



Reference: 10263130
EAN 13: 3427580739309

CONTACT

Markets and Products Information
rollingstock.business@lynxeogroup.com

HIGH TEMPERATURE EXTRA-FLEXIBLE POWER CABLES

FLAMEX® EN 50382-2 FX power cables are designed with extra flexible conductors for easier installation. Able to withstand higher operating temperatures, these silicone-based cables allow to save cable weight.

STANDARDS

Product EN 45545-2 (HL3); EN 50382-2; IEC 60228

DESIGN

1. Conductor

Extra flexible class 6 copper according to IEC 60228

- tinned copper for 120°C Class
- plain copper for 150°C Class

Separator: Unweaved tape

2. Insulation

Cross-linked silicone type EI 111 according to EN 50382-1

Colour: black outer layer

Example of marking: FLAMEX SI - EN 50382-2 - Voltage rate (1800V or 3600V)
- cross-section mm² - FX - temperature class (150°C) - LYNXEO 279 - week/year

GUIDE TO USE

- Cabling rules are given in EN 50343 and EN 50355
- Permissible current carrying capacities: values and calculation method are given in EN 50343
- Bending radius:
 - Static use: 4 x outer cable diameter
 - For installation and occasional movements: 6 x outer cable diameter
- Pulling tensile force (dynamic) during installation: 50 N/mm² of copper size
- Mechanical static tensile force: 15N/mm² of copper size



Conductor flexibility
Extra-flexible
class 6



Halogen free
EN 60754-1 & EN
60684-2



Rated Voltage Uo/U
(Um)
3.6 / 6 (7.2) kV



Flame retardant
EN 60332-1-2



Fire retardant
EN IEC 60332-3-24
(cat C); EN IEC
60332-3-25
(EN50305)



Smoke density
EN/IEC 61034-2



Gases toxicity
EN 50305-9.2



Operating temp.
-50 ... 120 °C

CHARACTERISTICS

Construction characteristics

| | |
|-----------------------|---------------------------|
| Conductor material | Plain copper |
| Conductor flexibility | Extra-flexible class 6 |
| Insulation | High temperature silicone |
| Halogen free | EN 60754-1 & EN 60684-2 |

Dimensional characteristics

| | |
|-------------------------|---------------------|
| Conductor cross-section | 120 mm ² |
| Conductor diameter | 14.2 mm |
| Nominal outer diameter | 21.0 mm |
| Minimum outer diameter | 19.3 mm |
| Maximum outer diameter | 22.6 mm |
| Approximate weight | 1247 kg/km |

Electrical characteristics

| | |
|---|------------------|
| Rated Voltage U _o /U (U _m) | 3.6 / 6 (7.2) kV |
|---|------------------|

Usage characteristics

| | |
|---------------------------------------|--|
| Flame retardant | EN 60332-1-2 |
| Fire retardant | EN IEC 60332-3-24 (cat C); EN IEC 60332-3-25 (EN50305) |
| Smoke density | EN/IEC 61034-2 |
| Gases toxicity | EN 50305-9.2 |
| Operating temperature, range | -50 ... 120 °C |
| Max. conductor temperature in service | 150 °C |
| Overload maximum core temperature | 170 °C |
| Chemical resistance | Good |