



Caledonian

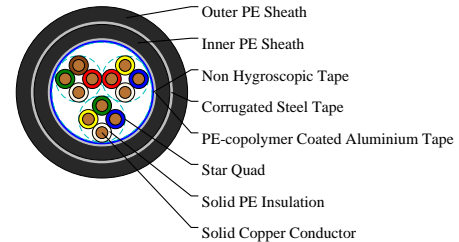
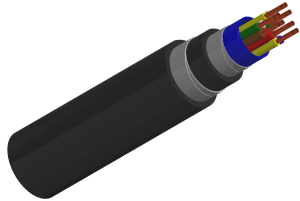
Railway Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

EAPSP-R n x 4 x 1.3

RS/EAPSP-R-2Y(F)(L)2YB2Y-3Q1.3



APPLICATIONS

The cables are used as railway cables and can be installed directly into the ground or in ducts.

STANDARDS

RENFE E.T. 03.365.051.6

VOLTAGE RATING

300/500V

CABLE CONSTRUCTION

Conductors: Soft annealed solid copper.

Insulation: PE Insulation.

Cabling Element: Four insulated conductors are twisted together to form a quad.

Stranding: Star quads are helically stranded in concentric layers.

Filled: The cable core interstices are filled with petroleum jelly to avoid longitudinal water penetration within the cable. The water resistant filling compound is applied to the air space between non-hygroscopic tape and shield, shield and sheath within the cable core.

Core Wrapping: Plastic tape(s) with overlapping.

Moisture Barrier: One laminated sheath made of aluminium tape (0.2mm thick) coated with copolymer on at least one side is applied with longitudinally overlap.

Inner Sheath: PE sheath.

Armour: One corrugated steel tape is longitudinally applied with overlap.

Outer Sheath: PE sheath.

PHYSICAL AND THERMAL PROPERTIES

Minimum Bending Radius: 10xOD

Temperature Range: -30°C to +70°C (during operation); -10°C to +50°C (during installation)

Electrical Properties

Electrical Characteristics at 20°C:

Nominal Conductor Diameter: 1.3 mm

Maximum Conductor Resistance: 13.7 Ω/km



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Minimum Insulation Resistance @500 V DC:25000MΩ.km

Resistance Unbalance:1%

Mutual Capacitance @800Hz:45 nF/km

Capacitance Unbalance @800Hz:

K1 mean value/individual value: 35/250 pF/460m

K9-12 mean value/individual value: 35/250 pF/460m

ea1/2 mean value/individual value : 320/1200 pF/460m

Attenuation @1KHz:0.5 dB/km

Test Voltage @50Hz 1min

Core to core:2100 Veff

Core to screen:2500 Veff

Core to armouring:2000 Veff

DIMENSION AND PARAMETERS

| No. of Quad | Conductor Diameter | Nominal Diameter over Insulation | Nominal Inner Sheath Thickness | Nominal Outer Sheath Thickness | Nom. Overall Diameter | Approx. Weight |
|-------------|--------------------|----------------------------------|--------------------------------|--------------------------------|-----------------------|----------------|
| | mm | mm | mm | mm | mm | kg/km |
| 3 | 1.3 | 2.5 | 1.3 | 1.4 | 23 | 570 |



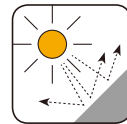
Buried in Ground



Laid In Ducts



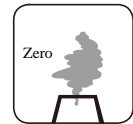
Rated voltage



UV Resistant



Water Resistant



Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C20-454