



**Reference:** 10211466  
**EAN 13:** 3427650124059

## CONTACT

Markets and Products Information  
 rollingstock.business@lynxeogroup.com

## HIGH TEMPERATURE FLEXIBLE POWER CABLES

FLAMEX® EN 50382-2 F power cables are designed and dedicated to be used on rolling stock equipment where high operating temperature is required to save cable weight. Thanks to its high flexibility, these cables with low bending radius are frequently installed on locomotive equipment.

## STANDARDS

**Produkt** EN 45545-2 (HL3); EN 50382-2; IEC 60228

## DESIGN

### 1. Conductor

Flexible class 5 copper according to IEC 60228  
 - tinned copper for 120°C Class  
 - plain copper for 150°C Class

Separator: Unweaved tape

### 2. Insulation

Cross-linked silicone type EI 111 according to EN 50382-1  
 Colour: black outer layer

Example of marking: FLAMEX SI - EN 50382-2 - Voltage rate (1800V or 3600V) - cross-section mm<sup>2</sup> - F - temperature class (120°C or 150°C) - LYNXEO 279 - week/year

## 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: 4 x outer cable diameter
  - For installation and occasional movements: 6 x outer cable diameter
- Pulling tensible force (dynamic) during installation: 50 N/mm<sup>2</sup> of copper size
- Mechanical static tensible force: 15N/mm<sup>2</sup> of copper size



Leiterflexibilität  
 KL.5 = feindrähtig



Halogenfrei  
 EN 60754-1 & EN 60684-2



Nennspannung U<sub>o</sub>/  
 U  
 3.6 / 6 (7.2) kV



Flammwidrig  
 EN 60332-1-2



Flammwidrig  
 EN IEC 60332-3-24  
 (cat C); EN IEC  
 60332-3-25  
 (EN50305)



Rauchdichte  
 EN/IEC 61034-2



Toxizität der  
 (Brand-)Gase  
 EN 50305-9.2



Betriebstemp.  
 -50 ... 120 °C

## CHARACTERISTICS

**Konstruktionsmerkmale**

Leitermaterial	Verzinntes Kupfer
Leiterflexibilität	KL.5 = feindrätig
Isolierung	Hochtemperatur-Silikon
Halogenfrei	EN 60754-1 & EN 60684-2

**Abmessungsmerkmale**

Leiterquerschnitt	6 mm <sup>2</sup>
Leiterdurchmesser	3,0 mm
Außendurchmesser, nom.	9,6 mm
Außendurchmesser Mindestwert	9,2 mm
Maximaler Außendurchmesser	10,4 mm
Nettogewicht ca.	128 kg/km

**Elektrische Eigenschaften**

Nennspannung U <sub>o</sub> /U	3.6 / 6 (7.2) kV
--------------------------------	------------------

**Anwendungsmerkmale**

Flammwidrig	EN 60332-1-2
Flammwidrig	EN IEC 60332-3-24 (cat C); EN IEC 60332-3-25 (EN50305)
Rauchdichte	EN/IEC 61034-2
Toxizität der (Brand-)Gase	EN 50305-9.2
Betriebstemperatur	-50 ... 120 °C
Max. Betriebstemperatur am Leiter	120 °C
Maximale Überlasttemperatur am Leiter	140 °C
Chemische Beständigkeit	Gut
Brandlast ca.	0,283 kWh/m