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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 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 U_o/U_i
(Um)
1.8 / 3 (3.6) 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	20.0 mm
Minimum outer diameter	18.6 mm
Maximum outer diameter	21.7 mm
Approximate weight	1212 kg/km

Electrical characteristics

Rated Voltage U _o /U (U _m)	1.8 / 3 (3.6) kV
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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