



## CONTACT

Markets and Products Information  
 rollingstock.business@lynxeogroup.com

## 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>o</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

### Electrical characteristics

Rated Voltage U <sub>0</sub> /U (Um)	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



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

## PRODUCTS LIST

Reference	Cross section [mm <sup>2</sup> ]	Braid section [mm <sup>2</sup> ]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
79462731	10	6	12.5	13.1	280
79462931	25	6	16.4	17.0	500
79463031	35	10	17.4	18.0	630
79463131	50	10	18.6	19.2	790
79463231	70	10	20.5	21.1	970
79463331	95	16	22.2	22.8	1250
79463431	120	16	24.4	25.0	1560
79463531	150	16	27.0	28.0	2000
79463631	185	16	28.4	29.4	2270
79463731	240	25	31.6	32.6	2930
79463831	300	25	33.9	34.9	3460