

FRHF control

Control cable FRHF

450/750 V

Application

Fire-resistant control cable for fixed installations indoors and outdoors. Not to be laid in soil nor directly in cast concrete. For locations where safety requires the operation of alarm, control, signalling and energy circuits also during a fire. The conductor insulation must be protected against UV-radiation. Installations must be in accordance with national regulations and rules of installations. No requirement for CPR-classification.



FlameRex

Design

Standards	SFS 7516
Conductor	Circular solid copper, EN/IEC 60228 class 1
Insulation	Cross-linked polyethylene XLPE and mica-tape
Core Identification	Black, with white numbers
Inner covering	Extruded filling compound
Oversheath	UV-protected polyolefin compound, Orange

Temperature limits

Max. conductor temperature °C	70
Max. cond. temp. short circuit max. 5 s °C	160
Min. cable temperature during operation °C	-40
Min. cable temperature during handling °C	-15
Min. cable temperature during transport °C	-40

Additional information

IEC 60331-21 Fire-resistant, 180 min.
IEC 60331-1, -2 EN 50200, EN 50362 Fire-resistant with shock, 90 min.
EN/IEC 60332-3 Flame retardant in a bunch
EN/IEC 61034 Low smoke density
EN/IEC 60754 Halogen-free, non-corrosive

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Technical information	7x1,5	12x1,5	19x1,5	27x1,5	7x2,5	12x2,5	19x2,5	27x2,5
Product code	1145581	1145585	1145587	1145591	1145596	1145598	1145599	1145607
Nominal cross-sectional area of conductor mm ²	1,5	1,5	1,5	1,5	2,5	2,5	2,5	2,5
Nominal diameter of conductor mm	1,3	1,3	1,3	1,3	1,7	1,7	1,7	1,7
Nominal thickness of insulation mm	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7
Nominal thickness of oversheath mm	1,5	1,5	1,5	1,6	1,5	1,5	1,6	1,7
Fire load MJ/m	3,283	5,244	7,580	10,395	4,363	6,655	9,871	13,559
Fire load kWh/m	0,912	1,457	2,106	2,888	1,212	1,849	2,742	3,766
Nominal cable diameter mm	13,660	17,990	21,840	25,680	15,370	19,520	23,150	27,890
Nominal cable weight kg/km	281,278	460,979	672,664	927,580	388,855	600,524	879,708	1235,176
Metall weight Cu kg/m	0,094	0,162	0,257	0,365	0,151	0,262	0,412	0,589
Maximum forces during installation when pulling by								
Max. pulling force by pulling-eye kN	0,5	0,9	1,4	2,0	0,8	1,5	2,3	3,3
Minimum bending radii								
Minimum bending radius, handling mm	164	216	262	308	184	234	278	335
Minimum bending radius, final bending mm	115	151	183	216	129	164	194	234
Minimum bending radii								
During handling and installation, cable cm	16	22	26	31	18	23	28	33
In final installation, cable cm	11	15	18	22	13	16	19	23
DC resistance								
Max. DC resistance of conductor at 20 °C Ω/km	12,1	12,1	12,1	12,1	7,41	7,41	7,41	7,41