

ZC03 SH - QUAD CABLES FOR RAILWAYS SIGNALLING WITH LSOH SHEATH



Signaling cable



Fire retardant



Low smoke emission



UV resistant



Chemicals resistant



EM interferences resistant



Zero halogen



ROHS compliant

STANDARDS

Construction : SNCF ST-445

Complementary : EN 50266-2-4 Cat C, EN 50267-2-2, EN 50268-2 and NF-C 20454

DESCRIPTION AND APPLICATION

Railway signalling cable of 8 pairs (4 quads). Copper conductor of 1 mm², insulated with solid coloured polyethylene. Stranded in quads. Shielded with a corrugated copper tape and armoured with two steel tapes helically applied. Brown flame retardant and UV resistant LSOH outer sheath colour black. This cable is protected against external inductions of the catenaries. It is used to connect the control centre to the track equipment. To be installed in conduit or buried along routes electrified at 25000 volts.

CONSTRUCTION

- **Conductors:** Annealed copper, section 1 mm².
- **Insulation:** Solid HDPE.
- **Cabling elements:** 4 star quads.
- **Core wrapping.** Longitudinal dielectric tape applied with overlap.
- **Waterproof inner sheath:** Flame retardant thermoplastic.
- **Screen:** Corrugated copper tape longitudinally applied with overlap.
- **Separation inner sheath:** Flame retardant thermoplastic.
- **Armour.** 2 steel tapes applied helically.
- **Sheath:** Flame retardant, UV, acid and bases resistant LSOH material coloured brown.
- **Sheath marking :** The outer sheath shall be marked, at regular intervals with the following information:
 - Name of Manufacturer / year / Length markings
 - Other type of markings is also possible according to the customer



ELECTRICAL CHARACTERISTICS (20°C)

	1mm ²
Maximum conductor Resistance (Ω/km)	18,1
Minimum insulation resistance (MΩxkm, 20°C, 500 V)	5000
Maximum mutual capacitance (nF/km, 1000 Hz)	40
Capacitance unbalance (pF/500m, 1000 Hz)	200
Dielectric strength (Vdc, 3 min)	
conductor – conductor	4500
Characteristic impedance (Ω)	
25-45 KHz	140±10
45-80 KHz	130±10

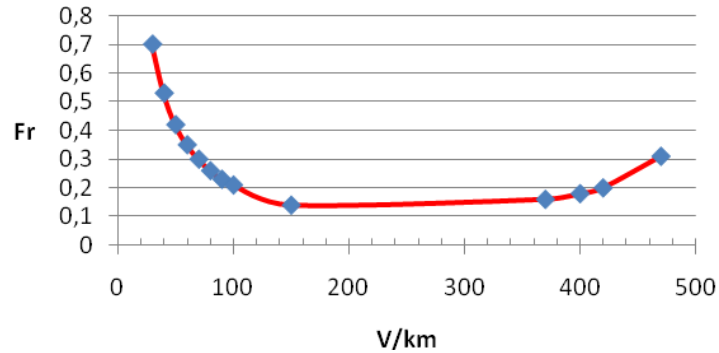
All drawings, designs, specifications and particulars of weights, dimensions, etc. in this documentation are only indicative and must not be considered contractual.

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REDUCTION FACTOR, R_k (50 Hz)

1mm²

The Fr shall not exceed the values shown in the graph below.



MECHANICAL CHARACTERISTICS

Temperature range: from -25° C to +75° C

Minimum bending radius: 15 x R_{cable}

SIZE, DIMENSIONS AND WEIGHTS

Section : 1 mm ²					
Code	No. cable Quad.	Weight approx. (mm)	Weight approx. (kg/km)	Length (m)	Drum
EA5N0MPA1000402N	4	27.7	1832	2000	B1

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