



(N)HXH FE180/E90

SiR/FRNC halogen-free energy cable with insulation integrity and circuit integrity VDE Reg. No. K054

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.. 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. K054



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
IEC 60331-21: insulation integrity FE180
DIN 4102-12: circuit integrity E90

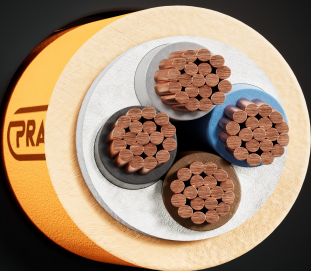


Core identification
HD 308 S2



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) or round stranded (RM)
- 2 Core insulation (silicone rubber)
- 3 Inner covering (halogen-free tape or halogen free polymer compound)
- 4 Sheath (halogen-free polymer compound, orange)

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	29	9.3	126
3 x 1.5 RE	12.1	24	9.9	147
4 x 1.5 RE	12.1	24	10.7	174
5 x 1.5 RE	12.1	24	11.5	202
7 x 1.5 RE	12.1	16	12.6	254
10 x 1.5 RE	12.1	13	15.8	379
12 x 1.5 RE	12.1	13	16.3	414
14 x 1.5 RE	12.1	12	17.2	466
16 x 1.5 RE	12.1	12	18.0	517
19 x 1.5 RE	12.1	11	19.1	591
21 x 1.5 RE	12.1	10	20.0	630
24 x 1.5 RE	12.1	10	22.3	777
30 x 1.5 RE	12.1	8	23.5	894
40 x 1.5 RE	12.1	8	28.5	1298
52 x 1.5 RE	12.1	8	31.8	1626
61 x 1.5 RE	12.1	7	33.9	1865
2 x 2.5 RE	7.41	38	10.2	161
3 x 2.5 RE	7.41	32	10.8	190
4 x 2.5 RE	7.41	32	11.6	225
5 x 2.5 RE	7.41	32	12.8	269
7 x 2.5 RE	7.41	20	13.9	343
10 x 2.5 RE	7.41	17	17.6	510
12 x 2.5 RE	7.41	16	18.1	562
14 x 2.5 RE	7.41	16	19.1	635
16 x 2.5 RE	7.41	15	20.0	707
19 x 2.5 RE	7.41	14	21.2	811
21 x 2.5 RE	7.41	13	22.5	878
24 x 2.5 RE	7.41	12	24.8	1063
30 x 2.5 RE	7.41	10	28.3	1396
40 x 2.5 RE	7.41	10	31.5	1760
52 x 2.5 RE	7.41	10	35.4	2235
61 x 2.5 RE	7.41	9	37.7	2569
2 x 4 RE	4.61	51	12.2	233
3 x 4 RE	4.61	42	12.8	275
4 x 4 RE	4.61	42	14.0	334
5 x 4 RE	4.61	42	15.2	391
2 x 6 RE	3.08	63	13.1	291
3 x 6 RE	3.08	54	14.1	356
4 x 6 RE	3.08	54	15.2	429
5 x 6 RE	3.08	54	16.7	514
2 x 10 RE	1.83	86	15.1	418
3 x 10 RE	1.83	74	16.2	520
4 x 10 RE	1.83	74	17.8	642
5 x 10 RE	1.83	74	19.6	778
1 x 16 RM	1.15	131	9.7	213
2 x 16 RE	1.15	113	17.4	588
2 x 16 RM	1.15	113	17.9	611
3 x 16 RE	1.15	98	18.4	732
3 x 16 RM	1.15	98	19.2	764
4 x 16 RE	1.15	98	20.2	911
4 x 16 RM	1.15	98	21.4	972
5 x 16 RE	1.15	98	22.4	1118



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)
5 x 16 RM	1.15	98	23.2	1154
1 x 25 RM	0.727	177	11.3	313
2 x 25 RM	0.727	133	21.6	924
3 x 25 RM	0.727	133	23.2	1164
4 x 25 RM	0.727	133	25.4	1447
5 x 25 RM	0.727	133	30.3	1935
1 x 35 RM	0.524	217	12.8	422
3 x 35 RM	0.524	162	28.5	1713
4 x 35 RM	0.524	162	31.1	2113
5 x 35 RM	0.524	162	32.5	2454
1 x 50 RM	0.387	265	14.5	557
3 x 50 RM	0.387	197	31.9	2215
4 x 50 RM	0.387	197	35.1	2755
5 x 50 RM	0.387	197	38.1	3259
1 x 70 RM	0.268	336	16.6	770
3 x 70 RM	0.268	250	33.8	2510
4 x 70 RM	0.268	250	40.4	3801
5 x 70 RM	0.268	250	42.7	4298
1 x 95 RM	0.193	415	18.9	1049
3 x 95 RM	0.193	308	38.3	4275
4 x 95 RM	0.193	308	45.6	5066
5 x 95 RM	0.193	308	46.6	6127
1 x 120 RM	0.153	485	20.6	1299
3 x 120 RM	0.153	359	43.8	4796
4 x 120 RM	0.153	359	50.0	6262
5 x 120 RM	0.153	359	50.6	7740
1 x 150 RM	0.124	557	22.5	1582
3 x 150 RM	0.124	412	42.8	5805
4 x 150 RM	0.124	412	55.3	7702
5 x 150 RM	0.124	412	56.4	9675
1 x 185 RM	0.099	646	24.6	1950
3 x 185 RM	0.099	475	52.3	7159
4 x 185 RM	0.099	475	56.3	8769
5 x 185 RM	0.099	475	62.3	11932
1 x 240 RM	0.075	774	27.8	2537
3 x 240 RM	0.075	564	59.1	9288
4 x 240 RM	0.075	564	68.0	11965



System / System Manufacturer	System identification	Classification	Range	Distance (a) /Width (b) / Load (g)	AbP number	Laying type No.
OBO Bettermann	RKSM 630 + AW55/31	E90	$n \times \geq 1.5$	a $\leq$ 1500 mm b $\leq$ 300 mm g $\leq$ 20 kg/m	P-MPA-E-23-003	2.1
OBO Bettermann	RKSM 640 + AW55/41	E90	$n \times \geq 1.5$	a $\leq$ 1500 mm b $\leq$ 400 mm g $\leq$ 20 kg/m	P-MPA-E-23-003	2.2
OBO Bettermann	2056/M	E90	$n \times \geq 1.5$	a $\leq$ 800 mm	P-MPA-E-23-003	8.1
OBO Bettermann	732/733	E90	$n \times \geq 1.5$	a $\leq$ 800 mm	P-MPA-E-23-003	8.2
Niedax	Bügelschellen B	E90	$n \times \geq 1.5$	a $\leq$ 800 mm	P-MPA-E-23-003	9.1
Niedax	Abstandschelle SAS	E90	$n \times \geq 1.5$	a $\leq$ 800 mm	P-MPA-E-23-003	9.2

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