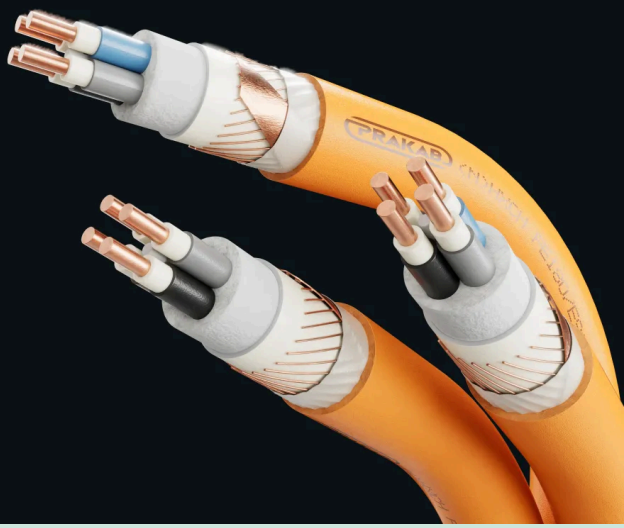
We Make Modern Life Possible.

SAFETY CABLES

(N)HXCH FE180/ E90 (8310)



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 if circuit integrity is required.

TECHNICAL DATA

Standard
adapted to DIN VDE 0266

Certificate
VDE Germany
VDE Reg. No. 8310

Test Voltage
4 kV / 50 Hz

Rated Voltage
0.6/1 kV

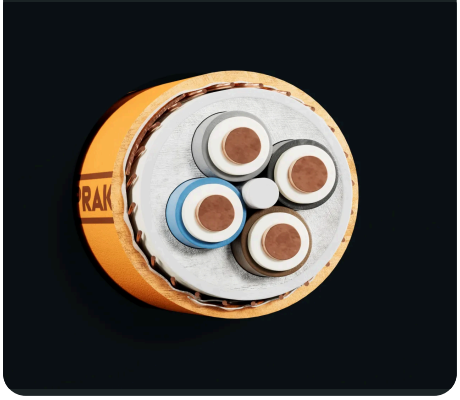
Bending radius (min.)
12 x Ø of cable

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 E90

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. Primary core insulation (silicone rubber)
3. Secondary core insulation (silicone rubber)
4. Inner covering (halogen-free tape and halogen free polymer compound)
5. Inner sheath (halogen-free polymer compound)
6. Concentric screen (bare copper wires), counter helix (copper tape) and halogen-free plastic tape
7. Sheath (halogen-free polymer compound, orange)

(N)HXCH FE180/E90 (8310)

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

Number of cores x nominal cross-section / cross-section of screen (mm²)	Current rating in the air (A)	Outer diameter appr. (mm)	Total weight appr. (kg/km)
2 x 1.5 RE / 1.5	28	15.4	291
3 x 1.5 RE / 1.5	25	15.9	313
4 x 1.5 RE / 1.5	25	16.8	351
5 x 1.5 RE / 2.5	16	17.8	402
7 x 1.5 RE / 2.5	16	18.8	466
10 x 1.5 RE / 2.5	13	22.3	632
12 x 1.5 RE / 2.5	13	22.8	678
14 x 1.5 RE / 2.5	12	23.7	741
19 x 1.5 RE / 4	11	26.3	914
24 x 1.5 RE / 6	10	30.9	1244
30 x 1.5 RE / 6	9	32.4	1400
40 x 1.5 RE / 10	8	36.2	1767
2 x 2.5 RE / 2.5	37	16.1	339
3 x 2.5 RE / 2.5	33	16.7	372
4 x 2.5 RE / 2.5	33	17.7	420
5 x 2.5 RE / 2.5	22	18.8	473
7 x 2.5 RE / 2.5	21	19.9	561
10 x 2.5 RE / 4	18	24.4	795
12 x 2.5 RE / 4	17	25.0	856
14 x 2.5 RE / 4	16	25.9	940
16 x 2.5 RE / 2.5	15	26.5	1011
19 x 2.5 RE / 6	14	28.2	1169
24 x 2.5 RE / 10	13	33.8	1608
30 x 2.5 RE / 10	12	35.5	1822
40 x 2.5 RE / 10	11	39.7	2312
2 x 4 RE / 4	49	17.6	411
3 x 4 RE / 4	43	18.3	455
4 x 4 RE / 4	43	19.3	519
5 x 4 RE / 2.5	28	20.0	571
5 x 4 RE / 4	28	20.6	587
6 x 4 RE / 4	28	21.8	671
7 x 4 RE / 4	27	21.8	709
10 x 4 RE / 6	23	26.1	1002
12 x 4 RE / 6	22	26.8	1088
14 x 4 RE / 6	21	27.8	1201
19 x 4 RE / 10	19	32.0	1609
2 x 6 RE / 6	62	18.6	498
3 x 6 RE / 6	54	19.3	561
4 x 6 RE / 6	54	20.5	644
5 x 6 RE / 6	36	21.9	738
7 x 6 RE / 6	36	23.3	897
2 x 10 RE / 10	85	20.6	662
3 x 10 RE / 10	75	21.4	760
4 x 10 RE / 10	75	22.8	884

(N)HXCH FE180/E90 (8310)

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

Number of cores x nominal cross-section / cross-section of screen (mm²)	Current rating in the air (A)	Outer diameter appr. (mm)	Total weight appr. (kg/km)
5 x 10 RE / 10	49	24.4	1026
2 x 16 RE / 16	113	22.4	881
2 x 16 RM / 16	113	22.9	908
3 x 16 RM / 16	100	23.9	1057
4 x 16 RE / 16	100	25.0	1210
4 x 16 RM / 16	100	25.6	1243
5 x 16 RM / 16	65	27.5	1456
2 x 25 RM / 16	152	26.3	1225
3 x 25 RM / 16	136	27.6	1457
4 x 25 RM / 16	136	30.7	1819
5 x 25 RM / 16	90	33.3	2163
2 x 35 RM / 16	187	28.4	1493
3 x 35 RM / 16	165	31.0	1893
3 x 35 RM / 35	165	32.1	2071
4 x 35 RM / 16	165	33.4	2285
5 x 35 RM / 16	109	36.5	2746
1 x 50 RM / 25	265	21.0	981
2 x 50 RM / 25	228	33.0	2073
3 x 50 RM / 25	201	34.9	2516
4 x 50 RM / 25	201	38.4	3095
5 x 50 RM / 25	133	42.0	3710
1 x 70 RM / 35	336	24.0	1307
3 x 70 RM / 35	255	40.4	3429
4 x 70 RM / 35	255	43.9	4174
5 x 70 RM / 35	180	48.0	5011
1 x 95 RM / 50	415	26.2	1710
3 x 95 RM / 50	314	45.4	4567
4 x 95 RM / 50	314	49.5	5589
5 x 95 RM / 50	215	54.6	6784
1 x 120 RM / 70	485	27.6	2150
3 x 120 RM / 70	364	48.5	5615
4 x 120 RM / 70	364	53.4	6937
5 x 120 RM / 70	247	58.6	8347
3 x 150 RM / 70	416	53.5	6780
4 x 150 RM / 70	416	58.6	8347
5 x 150 RM / 70	279	64.7	10124
3 x 185 RM / 95	480	59.3	8520
4 x 185 RM / 95	480	65.3	10496
3 x 240 RM / 120	565	66.4	10929
4 x 240 RM / 120	565	72.7	13438

(N)HXCH FE180/E90 (8310)

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

System / System Manufacturer	System identification	Classification	Range	Distance (a) /Width (b) / Load (g)	AbP number	AbP part no.
Normtrag	Leiter	E90	n x ≥ 1.5/1.5	a ≤ 1200 mm b = 400 mm g ≤ 20 kg/m	P-MPA-E-09-016	2.2.13 - 1
Normtrag	Rinne	E90	n x ≥ 1.5/1.5	a ≤ 1200 mm b = 300 mm g ≤ 10 kg/m	P-MPA-E-09-016	2.2.13 - 2
Normtrag	Abstandschelle	E90	n x ≥ 1.5/1.5	a ≤ 300 mm	P-MPA-E-09-016	2.2.2 - 3
Normtrag	Abstandschelle	E90	n x ≥ 1.5/1.5	a ≤ 300 mm	P-MPA-E-09-016	2.2.13 - 3
Normtrag	Bügeschelle mit LW	E90	n x ≥ 1.5/1.5	a ≤ 600 mm	P-MPA-E-09-016	2.2.2 - 4
Normtrag	Bügeschelle mit LW	E90	n x ≥ 1.5/1.5	a ≤ 600 mm	P-MPA-E-09-016	2.2.13 - 4
Niedax	RLVC 60.300 S + KTA300	E90	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 300 mm g ≤ 20 kg/m	P-1016 DMT DO	I
Niedax	RLVC 60.400 S + KTA400	E90	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 400 mm g ≤ 30 kg/m	P-1016 DMT DO	II
Niedax	RLVC 60.400 S + KTAS400 (wand)	E90	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 400 mm g ≤ 30 kg/m	P-1034 DMT DO	VII
Niedax	RLVC 60.400 S + KTAS400	E90	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 400 mm g ≤ 25 kg/m	P-1034 DMT DO	IX
PohlCon	RG-BS 60-40E4 + DB-T 40EC + AB-T 40EC	E90	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 400 mm g ≤ 30 kg/m	P-1043 DMT DO	II
PohlCon	RG-BS 60-10E4 + AB-T 10EC	E90	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 100 mm g ≤ 30 kg/m	P-1043 DMT DO	III
PohlCon	Bügeschelle AC + KHA 8	E90	n x ≥ 1.5/1.5	a ≤ 800 mm	P-1043 DMT DO	VII
OBO Bettermann	Rinne RKSM 630	E60	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 300 mm g ≤ 20 kg/m	ABP_P-MPA-E-23-001	1.1
OBO Bettermann	Rinne RKSM 640	E60	n x ≥ 1.5/1.5	a ≤ 1500 mm b = 400 mm g ≤ 20 kg/m	ABP_P-MPA-E-23-001	1.2

Technical changes reserved. All figures are therefore without guarantee.



CONTACT PERSON

Ing. Štěpán Laštůvka
Product Supervisor
+420 732 912 682
stepan.lastuvka@prakab.com