



### CONTACT

Markets and Products Information  
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### FIRE RESISTANT POWER CABLES

FLAMEX® EN50264-3-1 FR flexible power cables maintain circuit integrity in case of fire (according to EN 50200 for 90 minutes) and are fire retardant, low smoke and halogen-free satisfying performance requirements of EN 45545-2-HL3. On top of that, FLAMEX® cables withstand tough working conditions (oil, ozone, temperature variations, etc.).

### STANDARDS

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

**Test** EN 50200; IEC 60331-1 or 2

### DESIGN

#### 1. Conductor

Flexible stranded tinned copper, class 5 acc. to IEC 60228  
 Mineral tape

#### 2. Insulation

Cross-linked compound type EI 109 acc. to EN 50264-1  
 Oil, diesel, ozone and UV resistant  
 Colour: black

Example of marking: FLAMEX type EN 50264-3-1 FR 600 V mm<sup>2</sup> M (N)MHXAF-FR 0,6/1kV | 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 if D ≤ 10mm / 5 x outer cable diameter 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<sub>m</sub>  
 (Um)  
 0.6/ 1 (1.2) kV



Fire resistant  
 IEC 60331-1 or -2



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

## CHARACTERISTICS

## Construction characteristics

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

## Electrical characteristics

Rated Voltage U <sub>0</sub> /U (Um)	0.6/ 1 (1.2) kV
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## Usage characteristics

Fire resistant	IEC 60331-1 or -2
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
Operating temperature, range	-40 ... 90 °C
Overload maximum core temperature	120 °C
Chemical resistance	Good
Ozone resistance	Yes
U.V resistance	Yes

## FLAMEX® FR TYPE EN 50264-3-1 600V

Reference	Cross section [mm <sup>2</sup> ]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
79462214	1	3.1	3.3	18
79462314	1.5	3.4	3.8	24
79462414	2.5	3.8	4.2	33
79462514	4	4.5	4.9	46
79462614	6	5.0	5.4	66
79462714	10	6.1	6.5	110
79462814	16	7.1	7.7	170
79462914	25	8.7	9.3	255
79463014	35	9.8	10.4	340
79463114	50	11.9	12.5	490
79463214	70	13.8	14.4	700
79463314	95	15.3	15.9	900
79463414	120	17.0	17.6	1120
79463514	150	19.2	19.8	1410
79463614	185	21.5	22.1	1710
79463714	240	24.1	24.7	2200