

## SPFB Speed Control System Cables

### Applications

The cables are used for the train speed control system (French system KVB). The cables are laid along railway lines and connect the speed sensors (located between the rails) to the encoder located inside the trackside equipment shelter.

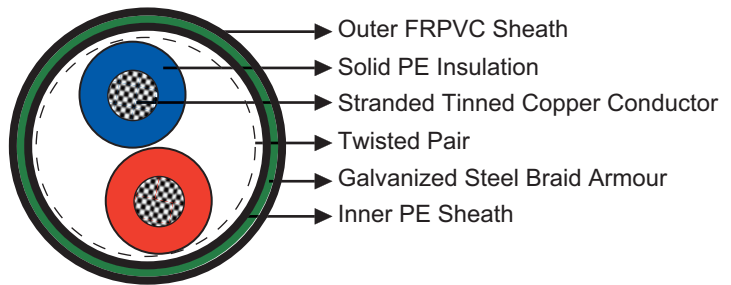


### Standards

- SNCF CT 446

### Construction

- Conductors: Class 2 stranded tinned copper.
- Insulation: Solid polyethylene.
- Cabling Element: Twisted pair.
- Inner Sheath: Low density polyethylene.
- Armour: Galvanized steel braid armour.
- Outer Sheath: Flame Retardant PVC.



### Electrical Characteristics at 20°C

Nominal Conductor Diameter	mm	0.8
Nominal Cross Section Area	mm <sup>2</sup>	0.5
Maximum Conductor Resistance (DC)	Ω/km	36
Characteristic Impedance @100KHz	Ω	120
Maximum Attenuation @50KHz	dB/km	5
Nominal Insulation Thickness	mm	0.55
Operating Voltage	V	500

### Mechanical and Thermal Properties

- Minimum Bending Radius: 8×OD (static); 16×OD (dynamic)
- Temperature Range: -30°C to +70°C (during operation); -20°C to +50°C (during installation)

### Dimensions and Weight

Cable Code	No. of cores & Nominal Conductor Cross Sectional Area No. x mm <sup>2</sup>	No. & Nominal Diameter of Strands No./mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
			Inner	Outer		
RS/SPFB-2Y2Y(SWB)2Y-2C0.5S	2 x 0.5	7/0.32	1.0	1.5	9.1	97



Flexible



Ozone Resistant



Fuel Oil Resistant



Mineral Oil Resistant



Laid In Ducts/  
Channel



Flame Retardant  
NF C32-070-2.1(C2)  
IEC 60332-1/EN 50265-2-1