FLAMEX® EN 50382-2 FFXS

SHIELDED HIGH TEMPERATURE EXTRA-FLEXIBLE POWER CABLES

FLAMEX® EN 50382-2 FFXS shielded power cables are designed with extra flexible conductors as per jumper cables. They 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
Extra flexible class 6 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 - FFXS - temperature class (120°C or 150°C) - Manufacturing n° - LYNXEO 279 - week/year
DTREN 150068 - EN 50382-2 - 1800V - cross-section mm² - FFXS - 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: 8 x outer cable diameter
  - For installation and occasional movements: 10 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


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


Electro magnetic interference resistance
Yes

CONTACT

Markets and Products Information
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CHARACTERISTICS

Construction characteristics	
Conductor flexibility	Extra-flexible class 6
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); EN IEC 60332-3-25 (EN50305)
Smoke density	EN/IEC 61034-2
Gases toxicity	EN 50305-9.2
Operating temperature, range	-50 ... 120 °C
Electro magnetic interference resistance	Yes
Chemical resistance	Good


Conductor flexibility **Extra-flexible class 6**

Halogen free **EN 60754-1 & EN 60684-2**


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**


Electro magnetic interference resistance **Yes**

FLAMEX SI EN 50382-2 FFXS 1800V 120°C / DTREN150068

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]
13105686	FLAMEX DTREN150068 EN 50382-2 Type FFXS 1.8/3 kV 1x25 120°C	25	7.0	6.8	14.6	14.0	15.3	465
10279846	FLAMEX SI EN 50382-2 Type FFXS 1.8/3kV 1x35 120°C	35	8.23	7	15.9	14.8	16.5	521
10284784	FLAMEX DTREN150068 EN 50382-2 Type FFXS 1.8/3kV 1x50 120°C	50	9.5	7.5	17.3	16.6	18.6	651
13117417	FLAMEX DTREN150068 EN 50382-2 Type FFXS 1.8/3kV 1x70 120°C	70	11.5	8.5	19.3	18.5	20.7	918
10267164	FLAMEX DTREN150068 EN 50382-2 Type FFXS 1.8/3kV 1x95 120°C	95	12.9	8.5	21.6	20.7	23.2	1170
13117546	FLAMEX DTREN150068 EN 50382-2 Type FFXS 1.8/3 kV 1x120 120°C	120	14.4	10	23.3	22.3	25.0	1346
10285643	FLAMEX DTREN150068 EN 50382-2 Type FFXS 1.8/3kV 1x150 120°C	150	17.1	11.8	26.0	24.9	27.9	1815
	FLAMEX DTREN150068 EN 50382-2 Type FFXS 1.8/3 kV 1x185 120°C	185	18.3	-	28.3	27.1	30.3	-
	FLAMEX DTREN150068 EN 50382-2 Type FFXS 1.8/3kV 1x240 120°C	240	21.4	-	31.6	30.3	33.8	-

FLAMEX SI EN 50382-2 FFXS 1800V 150°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]
10284785	FLAMEX SI EN 50382-2 Type FFXS 1.8/3 kV 1x35 150°C	35	7.7	6	15.5	15.0	17.1	503
10284786	FLAMEX SI EN 50382-2 Type FFXS 1.8/3 kV 1x50 150°C	50	9.2	6	17.0	16.5	18.6	652
10261506	FLAMEX SI EN 50382-2 Type FFXS 1.8/3 kV 1x70 150°C	70	11.0	8.5	18.9	18.0	20.2	876
10267165	FLAMEX SI EN 50382-2 Type FFXS 1.8/3kV 1x95 150°C	95	12.6	8.5	21.3	20.2	22.8	1113

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]
10270368	FLAMEX SI EN 50382-2 Type FFXS 1.8/3kV 1x120 150°C	120	14.6	10	23.5	22.3	25.1	1388
10284128	FLAMEX SI EN 50382-2 Type FFXS 1.8/3 kV 1x150 150°C	150	15.9	11	24.8	23.6	26.5	1657
10285211	FLAMEX SI EN 50382-2 Type FFXS 1.8/3 kV 1x185 150°C	185	18.2	12.5	27.7	26.3	29.6	2064

FLAMEX SI EN 50382-2 FFXS 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 Type FFXS 3.6/6kV 1x25 120°C	25	7.0	-	16.8	16.1	18.0	-
	FLAMEX SI EN 50382-2 Type FFXS 3.6/6kV 1x50 120°C	50	9.5	-	19.7	18.8	21.2	-
10282760	FLAMEX DTREN150068 EN 50382-2 Type FFXS 3.6/6kV 1x70 120°C	70	11.4	15	22.0	21.0	23.6	1018
10282761	FLAMEX SI EN 50382-2 Type FFXS 3.6/6kV 1x95 120°C	95	12.9	15	23.7	22.7	25.5	1302
10282762	FLAMEX SI EN 50382-2 Type FFXS 3.6/6kV 1x120 120°C	120	14.4	17	25.2	24.1	27.1	1478
	FLAMEX SI EN 50382-2 Type FFXS 3.6/6kV 1x150 120°C	150	17.1	-	28.1	26.9	30.2	-
10277617	FLAMEX SI EN 50382-2 Type FFXS 3.6/6kV 1x185 120°C	185	18.3	20	30.1	28.8	32.3	2186
	FLAMEX SI EN 50382-2 Type FFXS 3.6/6kV 1x240 120°C	240	21.4	-	33.8	32.3	36.3	-

FLAMEX SI EN 50382-2 FFXS 3600V 150°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]
10281173	FLAMEX SI EN 50382-2 Type FFXS 3.6/6kV 1x50 150°C	50	9.2	12	19.9	18.9	21.9	774
	FLAMEX SI EN 50382-2 Type FFXS 3.6/6kV 1x70 150°C	70	11.0	-	21.6	20.5	23.1	-
	FLAMEX SI EN 50382-2 Type FFXS 3.6/6kV 1x95 150°C	95	12.6	-	23.4	22.2	25.0	-
10276182	FLAMEX SI EN 50382-2 Type FFXS 3.6/6kV 1x120 150°C	120	14.6	16	25.4	24.1	27.2	1507
10276181	FLAMEX SI EN 50382-2 Type FFXS 3.6/6kV 1x150 150°C	150	15.9	16.5	26.9	25.5	28.8	1781
	FLAMEX SI EN 50382-2 Type FFXS 3.6/6kV 1x185 150°C	185	18.2	-	30.0	28.5	32.0	-