



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 (mm²) 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:
 - o Static use: 3 x outer cable diameter (5 x D if D>10mm)
 - o 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_o/U
 (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 |

Electrical characteristics

| | |
|--------------------------------------|------------------|
| Rated Voltage U ₀ /U (Um) | 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 | 120 °C |
| Chemical resistance | Excellent |
| Ozone resistance | Yes |
| U.V resistance | Yes |

PRODUCTS LIST

| Reference | Cross section [mm ²] | Min. outer diam. [mm] | Max. outer diam. [mm] | Approx. weight [kg/km] |
|-----------|----------------------------------|-----------------------|-----------------------|------------------------|
| 79462324 | 1.5 | 5.7 | 6.0 | 50 |
| 79462424 | 2.5 | 6.25 | 6.55 | 60 |
| 79462524 | 4 | 6.8 | 7.2 | 80 |
| 79462624 | 6 | 7.4 | 7.8 | 100 |
| 79462724 | 10 | 8.7 | 9.3 | 160 |
| 79462824 | 16 | 9.8 | 10.6 | 230 |
| 79462924 | 25 | 12.3 | 13.1 | 340 |
| 79463024 | 35 | 13.3 | 14.1 | 450 |
| 79463124 | 50 | 14.6 | 15.6 | 600 |
| 79463224 | 70 | 16.7 | 17.7 | 820 |
| 79463324 | 95 | 19.2 | 20.2 | 1050 |
| 79463424 | 120 | 20.8 | 21.8 | 1300 |
| 79463524 | 150 | 22.9 | 23.9 | 1600 |
| 79463624 | 185 | 25.5 | 26.5 | 1950 |
| 79463724 | 240 | 27.9 | 29.3 | 2500 |
| 79463824 | 300 | 30.6 | 32.0 | 3100 |