(N)HXCH-FE 180/E 90

Security cable, halogen-free, 0,6/1 kV







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CE

Technical data

- Halogen free security cable adapted to DIN VDE 0266
- Temperature range during installation -5°C to +50°C fixed installation -30°C to +90°C
- Permissible operating temperature at conductor +90°C
- Nominal voltage U₀/U 0,6/1 kV
- Test voltage 4000 V
- Minimum bending radius 12x outer Ø
- Caloric load values see "Technical Information"

Cable structure

- Bare copper conductor, single wire or multi wire acc. to DIN VDE 0295 cl.1 or cl.2 / IEC 60228 cl.1 or cl.2
- Core insulation of polymer
- Core identification acc. to DIN VDE 0293-308
 ≤ 5 cores: coloured
 ≥ 6 cores: black with continuous white numbering
- Cores stranded in layer
- Overall core sheath
- Bare copper wire screening with helix of copper tape
- Separator
- Outer sheath of polyolefin
- Sheath colour: orange

Tests

- Flame test acc. to DIN VDE 0482-332-3-24 / DIN EN 60332-3-24 / IEC 60332-3-24
- Corrosiveness of combustion gases acc. to DIN VDE 0482-754-2 / DIN EN 60754-2 / IEC 60754-2
- Smoke density ac. to DIN VDE 0482-1034-1+2 / DIN EN 61034-1+2 / IEC 61034-1+2

Properties

- · Halogen-free
- Flame retardant
- Self-extinguished
- No flame propagation
- Low smoke density
- FE 180: Insulation integrity for 180 minutes. Tests acc. to DIN VDE 0472-814 / IEC 60331
- E 90: Functionality of electrical cable systems for min. 90 minutes. This fulfils the demands of technical guide lines for fire protection Test method acc. to DIN 4102-12 The functionality for 90 minutes assures the functional performance of water-pressure-rising stations for the supply to avoid smoke and heat in safety-stairs and inner rooms, ladder shafts and engine rooms for fire brigade lifts, emergency lifts for sickbeds in hospitals and the fire brigade lifts.

Note

- re = round conductor, single wire rm = round conductor, multi wire
- The conductor is metrically constructed (mm²). The AWG designation is approximate and purely informative.

Application

Wherever damage to people and material must be prevented in the event of a fire due to a high concentration of material assets. Suitable for permanent installation in dry, damp and wet rooms above, on, in and under plaster, as well as in masonry and concrete. They are also suitable for laying outdoors and in the ground when laying in pipes. Laying in the pipe is permitted if precautions have been taken to prevent water from building up in the pipe.

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Product conforms with Low-Voltage Directive 2014/35/EU.

Part no.	No.cores x cross-sec. mm²	Outer Ø app. mm	Cop. weight kg/km	Weight app. kg/km	AWG-No.
59028	2 x 2,5 / 2,5 re	16,0	80,0	390,0	14
53032	3 x 1,5 / 1,5 re	16,9	66,0	380,0	16
53033	3 x 2,5 / 2,5 re	18,0	104,0	430,0	14
53034	3 x 4 / 4 re	19,0	161,0	530,0	12
53035	3 x 6 / 6 re	20,1	240,0	640,0	10
53036	3 x 10 / 10 re	22,0	408,0	850,0	8
53037	3 x 16 / 16 rm	24,0	643,0	1150,0	6
53038	3 x 25 / 16 rm	28,0	902,0	1700,0	4

Part no.	No.cores x cross-sec. mm²	Outer Ø app. mm	Cop. weight kg/km	Weight app. kg / km	AWG-No.
53039	3 x 35 / 16 rm	30,0	1190,0	2150,0	2
53040	3 x 50 / 25 rm	34,0	1723,0	2800,0	1
53041	3 x 70 / 35 rm	38,0	2410,0	3800,0	2/0
53042	3 x 95 / 50 rm	44,0	3296,0	5100,0	3/0
53043	3 x 120 / 70 rm	47,0	4236,0	6250,0	4/0
53044	3 x 150 / 70 rm	51,0	4992,0	6900,0	300 kcmil
53045	3 x 185 / 95 rm	56,0	6383,0	8550,0	350 kcmil
53046	3 x 240 / 120 rm	65.0	8242.0	11150.0	500 kcmil

Continuation ▶

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	EAC		
eight pp. kg / km	AWG-No.		
680,0	16		
680,0	14		
1050,0	16		
1050,0	14		
1900,0	16		
1900,0	14		
2200.0	16		

14 16 14

Cop. weight kg / km 133,0 200,0 205,0 334,0 413,0 696.0

696,0 499,0 840,0

Outer Ø

app. mm

21,0 21,0 27,0

28,0

37,5 39,0

No.cores x

cross-sec. mm²

53062

53068

7 x 1,5 / 2,5 re
7 x 2,5 / 2,5 re
12 x 1,5 / 2,5 re
12 x 2,5 / 4 re
24 x 1,5 / 6 re
24 x 2,5 / 10 re
30 x 1,5 / 6 re
30 x 2,5 / 10 re

Weigh

2200,0 2200,0

Part no.	No.cores x cross-sec. mm²	Outer Ø app. mm	Cop. weight kg/km	Weight app. kg/km	AWG-No.
53047	4 x 1,5 / 1,5 re	18,0	81,0	435,0	16
53048	4 x 2,5 / 2,5 re	18,9	128,0	500,0	14
53049	4 x 4 / 4 re	20,0	200,0	610,0	12
53050	4 x 6 / 6 re	21,0	297,0	740,0	10
53051	4 x 10 / 10 re	23,0	504,0	1050,0	8
53052	4 x 16 / 16 rm	25,0	796,0	1350,0	6
53053	4 x 25 / 16 rm	30,0	1142,0	1950,0	4
53054	4 x 35 / 16 rm	33,0	1526,0	2400,0	2
53055	4 x 50 / 25 rm	37,0	2203,0	3200,0	1
53056	4 x 70 / 35 rm	42,0	3082,0	4300,0	2/0
53057	4 x 95 / 50 rm	47,0	4208,0	5750,0	3/0
53058	4 x 120 / 70 rm	51,0	5388,0	7100,0	4/0
53059	4 x 150 / 70 rm	56,0	6540,0	8550,0	300 kcmil
53060	4 x 185 / 95 rm	68,0	8159,0	10700,0	350 kcmil
53061	4 x 240 / 120 rm	70,0	10546,0	13930,0	500 kcmil

Dimensions and specifications may be changed without prior notice. (RQ02) $\,$