



FIRE RESISTANT HIGH TEMPERATURE EXTRA-FLEXIBLE POWER CABLES

FLAMEX® FR TYPE EN 50382-2 power cables maintain circuit integrity in case of fire (according to IEC 60331-4 for 90 minutes) and are fire retardant, low smoke and halogen-free satisfying performance requirements from EN 45545-2. Able to withstand higher operating temperatures, these silicone-based cables allow to save 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

2. Insulation

Fire barrier

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

Colour: black outer layer

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

CONTACT

Markets and Products Information
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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



Flessibilità del conduttore
Extra-flessibile classe 6



Senza alogeno
EN 60754-1 & EN 60684-2



Tensione nominale U_o/U (U_m)
3.6 / 6 (7.2) kV



Resistenza al fuoco
prIEC 60331-4



Ritardante la fiamma
EN 60332-1-2



Fuoco ritardante
EN IEC 60332-3-24 (cat C); EN IEC 60332-3-25 (EN50305)



Densità fumo
EN/IEC 61034-2



Tossicità gas
EN 50305-9.2

CHARACTERISTICS**Caratteristiche costruttive**

| | |
|-----------------------------|------------------------------|
| Materiale del conduttore | Rame nudo |
| Flessibilità del conduttore | Extra-flessibile classe 6 |
| Isolamento | Silicone ad alta temperatura |
| Senza alogeno | EN 60754-1 & EN 60684-2 |

Caratteristiche dimensionali

| | |
|--|---------------------|
| Sezione del conduttore del cavo | 120 mm ² |
| Number of wires per conductor | - |
| Wire size | - mm |
| Diametro nominale del conduttore del cavo | 14,4 mm |
| Diametro esterno nominale del cavo | 21,8 mm |
| Diametro esterno min | 19,7 mm |
| Diametro esterno max | 22,6 mm |
| Peso approssimativo del cavo | 1224 kg/km |
| Spessore medio minimo della guaina esterna | - mm |

Caratteristiche elettriche

| | |
|--|------------------|
| Tensione nominale U ₀ /U (Um) | 3.6 / 6 (7.2) kV |
|--|------------------|

Caratteristiche d'utilizzo

| | |
|--|--|
| Resistenza al fuoco | prIEC 60331-4 |
| Ritardante la fiamma | EN 60332-1-2 |
| Fuoco ritardante | EN IEC 60332-3-24 (cat C); EN IEC 60332-3-25 (EN50305) |
| Densita' fumo | EN/IEC 61034-2 |
| Tossicità gas | EN 50305-9.2 |
| Temperatura Operativa | -50 ... 150 °C |
| Temperatura massima di servizio del conduttore | 170 °C |
| Resistenza chimica | Buona |