



CONTACT

Markets and Products Information
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REINFORCED HIGH TEMPERATURE EXTRA-FLEXIBLE POWER CABLES

FLAMEX® EN 50382-2 3600V FXZ power cables are designed with extra flexible conductors and reinforced with textile braid to be used as a jumper cable between vehicles. 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

Extra Flexible class 6 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 with an embedded polyester reinforcement

Colour: black outer layer

Examples of marking:

FLAMEX SI - EN 50382-2 - 3600 V - cross-section mm² - FXZ - class temperature (120° C) - LYNXEO 279 - week/year

FLAMEX SI - DTREN 150028 - EN 50382-2 - 3600 V - cross-section mm² - FXZ - class temperature (120°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/mm² of copper size
- Mechanical static tensible force: 15N/mm² of copper size



Conductor flexibility
 Extra-flexible
 class 6



Halogen free
 EN 60754-1 & EN
 60684-2



Rated Voltage U_o/U
 (Um)
 3.6 / 6 (7.2) 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



Operating temp.
 -50 ... 120 °C

CHARACTERISTICS

Construction characteristics

Conductor material	Tin plated copper
Conductor flexibility	Extra-flexible class 6
Insulation	High temperature silicone
Halogen free	EN 60754-1 & EN 60684-2

Electrical characteristics

Rated Voltage U _o /U (Um)	3.6 / 6 (7.2) kV
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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
Operating temperature, range	-50 ... 120 °C
Max. conductor temperature in service	120 °C
Overload maximum core temperature	140 °C
Chemical resistance	Good



Conductor flexibility
Extra-flexible
class 6



Halogen free
EN 60754-1 & EN
60684-2



Rated Voltage U_o/U
(Um)
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Smoke density
EN/IEC 61034-2



Gases toxicity
EN 50305-9.2



Operating temp.
-50 ... 120 °C

FLAMEX SI EN 50382-2 FXZ 3600V 120°C / DTREN150028

Reference	Name	Cross section [mm ²]	Conductor diam. [mm]	Nom. outer diam. [mm]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]	Fire load [kWh/m]
10265735	FLAMEX DTREN150028 EN50382 3600V 6 FXZ 120°C	6	3.4	10.3	9.8	11.4	157	0.321
10261352	FLAMEX DTREN150028 EN50382 3600V 25 FXZ 120°C	25	6.9	12.8	11.8	14.6	351	0.391
10265651	FLAMEX DTREN150028 EN50382 3600V 35 FXZ 120°C	35	8.1	14.2	13.6	14.7	452	0.454
10211475	FLAMEX EN 50382-2 3600V 50 FXZ 120°C	50	9.2	15.8	15.6	18.6	680	0.539
10211476	FLAMEX EN 50382-2 3600V 70 FXZ 120°C	70	11.0	17.6	17.3	20.6	935	0.641
10202387	FLAMEX EN 50382-2 3600V 95 FXZ 120°C	95	12.5	19.1	18.7	21.5	1150	0.693
10211477	FLAMEX EN 50382-2 3600V 120 FXZ 120°C	120	14.2	20.8	20.5	24.3	1480	0.768
10211478	FLAMEX EN 50382-2 3600V 150 FXZ 120°C	150	15.8	24.0	22.0	26.1	1800	0.894
10200535	FLAMEX EN 50382-2 3600V 185 FXZ 120°C	185	17.5	24.9	23.8	28.2	2240	0.976
10232560	FLAMEX DTREN150028 EN50382 3600V 240 FXZ 120°C	240	21.4	28.4	26.4	31.5	2629	1.121
10282755	FLAMEX DTREN150028 EN 50382-2 3600V 300 FXZ 120°C	300	23.5	32.0	31.0	34.0	2925	-