We Make
Modern Life
Possible

(N)HXH FE180/E90

SiR/FRNC halogen-free energy cable with insulation integrity and circuit integrity VDE Reg. No. 8310

SAFETY CABLES WITH CIRCUIT INTEGRITY

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
core/core 4 kV / 50 Hz

Rated Voltage
0,6/1 kV

Bending radius (min.)
12 x Ø of cable (multi core)
15 x Ø of cable (single core)

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 FE 180
DIN 4102-12: circuit integrity E90

Core identification
HD 308 S2

Temperature range
Laying temperature: min. -5°C
Operating temperature: -50°C up to 90°C
Conductor temperature: max. 90°C
Short circuit temperature: max. 90°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 bedding compound)
5. Sheath (halogen-free polymer compound, orange)

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Number of cores x nominal cross-section (mm^2)	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	12.1	28	11.7	191
3 x 1.5 RE	12.1	24	12.3	214
4 x 1.5 RE	12.1	24	13.2	246
5 x 1.5 RE	12.1	16	14.2	282
6 x 1.5 RE	12.1	15.5	15.2	324
7 x 1.5 RE	12.1	15.5	15.2	342
8 x 1.5 RE	12.1	13.5	16.7	400
10 x 1.5 RE	12.1	13	18.6	490
12 x 1.5 RE	12.1	12.5	19.2	532
14 x 1.5 RE	12.1	12	20.1	586
16 x 1.5 RE	12.1	11.5	21.1	647
19 x 1.5 RE	12.1	10.5	22.1	728
24 x 1.5 RE	12.1	9.5	26.5	1009
30 x 1.5 RE	12.1	9	28	1148
2 x 2.5 RE	7.41	37	12.5	228
3 x 2.5 RE	7.41	32	13.1	260
4 x 2.5 RE	7.41	32	14.1	304
5 x 2.5 RE	7.41	22	15.2	351
6 x 2.5 RE	7.41	21	16.4	407
7 x 2.5 RE	7.41	20.5	16.4	433
8 x 2.5 RE	7.41	18	18.1	505
8 x 2.5 RE	7.41	18	18.1	505
10 x 2.5 RE	7.41	17.5	20.2	623
12 x 2.5 RE	7.41	17.5	20.8	684
14 x 2.5 RE	7.41	16	21.8	759
16 x 2.5 RE	7.41	15	22.9	842
19 x 2.5 RE	7.41	14	24	954
24 x 2.5 RE	7.41	12.5	29	1315
2 x 4 RE	4.61	49	13.4	275
3 x 4 RE	4.61	42	14	320
4 x 4 RE	4.61	42	15.1	377
5 x 4 RE	4.61	28	16.3	440
7 x 4 RE	4.61	27	17.6	550
12 x 4 RE	4.61	22	22.6	883
19 x 4 RE	4.61	18.5	27.1	1326
2 x 6 RE	3.08	62	14.3	337
3 x 6 RE	3.08	53	15.1	399
4 x 6 RE	3.08	53	16.3	476
5 x 6 RE	3.08	36	17.7	559
7 x 6 RE	3.08	34	19.1	709
2 x 10 RE	1.83	85	15.9	456
3 x 10 RE	1.83	74	16.8	552
4 x 10 RE	1.83	74	18.2	670
4 x 10 RM	1.83	74	18.7	692
5 x 10 RE	1.83	49	19.8	800
5 x 10 RM	1.83	49	20.4	827
7 x 10 RE	1.83	48	21.5	1023
1 x 16 RE	1.15	131	11.5	271
1 x 16 RM	1.15	131	11.7	278
2 x 16 RE	1.15	113	17.8	616
2 x 16 RM	1.15	113	18.2	639
3 x 16 RE	1.15	98	18.8	761

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3 x 16 RM	1.15	98	19.3	788
4 x 16 RE	1.15	98	20.4	934
4 x 16 RM	1.15	98	21	965
5 x 16 RE	1.15	65	22.3	1128
5 x 16 RM	1.15	65	22.9	1164
1 x 25 RM	0.727	177	13.4	392
1 x 25 RM	0.727	177	13.4	392
2 x 25 RM	0.727	152	21.5	935
3 x 25 RM	0.727	133	22.9	1165
3 x 25 + 16 RM/RM	0.727	133	24.1	1326
4 x 25 RM	0.727	133	26	1509
5 x 25 RM	0.727	90	28.4	1819
1 x 35 RM	0.524	217	14.4	494
2 x 35 RM	0.524	186	23.6	1192
3 x 35 RM	0.524	162	26.1	1575
3 x 35 + 16 RM/RM	0.524	162	27.1	1721
4 x 35 RM	0.524	162	28.5	1945
5 x 35 RM	0.524	109	31.4	2373
1 x 50 RM	0.387	265	16.2	642
3 x 50 RM	0.387	197	29.9	2082
3 x 50 + 25 RM/RM	0.387	197	31.4	2329
4 x 50 RM	0.387	197	33.3	2630
5 x 50 RM	0.387	133	36.7	3203
1 x 70 RM	0.268	336	18	858
3 x 70 RM	0.268	250	34.2	2858
3 x 70 + 35 RM/RM	0.268	250	35.7	3183
4 x 70 RM	0.268	250	37.7	3578
5 x 70 RM	0.268	180	41.6	4368
1 x 95 RM	0.193	415	20.2	1140
3 x 95 RM	0.193	308	39	3845
3 x 95 + 50 RM/RM	0.193	308	41	4296
4 x 95 RM	0.193	308	43.1	4827
4 x 95 RM	0.193	308	43.1	4826
5 x 95 RM	0.193	215	48.1	5960
1 x 120 RM	0.153	485	21.6	1384
3 x 120 RM	0.153	359	42.1	4683
3 x 120 + 70 RM/RM	0.153	359	44.9	5380
4 x 120 RM	0.153	359	46.8	5935
5 x 120 RM	0.153	247	51.9	7278
1 x 150 RM	0.124	557	23.6	1680
3 x 150 RM	0.124	412	46.8	5778
3 x 150 + 70 RM/RM	0.124	412	48.7	6370
4 x 150 RM	0.124	412	51.8	7279
5 x 150 RM	0.124	279	57.7	8976
1 x 185 RM	0.0991	646	25.8	2061
3 x 185 + 95 RM/RM	0.0991	475	54.1	7991
4 x 185 RM	0.0991	475	57.5	9058
1 x 240 RM	0.0754	774	28.8	2650
3 x 240 + 120 RM/RM	0.0754	564	60.9	10297
4 x 240 RM	0.0754	564	64.7	11689

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CONTACT PERSON

Ing. Dan Bachtík
Product Supervisor
+420734366090
dan.bachtik@prakab.cz