

PETROLEUM FILLED MULTICONDUCTOR RAILWAY SIGNALING CABLES, ARMOURED PE SHEATH WITH A RF OF 0,1. ADIF SPECIFICATION



Signaling cable



Impact Resistant



Water blocked



UV Resistant



Rodent Resistant



EMI protected



ROHS Compliant

STANDARDS

Construction: ADIF ET-03.365.051.6 2nd edition

DESCRIPTION AND APPLICATION

Cables from 1 to 48 insulated conductors with 1.4 mm nominal diameter, PE insulation. Conductors are stranded in layers to form the core that is filled with petroleum filling compound and protected with an anti-inductive sheath with a reduction factor of 0,1 type PE-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.
- **Inner sheath:** Polyethylene.
- **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 costumer



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)	25000
Dielectric strength (Vac, 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.

EA480LR-Ed1

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REDUCTION FACTOR, R_k (50 Hz)	1,4
<i>Induced Voltage (V/km)</i>	
200	0.1
500	0.1

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
EA480LRA4000402N	4	20.7	1010	1000	A3
EA480LRA4000702N	7	22.6	1180	1000	A3
EA480LRA4000902N	9	23.6	1260	1000	A4
EA480LRA4001202N	12	24.9	1400	1000	A4
EA480LRA4001902N	19	27.4	1670	1000	A6
EA480LRA4002702N	27	30.1	1965	1000	A6
EA480LRA4003702N	37	32.9	2315	1000	A6
EA480LRA4004802N	48	35.2	2645	1000	A8

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