



Reference: 79463331

### CONTACT

Markets and Products Information  
[rollingstock.business@lynxeogroup.com](mailto: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>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	95 mm <sup>2</sup>
Minimum outer diameter	22.2 mm
Maximum outer diameter	22.8 mm
Approximate weight	1250 kg/km
Braid section	16 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	1.5 kWh/m
Short-circuit max. conductor temperature	200 °C