



Reference: 79462722

CONTACTMarkets and Products Information
rollingstock.business@lynxeogroup.com**SHIELDED SINGLE CORE POWER CABLES**

FLAMEX® EN 50264-3-1 1800V 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

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 1800V (mm²) MM S (N)SHXAFCOE
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: 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 5Halogen free
EN 60754-1 & EN
60684-2Rated Voltage U_o/U_m
(Um)
1.8 / 3 (3.6) kVFlame retardant
EN 60332-1-2Fire retardant
EN IEC 60332-3-24
(cat C); EN IEC
60332-3-25
(EN50305)Smoke density
EN/IEC 61034-2Gases toxicity
EN 50305-9.2Electro 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 | 10 mm ² |
| Minimum outer diameter | 10.1 mm |
| Maximum outer diameter | 10.7 mm |
| Braid section | 6 mm ² |
| Approximate weight | 208 kg/km |
| Number of cores | 1 |

Electrical characteristics

| | |
|---|------------------|
| Rated Voltage U _o /U (U _m) | 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 |
| Electro magnetic interference resistance | Yes |
| Operating temperature, range | -40 ... 90 °C |
| Max. conductor temperature in service | - °C |
| Overload maximum core temperature | - °C |
| Chemical resistance | Excellent |
| Ozone resistance | Yes |
| U.V resistance | Yes |
| Fire load | 0.35 kWh/m |
| Short-circuit max. conductor temperature | 200 °C |