## CCPSSP-R-FR0.1

# Applications

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

### Standards

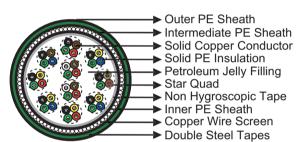
RENFE E.T. 03.365.051.6

#### Construction

- Conductors: Soft annealed solid copper, 0.9 mm nominal diameter.
  - Insulation: PE insulation.
- Cabling Element: Four insulated conductors are twisted together to form a quad.
  - Stranding: Quads are helically stranded in concentric layers.
  - Filling: Petroleum jelly filling.
  - Core Wrapping: At least one layer of water swellable material with overlapping.
  - Inner Sheath: PE sheath.
  - Screen: 1.4/1.8mm copper wires wrapping with one plastic tape (protection against interference).
  - Intermediate Sheath: PE sheath.
  - Armour: Two layers of steel tape (0.8mm thick).
  - Outer Sheath: PE sheath.

## **■** Electrical Characteristics at 20°C

Nominal Conductor Diameter	mm	0.9
Maximum Conductor Resistance	Ω/km	28.5
Minimum Insulation Resistance @500 V DC	MΩ.km	25000
Mutual Capacitance @800Hz	nF/km	41
Capacitance Unbalance @800Hz		
K₁ maximum individual value	pF/460m	250
K <sub>9-12</sub> maximum individual value	pF/460m	250
ea <sub>1/2</sub> maximum individual value	pF/460m	1200
Attenuation		
@1KHz	dB/km	0.7
@10KHz	dB/km	1.6
@30KHz	dB/km	2.1
Test Voltage @50Hz 1min		
Core to Core	$V_{\rm eff}$	2100
Core to Screen	$V_{\rm eff}$	2500
Core to Armouring	$V_{\rm eff}$	2000
Reduction Factor @100V/km 50Hz		0.1





# **№** Mechanical and Thermal Properties

- Minimum Bending Radius: 10×OD
- Temperature Range: -30°C to +70°C (during operation); -5°C to +50°C (during installation)

# ■ Dimensions and Weight

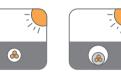
Cable Code	Number of Quads	Nominal Sheath Thickness mm			Maximum Overall Diameter	Nominal Weight
		Inner	Inter.	Outer	mm	kg/km
0.9mm Conductor, 1.8mm Insulated Wire						
RS/CCPSSP-R-FR0.1-2Y(F)2YD2YB2Y-1Q0.9	1	1.5	1.5	1.6	23.7	1300
RS/CCPSSP-R-FR0.1-2Y(F)2YD2YB2Y-3Q0.9	3	1.5	1.5	1.6	27.7	1648
RS/CCPSSP-R-FR0.1-2Y(F)2YD2YB2Y-5Q0.9	5	1.5	1.5	1.6	31.5	1984
RS/CCPSSP-R-FR0.1-2Y(F)2YD2YB2Y-25Q0.9	25	1.7	1.7	1.8	51.3	4166















Water Resistant

Rated Voltage Buried in Ciround

Laid In Ducts IEC 60754-1/NF C20-454 EN 50267-2-1

