



Reference: 13117417

CONTACT

Markets and Products Information
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SHIELDED HIGH TEMPERATURE EXTRA-FLEXIBLE POWER CABLES

FLAMEX® EN 50382-2 FFXS shielded power cables are designed with extra flexible conductors as per jumper cables. They are used for installations where enhanced electrical screening (EMC) is required. 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

2. Insulation

Cross-linked silicone type EI 111 according to EN 50382-1
 Separator: Unweaved tape

3. Screen

Tinned copper wire braid
 Separator: Unweaved tape

4. Outer sheath

Cross-linked silicone type EM 107 according to EN 50382-1
 Colour: black outer layer

Examples of marking:

FLAMEX SI - EN 50382-2 - Voltage rate (1800V or 3600V) - cross-section mm² - FFXS - temperature class (120°C or 150°C) - Manufacturing n° - NEXANS 279 - week/year
 DTREN 150068 - EN 50382-2 - 1800V - cross-section mm² - FFXS - temperature class (120°C) - Manufacturing n° - NEXANS 279 - week/year



Conductor flexibility
 Extra-flexible
 class 6



Halogen free
 EN 60754-1 & EN
 60684-2



Rated Voltage U_o/U_m
 (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 | Tin plated copper |
| Conductor flexibility | Extra-flexible class 6 |
| Insulation | High temperature silicone |
| Screen | Tinned copper braid |
| Outer sheath | High temperature silicone |
| Halogen free | EN 60754-1 & EN 60684-2 |

Dimensional characteristics

| | |
|-------------------------|---------------------|
| Conductor cross-section | 70 mm ² |
| Conductor diameter | 11.5 mm |
| Braid section | 8.5 mm ² |
| Nominal outer diameter | 19.3 mm |
| Minimum outer diameter | 18.5 mm |
| Maximum outer diameter | 20.7 mm |
| Approximate weight | 918 kg/km |

Electrical characteristics

| | |
|---|------------------|
| Rated Voltage U _o /U (U _m) | 1.8 / 3 (3.6) 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 |
| Electro magnetic interference resistance | Yes |
| Max. conductor temperature in service | 120 °C |
| Overload maximum core temperature | 140 °C |
| Chemical resistance | Good |