

PETROLEUM FILLED MULTICONDUCTOR RAILWAY SIGNALING CABLES, ARMOURED PE SHEATH WITH A RF OF 0,3. 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 4 to 61 polyethylene insulated conductors of 1.4 mm nominal diameter. The conductors are stranded in layers to form the core that is filled with petroleum filling compound and protected with an anti-inductive sheath with reduction factor of 0,3. They are used as signalling cables, especially 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, nominal diameter 1.4 mm.
- **Insulation:** Solid polyethylene.
- **Cabling elements:** Insulated conductors.
- **Lay-up:** Stranded in layers. Colour code as per ADIF ET-03.365.051.6.
- **Filling compound:** PE jelly.
- **Core wrapping.** Dielectric tape longitudinally applied with overlap.
- **Inner sheath:** Polyethylene.
- **Cable screen.** Corrugated copper tape longitudinally applied with overlap.
- **Inner sheath:** Polyethylene.
- **Armour:** Two 0.5 mm thick steel tapes helically applied.
- **Outer sheath:** UV resistant black polyethylene.
- **Sheath marking:** The outer sheath shall be marked in white ink, 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 ($M\Omega \times \text{km}$, 20°C, 500 V)	25000
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.

EA480M5-Ed1

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REDUCTION FACTOR, R_k (50 Hz)	1,4
<i>Induced Voltage (V/km)</i>	
110	0.3
320	0.3

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
EA480M5A4000402N	4	19.1	635	1000	A2
EA480M5A4000702N	7	19.7	730	1000	A2
EA480M5A4000902N	9	20.5	770	1000	A3
EA480M5A4001202N	12	21.8	860	1000	A3
EA480M5A4001902N	19	24.3	1080	1000	A4
EA480M5A4002702N	27	26.6	1300	1000	A4
EA480M5A4003702N	37	29.8	1625	1000	A6
EA480M5A4004802N	48	32.1	1900	1000	A6
EA480M5A4006102N	61	34.6	2220	1000	A8

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