

# FLAMEX® EN 50382-2 FFXS

FLAMEX SI EN 50382-2 Type FFXS 1.8/3 kV 1x70 120°C

Sheathed high temperature flexible shielded Power cables

## DESCRIPTION

### Application

These cables are designed and dedicated to be used on rolling stock equipment where high temperature is required to save cable weight.

Thanks to its high flexibility, these cables are frequently installed on locomotive equipment with low bending radius.

### Construction

- **Conductor**  
Extra flexible class 6 copper according to IEC 60228  
\* tinned copper for 120°C Class  
\* plain copper for 150°C Class
- **Insulation**  
Cross-linked silicone type EI 111 according to EN 50382-1
- **Separator**  
Unweaved tape
- **Screen**  
Tinned copper wire braid
- **Separator**  
Unweaved tape
- **Outer sheath**  
Cross-linked silicone type EM 107 according to EN 50382-1  
Colour: black outer layer

### Marking

FLAMEX SI - EN 50382-2 - Voltage rate (1800V or 3600V) - cross-section mm<sup>2</sup> - FFXS - temperature class (120°C or 150°C) - NEXANS 279 - week/year

### Guide to use

Cabling rules are given according to EN 50343



## STANDARDS

International EN 45545-2 (HL3)



Halogen free  
EN 50267



Rated Voltage U<sub>o</sub>/U  
(Um)  
1.8 / 3 kV



Chemical  
resistance  
Good



Flame retardant  
EN 60332-1-2



Fire retardant  
EN 50266-2



Smoke density  
EN/IEC 61034-2



Gases corrosivity  
IEC 60754



Gases toxicity  
EN 50305-9.2

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.

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- Minimum bending radius (static) : 4 x outer cable diameter
- Minimum bending radius (dynamic) : 6 x outer cable diameter
- Pulling tensible force (dynamic) during installation : 50 N/mm<sup>2</sup> of copper size
- Mechanical (static) tensible force : 15N/mm<sup>2</sup> of copper size
- Permissible current carrying capacities : value and calculation method are given in EN 50355

## Standards

Construction according to EN 50382-2

## CHARACTERISTICS

### Construction characteristics

Insulation	High temperature silicone
Halogen free	EN 50267

### Dimensional characteristics

Conductor cross-section	70 mm <sup>2</sup>
Conductor diameter	11.4 mm
Braid section	8.5 mm <sup>2</sup>
Nominal outer diameter	19.3 mm
Minimum outer diameter	18.3 mm
Maximum outer diameter	20.6 mm
Approximate weight	865 kg/km

### Electrical characteristics

Rated Voltage U <sub>o</sub> /U (U <sub>m</sub> )	1.8 / 3 kV
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### Usage characteristics

Chemical resistance	Good
Flame retardant	EN 60332-1-2
Fire retardant	EN 50266-2
Smoke density	EN/IEC 61034-2
Gases corrosivity	IEC 60754
Gases toxicity	EN 50305-9.2
Operating temperature, range	-50 - 120 °C
Max. conductor temperature in service	120 °C



Halogen free  
EN 50267



Rated Voltage U<sub>o</sub>/U  
(U<sub>m</sub>)  
1.8 / 3 kV



Chemical  
resistance  
Good



Flame retardant  
EN 60332-1-2



Fire retardant  
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Smoke density  
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