



Reference: 79462731

### CONTACT

Markets and Products Information  
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## SHIELDED SINGLE CORE POWER CABLES

FLAMEX® EN 50264-3-1 3600V MMS shielded power cables are used for protected installations where enhanced electrical screening (EMC) is required. This product range is recommended for installations and connections in narrow spaces where an optimal bending radius is required. FLAMEX® cables are designed to withstand tough working conditions (oil, ozone, temperature variation, etc.). 120°C conductor temperature is allowed for a 20,000 hours cumulative working time.

### STANDARDS

Product EN 50264-3-1; EN 45545 - HL3; IEC 60228

### DESIGN

#### 1. Conductor

Flexible stranded tinned copper, class 5 acc. to IEC 60228  
 Optional halogen-free separator tape

#### 2. Insulation

Cross-linked compound type EI 109 acc. to EN 50264-1  
 Colour: black or grey

#### 3. Screen

Halogen-free foil, tinned copper wire braid, halogen-free separator

#### 4. Outer sheath

Cross-linked compound type EM 104 acc. to EN 50264-1  
 Oil, diesel, ozone and UV resistant  
 Colour: black

Example of marking: FLAMEX EN 50264-3-1 3600V (mm<sup>2</sup>) MM (N)SHXAFCOE 3.6/6 kV | LYNXEO | WW-YYYY

### 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: 5 x outer cable diameter (6 x D if D > 10mm)
  - For installation and occasional movements: 10 x outer cable diameter



Conductor flexibility  
Flexible class 5



Halogen free  
EN 60754-1 & EN 60684-2



Rated Voltage U<sub>0</sub>/U  
(Um)  
3.6 / 6 (7.2) kV



Flame retardant  
IEC 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



Electro magnetic  
interference  
resistance  
Yes

**CHARACTERISTICS****Construction characteristics**

|                       |                         |
|-----------------------|-------------------------|
| Conductor material    | Tin plated copper       |
| Conductor flexibility | Flexible class 5        |
| Insulation            | Cross-linked compound   |
| Screen                | Tinned copper braid     |
| Outer sheath          | Cross-linked compound   |
| Halogen free          | EN 60754-1 & EN 60684-2 |

**Dimensional characteristics**

|                         |                    |
|-------------------------|--------------------|
| Conductor cross-section | 10 mm <sup>2</sup> |
| Minimum outer diameter  | 12.5 mm            |
| Maximum outer diameter  | 13.1 mm            |
| Approximate weight      | 280 kg/km          |
| Braid section           | 6 mm <sup>2</sup>  |
| Number of cores         | 1                  |

**Electrical characteristics**

|   |                  |
|---|------------------|
| Rated Voltage U <sub>o</sub> /U (U <sub>m</sub> ) | 3.6 / 6 (7.2) kV |
|---|------------------|

**Usage characteristics**

|  |  |
|--|--|
| Flame retardant                          | IEC 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   |
| Electro magnetic interference resistance | Yes  |
| Operating temperature, range             | -40 ... 90 °C  |
| Max. conductor temperature in service    | 90 °C  |
| Overload maximum core temperature        | 120 °C   |
| Chemical resistance                      | Excellent  |
| Ozone resistance                         | Yes  |
| U.V resistance                           | Yes  |
| Fire load                                | 0.75 kWh/m   |
| Short-circuit max. conductor temperature | 200 °C   |