



**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  | 8                     |
| Outer sheath          | Cross-linked compound |

**Dimensional characteristics**

|                            |                   |
|----------------------------|-------------------|
| Approximate weight         | - kg/km           |
| Conductor cross-section    | 1 mm <sup>2</sup> |
| Maximum outer diameter     | 18.0 mm           |
| Minimum outer diameter     | 17.0 mm           |
| Nominal conductor diameter | 1.3 mm            |
| Nominal outer diameter     | 7.0 mm            |

**Electrical characteristics**

|   |             |
|---|-------------|
| Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> ) | 450/750 V   |
| Maximum DC resistance at 20°C                     | 20 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                 |