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### CONTACT

Markets and Products Information  
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## REINFORCED HIGH TEMPERATURE EXTRA-FLEXIBLE POWER CABLES

FLAMEX® EN 50382-2 3600V FXZ power cables are designed with extra flexible conductors and reinforced with textile braid to be used as a jumper cable between vehicles. 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 with an embedded polyester reinforcement

Colour: black outer layer

Examples of marking:

FLAMEX SI - EN 50382-2 - 3600 V - cross-section mm<sup>2</sup> - FXZ - class temperature (120° C) - LYNXEO 279 - week/year

FLAMEX SI - DTREN 150028 - EN 50382-2 - 3600 V - cross-section mm<sup>2</sup> - FXZ - class temperature (120°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/mm<sup>2</sup> of copper size
- Mechanical static tensible force: 15N/mm<sup>2</sup> of copper size



Conductor flexibility  
 Extra-flexible  
 class 6



Halogen free  
 EN 60754-1 & EN  
 60684-2



Rated Voltage U<sub>0</sub>/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	Tin plated 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 <sup>2</sup>
Conductor diameter	14.2 mm
Nominal outer diameter	20.8 mm
Minimum outer diameter	20.5 mm
Maximum outer diameter	24.3 mm
Approximate weight	1480 kg/km

**Electrical characteristics**

Rated Voltage U <sub>o</sub> /U (U <sub>m</sub> )	3.6 / 6 (7.2) 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	120 °C
Overload maximum core temperature	140 °C
Chemical resistance	Good
Fire load	0.768 kWh/m