



CONTACT

Markets and Products Information
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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 tensible force (dynamic) during installation: 50 N/mm² of copper size
- Mechanical static tensible force: 15N/mm² of copper size

CHARACTERISTICS

Construction characteristics

Conductor material

Plain copper

Conductor flexibility

Extra-flexible class 6



Conductor flexibility
 Extra-flexible
 class 6



Halogen free
 EN 60754-1 & EN
 60684-2



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



Max. conductor
 temp. in service
 150 °C

Construction characteristics

| | |
|--------------|---------------------------|
| Insulation | High temperature silicone |
| Halogen free | EN 60754-1 & EN 60684-2 |

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 |



Conductor flexibility
Extra-flexible
class 6



Halogen free
EN 60754-1 & EN
60684-2



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



Max. conductor
temp. in service
150 °C

FLAMEX® SI EN 50382-2 FX 1800V 150°C

| Reference | Cross section [mm ²] | Conductor diam. [mm] | Nom. outer diam. [mm] | Min. outer diam. [mm] | Max. outer diam. [mm] | Approx. weight [kg/km] |
|-----------|----------------------------------|----------------------|-----------------------|-----------------------|-----------------------|------------------------|
| 10263100 | 50 | 9.2 | 14.4 | 13.5 | 15.8 | 545 |
| 10263101 | 70 | 11.0 | 16.4 | 15.0 | 17.8 | 747 |
| 10263102 | 95 | 12.5 | 18.3 | 17.0 | 19.9 | 973 |
| 10227163 | 120 | 14.2 | 20.0 | 18.6 | 21.7 | 1212 |
| 10263103 | 150 | 15.8 | 22.5 | 20.1 | 23.5 | 1463 |
| 10263125 | 185 | 18.2 | 23.8 | 22.1 | 25.4 | 1787 |
| 10227162 | 240 | 20.1 | 26.7 | 24.1 | 28.2 | 2270 |

FLAMEX® SI EN 50382-2 FX 3600V 150°C

| Reference | Cross section [mm ²] | Conductor diam. [mm] | Nom. outer diam. [mm] | Min. outer diam. [mm] | Max. outer diam. [mm] | Approx. weight [kg/km] |
|-----------|----------------------------------|----------------------|-----------------------|-----------------------|-----------------------|------------------------|
| 10263127 | 50 | 9.2 | 15.7 | 14.4 | 16.9 | 578 |
| 10263128 | 70 | 11.0 | 17.3 | 16.1 | 18.9 | 784 |
| 10263129 | 95 | 12.5 | 18.7 | 17.5 | 20.5 | 998 |
| 10263130 | 120 | 14.2 | 21.0 | 19.3 | 22.6 | 1247 |
| 10263131 | 150 | 15.8 | 22.3 | 20.8 | 24.4 | 1502 |
| 10227377 | 185 | 17.5 | 24.6 | 22.6 | 26.5 | 1839 |
| 10263132 | 240 | 20.1 | 28.3 | 25.4 | 29.8 | 2353 |