

(N)HXCH-FE 180/E 30

Security cable, halogen-free, 0.6/1 kV



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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
- Core stranded in layer
- Overall core covering
- 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 acc. 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 30: Functionality** of electrical cable systems for min. 30 minutes. This fulfils the demands of technical guide lines for fire protection Test method acc. to DIN 4102-12 The **functionality** for 30 minutes assures when persons and animals are to be saved from a burning building. 30 minutes secures the functional performance of the fire warning and alarm systems, safety and spare lighting, passenger lifts with evacuation circuits, except the cables which are installed within the ladder shafts and engine rooms.

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.

CE = 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.
52900	2 x 1,5 / 1,5 re	13,0	52,0	220,0	16
52901	2 x 2,5 / 2,5 re	13,5	80,0	385,0	14
52902	2 x 4 / 4 re	14,5	123,0	470,0	10
52903	2 x 6 / 6 re	16,0	182,0	550,0	10
52904	2 x 10 / 10 re	18,0	312,0	730,0	8
52905	3 x 1,5 / 1,5 re	13,5	66,0	380,0	16
52906	3 x 2,5 / 2,5 re	14,5	104,0	430,0	14
52907	3 x 4 / 4 re	15,5	161,0	530,0	12
52908	3 x 6 / 6 re	16,5	240,0	630,0	10
52909	3 x 10 / 10 re	18,5	408,0	850,0	8

Part no.	No. cores x cross-sec. mm²	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
52910	3 x 16 / 16 rm	20,5	643,0	1150,0	6
52911	3 x 25 / 16 rm	24,0	902,0	1700,0	4
52912	3 x 35 / 16 rm	26,5	1190,0	2150,0	2
52913	3 x 50 / 25 rm	29,5	1723,0	2800,0	1
52914	3 x 70 / 35 rm	33,0	2410,0	3800,0	2/0
52915	3 x 95 / 50 rm	37,5	3296,0	5100,0	3/0
52916	3 x 120 / 70 rm	42,5	4236,0	6250,0	4/0
52917	3 x 150 / 70 rm	47,0	5100,0	6900,0	300 kcmil
52918	3 x 185 / 95 rm	52,5	6383,0	8550,0	350 kcmil
52919	3 x 240 / 120 rm	58,5	8242,0	11150,0	500 kcmil

Continuation ►

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Part no.	No. cores x cross-sec. mm²	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
52920	4 x 1,5 / 1,5 re	14,5	81,0	435,0	16
52921	4 x 2,5 / 2,5 re	15,5	128,0	500,0	14
52922	4 x 4 / 4 re	16,5	200,0	610,0	12
52923	4 x 6 / 6 re	17,5	297,0	740,0	10
52924	4 x 10 / 10 re	20,0	504,0	1050,0	8
52925	4 x 16 / 16 re	22,0	796,0	1350,0	6
52926	4 x 25 / 16 rm	26,0	1142,0	1950,0	4
52927	4 x 35 / 16 rm	28,5	1526,0	2400,0	2
52928	4 x 50 / 25 rm	32,0	2203,0	3200,0	1
52929	4 x 70 / 35 rm	37,0	3082,0	4300,0	2/0
52930	4 x 95 / 50 rm	41,5	4208,0	5750,0	3/0
52931	4 x 120 / 70 rm	47,0	5388,0	7100,0	4/0
52932	4 x 150 / 70 rm	52,0	6558,0	8550,0	300 kcmil
52933	4 x 185 / 95 rm	58,0	8159,0	10700,0	350 kcmil
52934	4 x 240 / 120 rm	64,0	10546,0	13930,0	500 kcmil

Part no.	No. cores x cross-sec. mm²	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
52935	7 x 1,5 / 2,5 re	16,5	133,0	635,0	16
52936	7 x 2,5 / 2,5 re	17,5	200,0	680,0	14
52937	10 x 1,5 / 2,5 re	19,5	176,0	870,0	16
52938	10 x 2,5 / 4 re	21,0	286,0	980,0	14
52939	12 x 1,5 / 2,5 re	20,0	205,0	1050,0	16
52940	12 x 2,5 / 4 re	21,5	334,0	1050,0	14
52941	24 x 1,5 / 6 re	26,0	413,0	1900,0	16
52942	24 x 2,5 / 10 re	28,5	696,0	1900,0	14
52943	30 x 1,5 / 6 re	27,0	499,0	2200,0	16
52944	30 x 2,5 / 10 re	30,0	840,0	2200,0	14

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