



CONTACT

Markets and Products Information
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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

Product 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 mm² - 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 tensile force (dynamic) during installation: 50 N/mm² of copper size
- Mechanical static tensile force: 15N/mm² of copper size



Flessibilità del conduttore
 Flessibile classe 5



Senza alogeno
 EN 60754-1 & EN 60684-2



Tensione nominale
 U₀/U (Um)
 1.8 / 3 (3.6) kV



Ritardante la fiamma
 EN 60332-1-2



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



Densità fumo
 EN/IEC 61034-2



Tossicità gas
 EN 50305-9.2



Temperatura Operativa
 -50 ... 120 °C

CHARACTERISTICS**Caratteristiche costruttive**

Materiale del conduttore	Rame nudo
Flessibilità del conduttore	Flessibile classe 5
Isolamento	Silicone ad alta temperatura
Senza alogeno	EN 60754-1 & EN 60684-2

Caratteristiche dimensionali

Sezione del conduttore del cavo	35 mm ²
Diametro nominale del conduttore del cavo	7,7 mm
Diametro esterno nominale del cavo	- mm
Diametro esterno min	12,1 mm
Diametro esterno max	14,1 mm
Peso approssimativo del cavo	411 kg/km

Caratteristiche elettriche

Tensione nominale U ₀ /U (U _m)	1.8 / 3 (3.6) kV
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Caratteristiche d'utilizzo

Ritardante la fiamma	EN 60332-1-2
Fuoco ritardante	EN IEC 60332-3-24 (cat C); EN IEC 60332-3-25 (EN50305)
Densità fumo	EN/IEC 61034-2
Tossicità gas	EN 50305-9.2
Temperatura Operativa	-50 ... 120 °C
Temperatura massima di servizio del conduttore	150 °C
Overload maximum core temperature	170 °C
Resistenza chimica	Buona
Fire load	- kWh/m