



# Caledonian

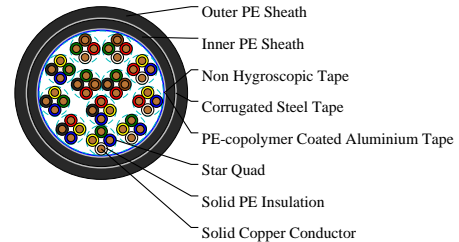
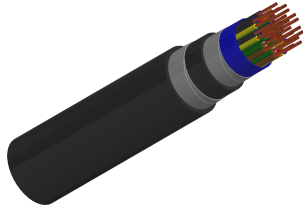
## Railway Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

EAPSP-R n x 4 x 1.3

RS/EAPSP-R-2Y(F)(L)2YB2Y-12Q1.3



## 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
12	1.3	2.5	1.5	1.8	38	1580



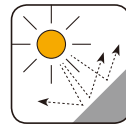
Buried in Ground



Laid In Ducts



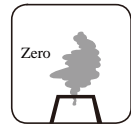
Rated voltage



UV Resistant



Water Resistant



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