



Reference: 79463524

## CONTACT

Markets and Products Information  
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## SHEATHED SINGLE CORE POWER CABLES

FLAMEX® EN 50264-3-1 1800V MM power cables are used for fixed and protected installations. This product range is recommended for 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 50264-1.  
Colour: grey

### 3. Sheath

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

Example of marking: FLAMEX EN 50264-3-1 1800V (mm<sup>2</sup>) MM NSHXAFOE 1.8/3 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: 3 x outer cable diameter (5 x D if D>10mm)
  - For installation and occasional movements: 6 x outer cable diameter



Conductor flexibility  
Flexible class 5



Halogen free  
EN 60754-1 & EN 60684-2



Rated Voltage U<sub>o</sub>/U<sub>m</sub>  
(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.  
-40 ... 90 °C

## CHARACTERISTICS

## Construction characteristics

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

## Dimensional characteristics

|                         |                     |
|-------------------------|---------------------|
| Conductor cross-section | 150 mm <sup>2</sup> |
| Minimum outer diameter  | 22.9 mm             |
| Maximum outer diameter  | 23.9 mm             |
| Approximate weight      | 1600 kg/km          |
| Conductor diameter      | - mm                |

## Electrical characteristics

|   |                  |
|---|------------------|
| Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> ) | 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             | -40 ... 90 °C  |
| Max. conductor temperature in service    | 90 °C  |
| Overload maximum core temperature        | - °C   |
| Chemical resistance                      | Excellent  |
| Ozone resistance                         | Yes  |
| U.V resistance                           | Yes  |
| Short-circuit max. conductor temperature | 200 °C   |