

EA470HA-Ed1

## MULTICONDUCTOR RAILWAY SIGNALING CABLES, ARMoured PE SHEATH WITH A Rf OF 0,3. 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 4 to 61 polyethylene insulated conductors of 1.4 mm nominal diameter. The conductors are stranded in layers to form the core which is then protected with an anti-inductive sheath with reduction factor of 0,3 type FC-PE-2S-PE. 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.
- **Core wrapping.** Dielectric tape longitudinally applied with overlap.
- **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 customer



### ELECTRICAL CHARACTERISTICS (20°C)

	1,4 mm
Conductor resistance ( $\Omega/\text{km}$ )	Average: 11,2 $\pm$ 0,5 / Maximum: 11,9
Minimum insulation resistance ( $M\Omega \times \text{km}$ , 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.

Page 1/2

EA470HA-Ed1

## MULTICONDUCTOR RAILWAY SIGNALING CABLES, ARMoured PE SHEATH WITH A Rf OF 0,3. ADIF SPECIFICATION

REDUCTION FACTOR, $R_k$ (50 Hz)	1,4
Induced Voltage (V/km)	
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
EA470HAA4000402N	4	18.6	604	1000	A2
EA470HAA4000702N	7	19.0	661	1000	A2
EA470HAA4000902N	9	20.0	733	1000	A4
EA470HAA4001202N	12	21.3	835	1000	A4
EA470HAA4001902N	19	23.8	1027	1000	A4
EA470HAA4002702N	27	26.1	1246	1000	A4
EA470HAA4003702N	37	28.9	1522	1000	A6
EA470HAA4004802N	48	31.4	1785	1000	A6
EA470HAA4006102N	61	33.9	2096	1000	A8

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

Page 2/2