



Caledonian

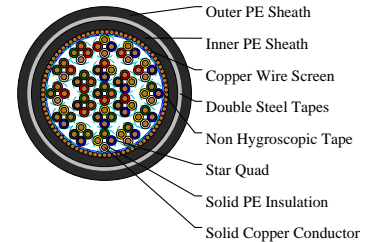
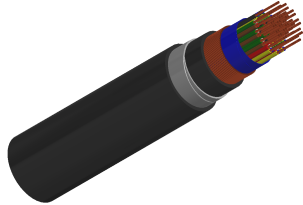
Railway Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

CCPSSP-FR0.1 nx4x0.9

RS/CCPSSP-FR0.1-2YD2YB2Y-19Q0.9



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: Quads are helically stranded in concentric layers.

Core Wrapping: Two or more layers of plastic tape(s) with overlapping.

Screen: 0.9mm copper wires wrapping with one plastic tape (protection against interference).

Inner Sheath: PE sheath.

Armour: Two layers steel tape (0.8mm thick).

Outer Sheath: PE sheath.

PHYSICAL AND THERMAL PROPERTIES

Minimum Bending Radius: 10xOD

Temperature Range: -40°C to +60°C (during operation); -10°C to +60°C (during installation)

Electrical Properties

Electrical Characteristics at 20°C:

Nominal Conductor Diameter: 0.9 mm

Maximum Conductor Resistance: 28.5 Ω/km

Minimum Insulation Resistance @500 V DC: 35000 MΩ.km

Mutual Capacitance @800Hz: 41 nF/km

Capacitance Unbalance@800Hz:

K1 maximum individual value: 250 pF/460m



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K9-12 maximum individual value:250 pF/460m

ea1/2 maximum individual value:1200 pF/460m

Attenuation:

@1KHz:0.7 dB/km

@10KHz:1.6 dB/km

@30KHz:2.1 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 |
| 19 | 0.9 | 1.8 | 1.7 | 1.8 | 38.6 | 2760 |



Anti Induction



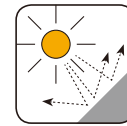
Buried in Ground



Laid In Ducts



Rated voltage



UV Resistant



Water Resistant



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