We Make Modern Life Possible.

SAFETY CABLES

(N)HXCH FE180/ E30-E60 (K011)



Halogen-free energy cable with insulation integrity and circuit integrity, screened

These cables are intended for the stationary distribution of electrical energy in dry or damp premises and for fixed installations in air or concrete. Suitable for hotels, hospitals, underground railways, airports etc. to protect people and technical building equipment in the event of fire.. Not allowed for installations underground or in water. These cables are not UV-protected.

TECHNICAL DATA

Standard
adapted to DIN VDE 0266
HD 604.5H
DIN VDE 0276-604, part 0, 1 and 5G
DIN VDE 0276-627, part 1 and 7H

Certificate
VDE Germany
VDE Reg. No. K011

Test Voltage
core/core 4 kV / 50 Hz

Rated Voltage
0.6/1 kV

Bending radius (min.)
12 x Ø of cable

Fire properties
EN 60332-1-2: flame retardant
EN 60754-2: halogen-free, non-corrosive combustion gases
EN IEC 60332-3-24: reduced flame propagation
EN 61034-2: low smoke emission
DIN VDE 0472-814: insulation integrity FE180
DIN 4102-12: circuit integrity: E30-E60

Core identification
HD 308 S2

Temperature range
Laying temperature: min. -5°C
Operating temperature: -30°C up to 90°C
Conductor temperature: max. 90°C
Short circuit temperature: max. 250°C

DESIGN



1. Copper conductor, round solid (RE) resp. round stranded (RM)
2. Core insulation (silicone rubber)
3. Inner covering (halogen-free tape and halogen free polymer compound)
4. Concentric screen (bare copper wires), counter helix (copper tape) and halogen-free plastic tape
5. Sheath (halogen-free polymer compound, orange)

Number of cores x nominal cross-section / cross-section of screen (mm²)	Max. conductor resistance (Ω/km)	Current rating in the air (A)	Outer diameter appr. (mm)	Total weight appr. (kg/km)
2 x 1.5 RE / 1.5	12.1	28	14.0	249
3 x 1.5 RE / 1.5	12.1	25	14.5	274
4 x 1.5 RE / 1.5	12.1	25	15.4	309
5 x 1.5 RE / 1.5	12.1	16	16.4	348
7 x 1.5 RE / 2.5	12.1	16	17.4	420
10 x 1.5 RE / 2.5	12.1	13	20.9	572
12 x 1.5 RE / 2.5	12.1	13	21.4	618
14 x 1.5 RE / 2.5	12.1	12	22.3	676
19 x 1.5 RE / 4	12.1	11	24.3	831
24 x 1.5 RE / 6	12.1	10	28.5	1091
30 x 1.5 RE / 6	12.1	9	30.0	1245
40 x 1.5 RE / 10	12.1	8	33.9	1590
2 x 2.5 RE / 2.5	7.41	37	14.8	296
3 x 2.5 RE / 2.5	7.41	33	15.4	330
4 x 2.5 RE / 2.5	7.41	33	16.3	376
5 x 2.5 RE / 2.5	7.41	22	17.4	427
7 x 2.5 RE / 2.5	7.41	21	18.6	513
10 x 2.5 RE / 4	7.14	18	23.0	732
12 x 2.5 RE / 4	7.14	17	23.6	798
14 x 2.5 RE / 6	7.14	15	24.6	898
19 x 2.5 RE / 6	7.14	14	26.9	1103
24 x 2.5 RE / 10	7.14	13	31.5	1443
30 x 2.5 RE / 10	7.14	12	33.2	1657
40 x 2.5 RE / 10	7.14	11	37.0	2084
2 x 4 RE / 4	4.61	49	16.2	362
3 x 4 RE / 4	4.61	43	16.9	409
4 x 4 RE / 4	4.61	43	18.0	471
5 x 4 RE / 4	4.61	28	19.2	537
7 x 4 RE / 4	4.61	27	20.5	651
10 x 4 RE / 6	4.61	27	24.7	930
12 x 4 RE / 6	4.61	27	25.4	1022
14 x 4 RE / 6	4.61	27	26.5	1129
19 x 4 RE / 10	4.61	25	29.6	1452
2 x 6 RE / 6	3.08	62	17.2	445
3 x 6 RE / 6	3.08	54	18.0	510
4 x 6 RE / 6	3.08	54	19.1	591
5 x 6 RE / 6	3.08	36	20.5	678
2 x 10 RE / 10	1.83	85	19.2	600
3 x 10 RE / 10	1.83	75	20.1	701
4 x 10 RE / 10	1.83	75	21.4	824
5 x 10 RE / 10	1.83	49	23.1	962
2 x 16 RM / 16	1.15	113	21.5	834
3 x 16 RM / 16	1.15	100	22.5	992
4 x 16 RM / 16	1.15	100	24.2	1175

Number of cores x nominal cross-section / cross-section of screen (mm²)	Max. conductor resistance (Ω/km)	Current rating in the air (A)	Outer diameter appr. (mm)	Total weight appr. (kg/km)
5 x 16 RM / 16	1.15	65	26.1	1380
1 x 25 RM / 16	0.727	152	15.2	535
3 x 25 RM / 16	0.727	136	26.5	1388
4 x 25 RM / 16	0.727	136	28.6	1670
5 x 25 RM / 16	0.727	90	31.2	1997
1 x 35 RM / 16	0.524	217	16.4	640
3 x 35 RM / 16	0.524	165	28.9	1733
4 x 35 RM / 16	0.524	165	31.3	2117
5 x 35 RM / 16	0.524	165	34.3	2558
1 x 50 RM / 16	0.387	265	18.2	786
3 x 50 RM / 25	0.387	201	32.8	2326
4 x 50 RM / 25	0.387	201	35.9	2855
5 x 50 RM / 25	0.387	201	39.4	3441
3 x 70 RM / 35	0.268	255	38.1	3171
4 x 70 RM / 35	0.268	255	41.6	3902
5 x 70 RM / 35	0.268	255	45.6	4707
3 x 95 RM / 50	0.193	314	43.0	4261
4 x 95 RM / 50	0.193	314	47.1	5266
5 x 95 RM / 50	0.193	314	51.8	6366
3 x 120 RM / 70	0.153	364	46.1	5277
4 x 120 RM / 70	0.153	364	50.6	6526
5 x 120 RM / 70	0.153	364	55.9	7901
1 x 150 RM / 16	0.124	557	25.7	1828
3 x 150 RM / 70	0.124	416	50.7	6338
4 x 150 RM / 70	0.124	416	55.8	7880
5 x 150 RM / 70	0.124	416	61.5	9534
3 x 185 RM / 95	0.099	480	56.5	8001
4 x 185 RM / 95	0.099	480	62.1	9896
4 x 240 RM / 120	0.075	565	69.5	12673

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System / System Manufacturer	System identification	Classification	Range	Distance (a) /Width (b) / Load (g)	AbP number	AbP part no.
Normtrag	Abstandschelle	E60	n x ≥ 1.5/1.5	a ≤ 300 mm	P-MPA-E-23-003	1.3
Normtrag	Bügelschelle	E60	n x ≥ 1.5/1.5	a ≤ 300 mm	P-MPA-E-23-003	1.4
Normtrag	Bügelschelle mit LW	E60	n x ≥ 1.5/1.5	a ≤ 600 mm	P-MPA-E-23-003	1.5
Normtrag	Rinne	E30	n x ≥ 1.5/1.5	a ≤ 1200 mm b = 300 mm g ≤ 10 kg/m	P-MPA-E-23-003	1.2
Normtrag	Leiter	E30	n x ≥ 1.5/1.5	a ≤ 1200 mm b = 400 mm g ≤ 20 kg/m	P-MPA-E-23-003	1.1
OBO Bettermann	RKSM 630 + AW55/31	E60	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 300 mm g ≤ 20 kg/m	P-MPA-E-23-003	2.1
OBO Bettermann	RKSM 640 + AW55/41	E60	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 400 mm g ≤ 20 kg/m	P-MPA-E-23-003	2.2
OBO Bettermann	GRM 55/ + AW15/ (AWG15/)	E60	n x ≥ 1.5/1.5	a ≤ 1500 mm b ≤ 400 mm g ≤ 15 kg/m	P-MPA-E-23-003	5.1
OBO Bettermann	2031-M/15	E60	n x ≥ 1.5/1.5 – n x ≤ 25	a ≤ 600 mm g ≤ 2 kg/m	P-MPA-E-23-003	6.1
OBO Bettermann	2031-M/30	E60	n x ≥ 1.5/1.5	a ≤ 600 mm g ≤ 3 kg/m	P-MPA-E-23-003	6.2
OBO Bettermann	2031-M/70	E60	n x ≥ 1.5/1.5	a ≤ 800 mm g ≤ 6 kg/m	P-MPA-E-23-003	6.3
OBO Bettermann	2056/M	E60	n x ≥ 1.5/1.5	a ≤ 800 mm	P-MPA-E-23-003	8.1
OBO Bettermann	732/733	E60	n x ≥ 1.5/1.5	a ≤ 800 mm	P-MPA-E-23-003	8.2
OBO Bettermann	Stahlpanzerrohr M	E30	n x ≥ 1.5/1.5	a ≤ 1500 mm	P-MPA-E-23-003	11.1
Niedax	RLVC 60.300 + KTAS300	E60	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 300 mm g ≤ 20 kg/m	P-MPA-E-23-003	3.1
Niedax	RLVC 60.400 + KTAS400	E60	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 400 mm g ≤ 20 kg/m	P-MPA-E-23-003	3.2
Niedax	MTC 54.400 + KTAS400	E60	n x ≥ 1.5/1.5	a ≤ 1500 mm b ≤ 400 mm g ≤ 15 kg/m	P-MPA-E-23-003	4.2
Niedax	SHS15	E60	n x ≥ 1.5/1.5 – n x ≤ 25	a ≤ 600 mm g ≤ 3 kg/m	P-MPA-E-23-003	7.1
Niedax	SHS30	E60	n x ≥ 1.5/1.5	a ≤ 600 mm g ≤ 3 kg/m	P-MPA-E-23-003	7.2
Niedax	SHS80	E30	n x ≥ 1.5/1.5	a ≤ 800 mm g ≤ 6 kg/m	P-MPA-E-23-003	7.3
Niedax	Bügelschellen B	E60	n x ≥ 1.5/1.5	a ≤ 800 mm	P-MPA-E-23-003	9.1
Niedax	Abstandschelle SAS	E60	n x ≥ 1.5/1.5	a ≤ 800 mm	P-MPA-E-23-003	9.2
Niedax	LLK	E60	n x ≥ 1.5/1.5	a ≤ 500 mm g ≤ 3 kg/m	P-MPA-E-23-003	12.1
Niedax	RLVC 60.300 E5 + TAH	E30	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 300 mm g ≤ 20 kg/m	P-MPA-E-23-003	3.3
Niedax	MTC 54.200 + KTAS200	E30	n x ≥ 1.5/1.5	a ≤ 1500 mm b ≤ 200 mm g ≤ 15 kg/m	P-MPA-E-23-003	4.1

Technical changes reserved. All figures are therefore without guarantee.



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