



Caledonian

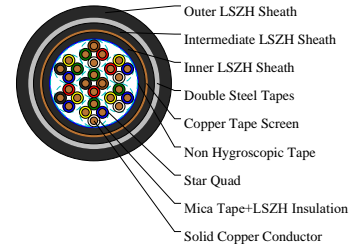
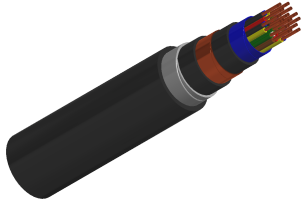
Railway Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

MD4 Fire Resisting Telecom Cables (CR1-C1 Class)

RS/MD4-HH(K)HBH-7Q0.8-FR



APPLICATIONS

The cables are telecommunication cables for tunnel application. The cables are halogen free fire resistant, inductive protected and armoured.

STANDARDS

Fire retardant: NBN C 30-004 F2

Fire resistant: NBN 713-020 Add.3. -RF 1h

VOLTAGE RATING

300/500V

CABLE CONSTRUCTION

Conductors: Solid copper conductor, 0.5mm sq nominal cross section area.

Insulation: Mica-tape + LSZH insulation.

Cabling Element: Four conductors are twisted to form a quad.

Stranding: Quads are helically stranded in concentric layers.

Core Wrapping: Plastic tape(s) with overlapping.

Inner Sheath: LSZH sheath.

Screen: Copper tape screen.

Intermediate Sheath: LSZH sheath.

Armour: Two layer of steel tape.

Outer Sheath: LSZH sheath.

PHYSICAL AND THERMAL PROPERTIES

Minimum Bending Radius: 10xOD

Temperature Range: -40°C to +60°C (during operation); -10°C +60°C (during installation)

Electrical Properties

Electrical Characteristics at 20°C:

Nominal Conductor Diameter: 0.8 mm

Maximum Conductor Resistance (DC): 36.7 Ω/km

Minimum Insulation Resistance: 100 MΩ.km



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Maximum Capacitance: 120 nF/km

Voltage Test 2 mins: 0.5 KVac

DIMENSION AND PARAMETERS

No. of Quad	Nominal Cross-sectional Area	Conductor Diameter	Insulation Thickness (min.)	Nominal Diameter over Insulation	Nominal Inner Sheath Thickness	Nominal Interm. Sheath Thickness	Nominal Outer Sheath Thickness	Nom. Overall Diameter	Approx. Weight
	mm ²	mm	mm	mm	mm	mm	mm	mm	kg/km
7	0.5	0.8	0.5	1.8	1	1	1.8	30.7	1074



Anti Induction



Buried in Ground



Fire Retardant
NF C32-070.2.2(C1)
IEC60332-3-24/EN50266-2.4



Flame Retardant
NF C32-070.2.1(C2)
IEC60332-1-2/EN50265-2.1



EN 50200/IEC 60331
/NF C32-070-2.3(CR1)
FE
Insulation Integrity FE180



Laid In Ducts



Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/NF C20-453



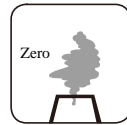
Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/NF C 20-902



Low Toxicity



Rated voltage



Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C20-454