

# FLAMEX® EN 50382-2 FFS

FLAMEX SI EN 50382-2 1800V 120 FFS 120°C

Nexans Ref.: 10282209

EAN 13: 3427580829420

Sheathed high temperature flexible shielded Power cables

## DESCRIPTION

### Application

FLAMEX SI EN 50382-2 type FFS screened power cables are used for fixed installations where enhanced mechanical protection and electrical screening (EMC) is required. The insulation and sheath are designed with state-of-the-art silicone materials to withstand high operating temperature and save weight on board of rolling stock equipment. FLAMEX cables are recommended for installations and connections in narrow spaces where an optimal bending radius is required. They provide optimum safety for people and maximal asset protection against all risks of fire.

### Construction

- **Conductor**  
Flexible class 5 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> - FFS  
- temperature class (120°C or 150°C) - NEXANS 279 - week/year

### Guide to use



Halogen free  
EN 50267



Rated Voltage Uo/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



### STANDARDS

International EN 45545-2 (HL3)

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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# FLAMEX® EN 50382-2 FFS

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Cabling rules are given according to EN 50343

- 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	120 mm <sup>2</sup>
Conductor diameter	14.4 mm
Nominal outer diameter	- mm
Minimum outer diameter	24.9 mm
Maximum outer diameter	27.3 mm
Approximate weight	1490 kg/km

### Electrical characteristics

Rated Voltage U <sub>o</sub> /U (Um)	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  
(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

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