

**Description**

Halogen free, low smoke emission and UV resistant coaxial cable - 75 Ohm  
Security sheath of LSZH material (Screening Class A)



**Data Sheet**

**DG163ZH**



Ø	1,63	7,20	7,37	7,85	10,10
	(Cu)	(PEG)	(Al/Pet/Al/Sur)	(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 50117-2-3

**Reaction to Fire**

EN 50399

EN50575

**Application**

DOCSIS 3.1 (Data Over Coax System)

**Construction data**

Inner conductor of plain copper	(Cu)	Ø 1,63 ± 0,03	mm
Dielectric of physical foam polyethylene	(PEG)	Ø 7,20 ± 0,10	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)		78	%
Braid optical coverage (IEC 96-1) - External		75	%
Tracer Identifier	Year + Flag		
Diameter over Braid		Ø 7,85	mm
Outer sheath of Thermoplastic material - grey (RAL 7001) - halogen-free, low smoke, flame retardant and UV-resistant	(LSZH)	Ø 10,10 ± 0,15	mm

Printed each meter by blue ink-jet :

**CAVEL DG 163 ZH MADE IN ITALY 75 Ohm Euroclass Dca,s2,d2,a1 EN50117-2-3 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	39,54	kg/km
Total weight of cable	105,43	kg/km
Minimum bending radius (single/repeated bending)	100	mm
Maximum cable pulling strength	300	N
Minimum installation temperature	-5	°C
Operating temperature	-25 / +80	°C

**Electrical data**

Characteristic impedance	200 MHz	75 ± 2	Ohm
Capacitance (@1kHz)		52 ± 2	pF/m
Velocity Ratio		85 %	

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

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Tel +39-382.815150 Fax +39-0382.814212

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**Responsible**

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Inner conductor resistance		8,50	Ohm/km
Outer conductor resistance		7,50	Ohm/km
Loop resistance		16	Ohm/km
Sheat Insulation voltage (spark test)		5	kV
Maximum current (I <sub>eff</sub> )		16	A
Structural return loss (SRL)			
5 - 470 MHz	>30 dB		
470 - 1000 MHz	>28 dB		
1000 - 2000 MHz	>23 dB		
2000 - 3000 MHz	>20 dB		

Screening Attenuation (SA)	SA-Class A+	Transfer Impedance (Zt)	Zt-Class A
30 - 1000 MHz	>95 dB	5 - 30 MHz	< 4mOhm/m
1000 - 2000 MHz	>95 dB		
2000 - 3000 MHz	>85 dB		

## Attenuation (at 20°C )

Frequency [MHz]	Attenuation [dB/100m]	Frequency [MHz]	Attenuation [dB/100m]
5	1,10	862	12,30
10	1,50	1000	13,20
30	2,20	1750	17,90
50	2,80	2150	20,10
200	5,60	2400	21,60
300	6,90	3000	24,80
470	8,80		

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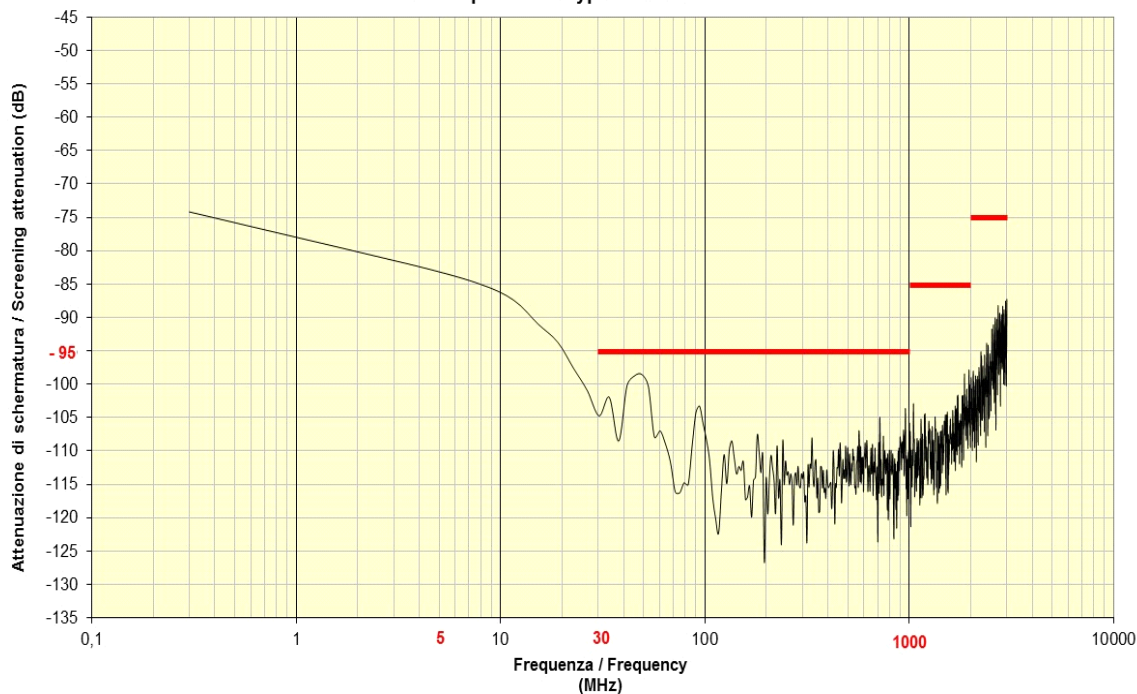
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Coaxial Cables

**CAVEL®**

since 1968

Data Sheet

**DG163ZH****Attenuazione di schermatura / Screening Attenuation****Cavo classe A+ / A+ Class Cable****Cavo tipo / Cable type: DG163ZH****Connectors**

- 3,5/12M-TL232** 3,5/12" connector, male, for UNDERGROUND (Hardline) installation -  
**5/8MU-TL232** 5/8" connector, male, for UNDERGROUND (Hardline) installation, nitin-plated brass - 69,0 mm x 20,5 mm  
**F163** Series F Crimp, F Crimp, for INDOOR installation, nitin-plated brass - 35,0 mm x 14,0 mm  
**FA17/73** Series F Twist-On, F Twist-On, for INDOOR installation, nitin-plated brass - 33,0 mm x 14,5 mm  
**FC11QM** Series F Compression, Quick Mount, for OUTDOOR installation  
**FM-TL232** Series F, male, for UNDERGROUND (Hardline) installation, nitin-plated brass - 76,0 mm x 31,0 mm  
**IEC14M-32** Series IEC (toolless), male, for UNDERGROUND (Hardline) installation, nitin-plated brass - 64,5 mm x 21,0 mm  
**NM-32** N Connector, male, for UNDERGROUND (Hardline) installation, nitin-plated brass - 62,5 mm x 21,0 mm  
**SR01-32** Adapter, for 11/50 - RG11, for UNDERGROUND (Hardline) installation

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