



Reference: 79463022

CONTACT

Markets 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 5



Halogen free
EN 60754-1 & EN 60684-2



Rated Voltage U_o/U_m
(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



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	35 mm ²
Minimum outer diameter	14.9 mm
Maximum outer diameter	15.5 mm
Braid section	10 mm ²
Approximate weight	539 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	0.8 kWh/m
Short-circuit max. conductor temperature	200 °C