA CONDUTTORI s.r.l.**

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

**Date**

**17/07/2017**

**Responsible**

**Alberto Scardovi**

## Description

Outdoor drop coaxial cable - 75 Ohm

Security sheath of LSZH material

Coaxial Cables

CAVEL®

since 1968

## Data Sheet

DG80ZH

MM8503ZHB



Ø	0,80	3,50	3,60	4,00	5,00
	(Cu)	(PEG)	(Al/Pet/Al)	(CuSn)	(LSZH)

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

Dca s2,d2,a1

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

EN 50117-2-5

## Reaction to Fire

EN50575

## Construction data

Inner conductor of plain copper	(Cu)	Ø 0,80 ± 0,02	mm
Dielectric of physical foam polyethylene	(PEG)	Ø 3,50 ± 0,10	mm
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)		65	%
Diameter over Braid		Ø 4,00	mm
Outer sheath of Thermoplastic material - grey (RAL 7001) - halogen-free, low smoke, flame retardant and UV-resistant	(LSZH)	Ø 5,00 ± 0,10	mm

Printed each meter by blue ink-jet :

**CAVEL DG 80 ZH MADE IN ITALY 75 Ohm Euroclass Dca s2,d2,a1 EN50117-2-5 CEI-UNEL 36762 C-4 (U0 = 400V) ULTRA HD / 4K gggaa(n) m**

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

## Physical data

Weight of copper conductors	11,13	kg/km
Total weight of cable	26,60	kg/km
Minimum bending radius (single/repetead bending)	25/50	mm
Maximum cable pulling strength	90	N
Minimum installation temperature	-5	°C
Operating temperature	-25 / +80	°C

## Electrical data

Characteristic impedance	200 MHz	75 ± 3	Ohm
Capacitance (@1kHz)		52 ± 2	pF/m
Velocity Ratio		85 %	
Inner conductor resistance		35	Ohm/km
Outer conductor resistance		18,60	Ohm/km
Loop resistance		53,60	Ohm/km
Sheat Insulation voltage (spark test)		2,50	kV

## ITALIANA CONDUTTORI s.r.l.

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

## Date

29/02/2016

## Responsible

PierPaolo Piccinini

**Description**

Outdoor drop coaxial cable - 75 Ohm

Security sheath of LSZH material



**Data Sheet**

**DG80ZH**

MM8503ZHB

Maximum current (I<sub>eff</sub>)

4

A

Structural return loss (SRL)

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

Screening Attenuation (SA)

SA-Class A

Transfer Impedance (Z<sub>t</sub>)

Z<sub>t</sub>-Class B

30 - 1000 MHz	>90 dB
1000 - 2000 MHz	>75 dB
2000 - 3000 MHz	>65 dB

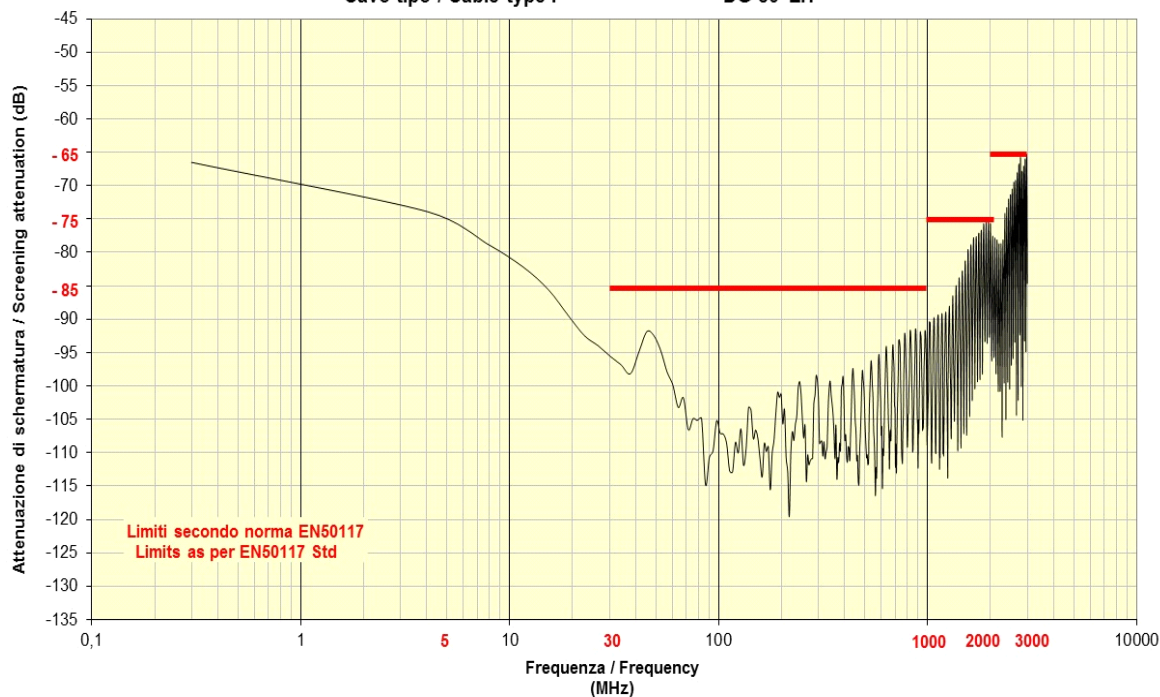
5 - 30 MHz

< 9 mΩ/m

**Attenuazione di schermatura / Screening Attenuation**

**Cavo classe A / A Class Cable**

Cavo tipo / Cable type : **DG 80 ZH**



**ITALIANA CONDUTTORI s.r.l.**

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

Date

29/02/2016

Responsible

PierPaolo Piccinini

## Description

Local Area Network Cable

Cat. 5e U/UTP 4x2xAWG24/1 LSZH

Coaxial Cables

CAVEL®

since 1968

## Data Sheet

LAN540ZH

MM8503ZHB



Ø	0,51	0,90	5,10
	(Cu)	(PE)	(LSZH)

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

Eca

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

EIA-TIA 568-B	ISO/IEC 11801 2° ed.	IEC 61156-5	EN 50173
EN 50288-3-1			

## Reaction to Fire

IEC 60332-1	EN50575
-------------	---------

## Construction data

4 pairs with conductor of bare copper wires	(Cu)	Ø 0,51	mm
Insulation of solid Polyethylene	(PE)	Ø 0,90	mm

## Composition

Twisted pairs, coloured by Standard TIA-568A

Outer sheath of Thermoplastic material - grey (RAL 7001) - (LSZH) Ø 5,10 mm  
 halogen-free, low smoke, flame retardant and UV-resistant

Printed each meter by blue ink-jet :

CAVEL LAN 540 ZH MADE IN ITALY CAT 5E U/UTP 4x2xAWG24 - Euroclass Eca ISO-IEC 11801 EN50173

CEI-UNEL 36762 C-4 (U0 = 400V) gggaan m

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

## Physical data

Weight of copper conductors	14,32	kg/km
Total weight of cable	31,58	kg/km
Minimum bending radius x1/n	20/40	mm
Maximum tensile strength during the installation	100	N
Installation temperature	0 / +50	°C
Operating temperature	-20 / +60	°C

## Electrical data

Characteristic impedance	100 MHz	100 ± 5	Ohm
Capacitance of Twisted Pair (@800Hz)		48	pF/m
Velocity Ratio		67 %	
DC Conductor Resistance		95	Ohm/km
Loop resistance		190	Ohm/km

## ITALIANA CONDUTTORI s.r.l.

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

## Date

30/05/2017

## Responsible

Alberto Scardovi

**Description**

Local Area Network Cable

Cat. 5e U/UTP 4x2xAWG24/1 LSZH

**Data Sheet****LAN540ZH**

MM8503ZHB

Loop resistance	190	Ohm/km
Insulation resistance	> 2000	mOhm/km
Sheath Insulation Voltage (DC, 1 min)	1	kV
Coupling Attenuation	> 45	dB

**ITALIANA CONDUTTORI s.r.l.**

Viale Zanotti 90 I - 27027 Gropello Cairoli

Tel +39-382.815150 Fax +39-0382.814212

Date

**30/05/2017**

Responsible

**Alberto Scardovi**

**Description**

PE/PP Side Pipe

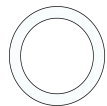
Coaxial Cables

**CAVEL**<sup>®</sup>

since 1968

**Data Sheet****PIPE1**

MM8503ZHB



∅

3,5 / 5,0 mm

PE+PP

Side Pipe in Polyethylene+Polypropylene blend

(PE+PP)

Inner ∅ 3,50 ± 0,20 mm

Outer ∅ 5,00 ± 0,20 mm

**Physical data**

Weight

9,15 kg

**ITALIANA CONDUTTORI s.r.l.**

Viale Zanotti 90 I - 27027 Gropello Cairoli

Tel +39-382.815150 Fax +39-0382.814212

Date

**29/02/2016**

Responsible

**Alberto Scardovi**