



### CONTACT

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## Railway power wires and cables according to CT 451

### STANDARDS

Product IEC 60228

### APPLICATION

Single-core and multi-core cables for railway applications intended for connecting equipment on and near the tracks. Lynxéo's cables are designed to allow ease of stripping, facilitating the installation process particularly the intergation with connectors and measurement systems.

An example of an application is the connection of CAUTOR, FORFEX, VCC (clamp lock) or PAULVÉ electromechanical detectors, which detect the passage of a train on the track and even its direction. They can also control any function linked to this passage, such as level crossings, signal control and station point control.

Lynxéo SCN-S and SCNV-S cables are adapted to fit with reinforced copper die-cast lugs designed for railways applications according to SNCF specifications.

### DESIGN

#### 1. Conductor

Flexible tinned copper Class 5 according to IEC 60228  
Separator (optional)

#### 2. Insulation

Cross-linked elastomer

Color coding

- 1 core: white
- 4 cores: black, blue, yellow, red
- 6 or 8 cores: numbers on black cores

Separator (optional)

#### 3. Outer sheath

Cross-linked elastomer  
Color: black

Example of marking:

SCN-S - x mm<sup>2</sup> - CT 451 LYNXEO 269 YY-MM      xxx m  
or SCNV-S - x mm<sup>2</sup> - CT 451 LYNXEO 269 YY-MM      xxx m



Conductor flexibility  
Flexible class 5



Rated Voltage U<sub>o</sub>/U  
(Um)  
450/750 V



Flame retardant  
C2, NF C 32-070 &  
IEC 60332-1



Oil resistance  
Good



U.V resistance  
Good



Max. conductor temp. in  
service  
70 °C



Operating temp.  
-30 ... 65 °C

**CHARACTERISTICS****Construction characteristics**

Conductor flexibility	Flexible class 5
Conductor material	Tin plated copper
Insulation	Cross-linked compound
Number of conductors	1
Outer sheath	Cross-linked compound

**Dimensional characteristics**

Approximate weight	- kg/km
Conductor cross-section	2.5 mm <sup>2</sup>
Maximum outer diameter	7.2 mm
Minimum outer diameter	6.4 mm
Nominal conductor diameter	2.2 mm
Nominal outer diameter	5.0 mm

**Electrical characteristics**

Rated Voltage U <sub>o</sub> /U (U <sub>m</sub> )	450/750 V
Maximum DC resistance at 20°C	8.21 Ohm/100m

**Usage characteristics**

Flame retardant	C2, NF C 32-070 & IEC 60332-1
Oil resistance	Good
U.V resistance	Good
Max. conductor temperature in service	70 °C
Operating temperature, range	-30 ... 65 °C