FLAMEX® EN 50382-2 FFS

CONTACT

Markets and Products Information
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SHIELDED HIGH TEMPERATURE FLEXIBLE POWER CABLES

FLAMEX® EN 50382-2 FFS shielded power cables are used for installations where enhanced electrical screening (EMC) is required. Able to withstand higher operating temperatures, these silicone-based cables allow to save cable weight.

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

2. Insulation
Cross-linked silicone type EI 111 according to EN 50382-1
Separator: Unweaved tape

3. Screen
Tinned copper wire braid
Separator: Unweaved tape

4. Outer sheath
Cross-linked silicone type EM 107 according to EN 50382-1
Colour: black outer layer

Examples of marking: FLAMEX SI - EN 50382-2 - Voltage rate (1800V or 3600V) - cross-section mm² - FFS - temperature class (120°C or 150°C) - Manufacturing n° - LYNXEO 279 - week/year
DTREN 150056 - EN 50382-2 - 1800V - cross-section mm² - FFS - temperature class (120°C) - Manufacturing N° - 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: 10 x outer cable diameter
  - For installation and occasional movements: 12 x outer cable diameter
- Pulling tensible force (dynamic) during installation: 50 N/mm² of copper size
- Mechanical static tensible force: 15N/mm² of copper size

Conductor flexibility
Flexible class 5

Halogen free
EN 60754-1 & EN 60684-2

Flame retardant
EN 60332-1-2

Fire retardant
EN IEC 60332-3-24 (cat C)

Smoke density
EN/IEC 61034-2

Gases toxicity
EN 50305-9.2

Operating temp.
-50 ... 120 °C

Electro magnetic interference resistance
Yes

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Lynxeo is indicative only and shall not be binding on Lynxeo or be treated as constituting a representation on the part of Lynxeo.

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CHARACTERISTICS

Construction characteristics	
Conductor material	Tin plated copper
Conductor flexibility	Flexible class 5
Insulation	High temperature silicone
Screen	Tinned copper braid
Outer sheath	High temperature silicone
Halogen free	EN 60754-1 & EN 60684-2
Usage characteristics	
Flame retardant	EN 60332-1-2
Fire retardant	EN IEC 60332-3-24 (cat C)
Smoke density	EN/IEC 61034-2
Gases toxicity	EN 50305-9.2
Operating temperature, range	-50 ... 120 °C
Electro magnetic interference resistance	Yes
Max. conductor temperature in service	120 °C
Overload maximum core temperature	140 °C
Chemical resistance	Good


Conductor flexibility
Flexible class 5

Halogen free
EN 60754-1 & EN 60684-2


Flame retardant
EN 60332-1-2


Fire retardant
EN IEC 60332-3-24 (cat C)


Smoke density
EN/IEC 61034-2


Gases toxicity
EN 50305-9.2


Operating temp.
-50 ... 120 °C


Electro magnetic interference resistance
Yes

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FLAMEX® SI EN 50382-2 FFS 1800V 120°C

Reference	Name	Cross section [mm²]	Conductor diam. [mm]	Braid section [mm²]	Nom. outer diam. [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
13117415	FLAMEX DTREN150056 EN 50382-2 1800V 25 FFS 120°C	25	6.4	6.3	14.2	14.0	16.5	434
13137636	FLAMEX SI EN 50382-2 1800V 35 FFS 120°C	35	7.7	6.5	15.7	14.6	16.7	508
10275514	FLAMEX DTREN150056 EN 50382-2 1800V 50 FFS 120°C	50	9.2	7.7	17.0	16.5	19.9	656
13117416	FLAMEX DTREN150056 EN 50382-2 1800V 70 FFS 120°C	70	10.8	8.9	19.1	18.0	21.0	945
10263836	FLAMEX DTREN150056 EN 50382-2 1800V 95 FFS 120°C	95	12.7	10.2	21.8	21.4	25.1	1159
10282209	FLAMEX DTREN150056 EN 50382-2 1800V 120 FFS 120°C	120	14.2	11.6	25.3	24.9	27.3	1484
10282210	FLAMEX DTREN150056 EN 50382-2 1800V 150 FFS 120°C	150	15.8	12.6	27.0	26.5	29.9	1745
	FLAMEX DTREN150056 EN 50382-2 1800V 185 FFS 120°C	185	17.5	-	-	28.5	31.9	-
	FLAMEX DTREN150056 EN 50382-2 1800V 240 FFS 120°C	240	20.3	-	-	29.5	34.0	-

FLAMEX® SI EN 50382-2 FFS 3600V 120°C

Reference	Name	Cross section [mm²]	Conductor diam. [mm]	Braid section [mm²]	Nom. outer diam. [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
	FLAMEX SI EN 50382-2 3600V 10 FFS 120°C	10	4.0	9	13.9	13.2	14.9	302
	FLAMEX SI EN 50382-2 3600V 35 FFS 120°C	35	7.7	13	18.5	17.5	19.8	653
10235715	FLAMEX SI EN 50382-2 3600V 50 FFS 120°C	50	9.2	13.3	19.9	17.9	20.5	782
10260429	FLAMEX SI EN 50382-2 3600V 70 FFS 120°C	70	10.8	13.5	21.4	19.2	22.4	1005
10260430	FLAMEX SI EN 50382-2 3600V 95 FFS 120°C	95	12.7	15.8	23.5	20.8	24.3	1251

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Reference	Name	Cross section [mm²]	Conductor diam. [mm]	Braid section [mm²]	Nom. outer diam. [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
10260431	FLAMEX SI EN 50382-2 3600V 120 FFS 120°C	120	14.4	16.1	25.2	22.4	26.2	1507
10260432	FLAMEX SI EN 50382-2 3600V 150 FFS 120°C	150	15.7	18.3	26.7	24.1	28.2	1764
10260433	FLAMEX SI EN 50382-2 3600V 185 FFS 120°C	185	16.9	18.7	28.7	26.4	30.9	2154

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