### EA470L0-Ed1

# MULTICONDUCTOR RAILWAY SIGNALING CABLES, LSZH ARMOURED SHEATH WITH A Rf OF 0,1. ADIF SPECIFICATION



















### **STANDARDS**

Construction: ADIF ET 03.365.051.6 2<sup>nd</sup> edition

Other complementary standards: EN 50266-2-4 CAT. C, EN 50267-2-2, EN 50268-2 and NF-C 20454

### **DESCRIPTION AND APPLICATION**

Cables from 1 to 61 insulated conductors of 1.4 mm, PE insulation. Conductors are stranded in layers to form the core that is protected with a LSZH anti-inductive sheath with a reduction factor of 0,1 type CC-TI-2S-TI. They are used as signalling cables in railways infrastructures where protection against power lines induction is required. For installation in ducts or directly buried in tunnels where fire resistance is needed. Protected against rodents.

## **CONSTRUCTION**

- **Conductors**: Annealed copper, 1.4 mm of nominal diameter.
- *Insulation*: Solid polyethylene.
- Cabling elements: Insulated conductors.
- Lay-up: Stranded in layers. Colour code as per ADIF ET-03.365.051.6.
- Core wrapping: Dielectric tape longitudinally applied with overlap.
- Cable screen. Bare copper conductors helically applied.
- Inner sheath: LSZH material.
- Armour: Two 0.8 mm thick steel tapes helically applied.
- Outer sheath: UV resistant LSZH material coloured green RAL 6018.
- **Sheath marking**: The outer sheath shall be marked, at regular intervals, with the following information:
  - Name of manufacturer/ Year/ Length marks
  - o Other type of marks according to the costumer



| ELECTRICAL CHARACTERISTICS (20°C)                  | 1,4 mm                            |  |  |
|--|-----------------------------------|--|--|
| Conductor resistance (Ω/km)                        | Average: 11,2±0,5 / Maximum: 11,9 |  |  |
| Minimum insulation resistance (MΩxkm, 20°C, 500 V) | 35000                             |  |  |
| Dielectric strength (Vdc, 3 s)                     |                                   |  |  |
| conductor – conductor                              | 3000                              |  |  |
| conductor - shield                                 | 5000                              |  |  |

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 <sub>k</sub> (50 Hz) | 1,4 |
|--|-----|
| Induced Voltage (V/km)                   |     |
| 200                                      | 0.1 |
| 500                                      | 0.1 |

## **MECHANICAL CHARACTERISTICS**

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

Bending radius: 15 x R<sub>cable</sub>

### **DIMENSIONS AND WEIGHTS**

| Diameter : 1.40  | ) mm              |                |                  |        |      |
|------------------|-------------------|----------------|------------------|--------|------|
| Code             | No.<br>conductors | Cable<br>Diam. | Aprox<br>weight. | Length | Drum |
|                  |                   | (mm)           | (kg/km)          | (m)    | type |
|                  |                   |                |                  |        |      |
| EA470L0A4000402N | 4                 | 21             | 1098             | 1000   | A4   |
| EA470L0A4000702N | 7                 | 20.1           | 1086             | 1000   | A4   |
| EA470L0A4000902N | 9                 | 21.1           | 1171             | 1000   | A4   |
| EA470L0A4001202N | 12                | 22.4           | 1307             | 1000   | A4   |
| EA470L0A4001902N | 19                | 24.9           | 1572             | 1000   | A4   |
| EA470L0A4002702N | 27                | 27.2           | 1844             | 1000   | A6   |
| EA470L0A4003702N | 37                | 30             | 2182             | 1000   | A6   |
| EA470L0A4004802N | 48                | 32.5           | 2526             | 1000   | A6   |
| EA470L0A4006102N | 61                | 35             | 2895             | 1000   | A8   |

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