

## QUAD CABLES FOR SIGNALING, ZC03



Signaling cable



Flame retardant



UV resistant



Chemicals resistant



EM interferences resistant



Rodents resistant



ROHS compliant

### STANDARDS

Construction: SNCF ST-445

Complementary: EN 50265-2-1

### DESCRIPTION AND APPLICATION

Railway signaling cables from 8 pairs (4 quads). Copper conductor of 1 mm<sup>2</sup>, insulated with solid coloured polyethylene. Stranded in quads. Screened with a corrugated copper tape and armoured with two steel tapes applied helically. Outer sheath of PVC lead free. This cable is protected against catenary interferences, flame retardant and resistant to mineral oils. This cable is used to connect the Control Center to the railway control points. It can also be installed along routes electrified at 25 Kv ac.

### CONSTRUCTION

- **Conductors:** Annealed copper, diameter 1 mm<sup>2</sup>.
- **Insulation:** Solid high density polyethylene.
- **Lay-up:** Four star quads.
- **Core wrapping:** Overlapping longitudinal dielectric tape.
- **Waterproof inner sheath:** Low density polyethylene.
- **Screen:** Overlapping longitudinal copper tape.
- **Inner sheath:** Low density polyethylene.
- **Armour:** Two steel tapes applied helically.
- **Sheath:** Black unleaded and UV resistant PVC
- **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)	1 mm <sup>2</sup>
Maximum loop 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 (Vcc, 3 min)	
conductor – conductor	4500
Characteristic Impedance (Ω)	
25-45 KHz	140±10
45-80 KHz	130±10

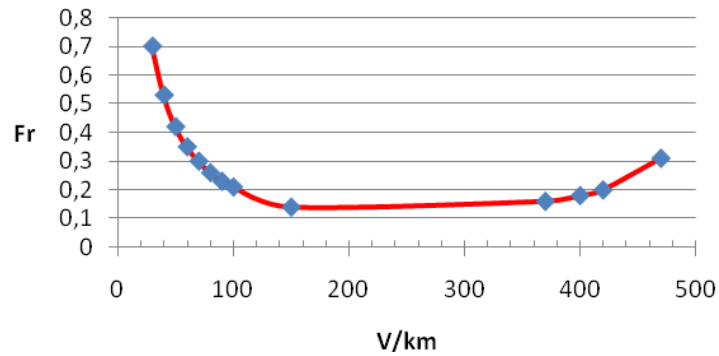
All drawings, designs, specifications and particulars of weights, dimensions, etc. in this documentation are only indicative and must not be considered contractual.

## QUAD CABLES FOR SIGNALING, ZC03

### REDUCTION FACTOR, $R_k$ (50 Hz)

1 mm<sup>2</sup>

The  $Fr$  will be no higher than the values in the next graphic.



### MECHANICAL CHARACTERISTICS

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

Minimum bending radius: 15 x  $R_{cable}$

### DIMENSIONS AND WEIGHTS

Section : 1 mm <sup>2</sup>					
Code	Nº Quad.	№ cable (mm)	Approx. Weight (kg/km)	Length (m)	Drum
EA5NOM1A1000402N	4	27.2	1471	2000	B1

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