

MULTICONDUCTOR RAILWAY SIGNALING CABLES, ARMoured PE SHEATH WITH A Rf OF 0,1. ADIF SPECIFICATION



Signaling cable



Impact Resistant



UV Resistant



Rodent Resistant



EMI protected



ROHS Compliant

STANDARDS

Construction. ADIF ET-03.365.051.6

DESCRIPTION AND APPLICATION

Cables from 1 to 61 insulated conductors with 1.4 mm nominal diameter, PE insulation. Conductors are stranded in layers to form the core that is protected with an anti-inductive sheath with a reduction factor of 0,1 type CC-PE-2S-PE. They are used as signalling cables in railways infrastructures where protection against power lines induction is required. For installation in ducts or directly buried. 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 wires helically applied.
- **Inner sheath:** Polyethylene.
- **Armour:** Two 0.8 mm thick steel tapes helically applied.
- **Outer sheath:** UV resistant black polyethylene.
- **Sheath marking:** The outer sheath shall be marked at regular intervals, with the following information:
 - Name of manufacturer/ Year/ Length marks
 - Other type of marks according to the customer



ELECTRICAL CHARACTERISTICS (20°C)

| | 1,4 mm |
|--|-----------------------------------|
| Conductor resistance (Ω/km) | Average: 11,2±0,5 / Maximum: 11,9 |
| Minimum insulation resistance ($M\Omega \times km$, 20°C, 500 V) | 35000 |
| Dielectric strength (Vac, 3 s) | |
| conductor – conductor | 3000 |
| conductor - shield | 5000 |

REDUCTION FACTOR, R_k (50 Hz)

| | 1,4 |
|------------------------|-----|
| Induced Voltage (V/km) | |
| 200 | 0.1 |
| 500 | 0.1 |

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

EA470K0-Ed1

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MECHANICAL CHARACTERISTICS

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

Bending radius: 15 x R_{cable}

DIMENSIONS AND WEIGHTS

| Diameter : 1.40 mm | | | | | |
|--------------------|----------------|------------------|-----------------------|------------|-----------|
| Code | No. conductors | Cable Diam. (mm) | Aprox weight. (kg/km) | Length (m) | Drum type |
| EA470K0A4000402N | 4 | 20.5 | 994 | 1000 | A4 |
| EA470K0A4000702N | 7 | 20.1 | 999 | 1000 | A4 |
| EA470K0A4000902N | 9 | 21.1 | 1078 | 1000 | A4 |
| EA470K0A4001202N | 12 | 22.4 | 1207 | 1000 | A4 |
| EA470K0A4001902N | 19 | 24.9 | 1458 | 1000 | A4 |
| EA470K0A4002702N | 27 | 27.2 | 1716 | 1000 | A6 |
| EA470K0A4003702N | 37 | 30.0 | 2030 | 1000 | A6 |
| EA470K0A4004802N | 48 | 32.5 | 2355 | 1000 | A6 |
| EA470K0A4006102N | 61 | 35.0 | 2709 | 1000 | A8 |

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