



Reference: 79462324

## CONTACT

Markets and Products Information  
rollingstock.business@lynxeogroup.com

## 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	1.5 mm <sup>2</sup>
Minimum outer diameter	5.7 mm
Maximum outer diameter	6.0 mm
Approximate weight	50 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