



# PRAFlaDur+ 90

(N)HXH FE180/E90, P90-R, PS90, B2ca s1a d1 a1 SiR/FRNC energy cables, with circuit integrity, UV resistant, Water resistant

**SAFETY CABLES WITH CIRCUIT INTEGRITY**

Cables are designed for fixed distribution of electricity in buildings with a high concentration of people to protect them and protect the technical equipment of buildings in the event of fire, where there is no requirement to maintain the functionality of the cable installation in fire. In case of fire, the cable releases a small amount of heat and smoke. The cables are resistant to UV radiation and water AD1-AD7.



## TECHNICAL DATA



**Standard**  
TP PRAKAB 04/08  
ZP PRAKAB 01/17



**Bending radius (min.)**  
12 x  $\varnothing$  of cable (multicore)  
15 x  $\varnothing$  of cable (singlecore)



**Core identification**  
ČSN 33 0166 ed. 2  
ČSN EN 50334



**Certificate**  
EZÚ Czech Republic  
TSÚS Slovakia



**Fire properties**  
ČSN EN 60332-1-2: self-extinguishing  
ČSN EN 60754-2: halogen-free, non-corrosive combustion gases  
ČSN EN 61034-2: low smoke emission  
ČSN EN 60332-3-22: reduced flame propagation  
ČSN 73 0895, STN 92 0205: circuit integrity  
ČSN EN 13501-6: fire classification  
CPR: B2ca s1a d1 a1



**Temperature range**  
Laying temperature: min. -5°C  
Operating temperature: -40°C up to 60°C  
Conductor temperature: max. 90°C  
Short circuit temperature: max. 250°C



**Test Voltage**  
core/core 4 kV / 50 Hz



**Rated Voltage**  
0.6/1 kV

## 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 filling compound)
- 5 Sheath (halogen-free polymer compound, brown, UV resistant, Water resistant)

Number of cores x nominal cross-section (mm <sup>2</sup> )	Max. conductor resistance (Ω/km)	Current rating in the earth (A)	Current rating in the air (A)	Outer diameter appr. (mm)	Total weight appr. (kg/km)
2 x 1.5 RE	12.1	45	28	12.0	194
3 x 1.5 RE	12.1	38	24	12.6	217
4 x 1.5 RE	12.1	38	24	13.5	249
5 x 1.5 RE	12.1	38	24	14.5	285
7 x 1.5 RE	12.1	19	16	15.5	345
10 x 1.5 RE	12.1	17	14	18.9	493
12 x 1.5 RE	12.1	15	13	19.5	535
14 x 1.5 RE	12.1	15	13	20.6	601
19 x 1.5 RE	12.1	12	11	22.6	744
24 x 1.5 RE	12.1	11	10	27.2	1042
30 x 1.5 RE	12.1	10	9	28.7	1183
40 x 1.5 RE	12.1	10	8	32.6	1542
2 x 2.5 RE	7.41	59	37	12.8	231
3 x 2.5 RE	7.41	50	32	13.4	263
4 x 2.5 RE	7.41	50	32	14.4	306
5 x 2.5 RE	7.41	50	32	15.5	353
7 x 2.5 RE	7.41	24	21	16.6	434
12 x 2.5 RE	7.41	19	17	21.3	697
14 x 2.5 RE	7.41	19	16	22.2	772
19 x 2.5 RE	7.41	16	14	24.5	968
24 x 2.5 RE	7.41	14	13	29.6	1347
30 x 2.5 RE	7.41	14	12	31.3	1553
40 x 2.5 RE	7.41	13	11	35.6	2025
2 x 4 RE	4.61	77	49	13.7	278
3 x 4 RE	4.61	65	41	14.3	322
4 x 4 RE	4.61	65	41	15.4	380
5 x 4 RE	4.61	65	41	16.6	443
2 x 6 RE	3.08	97	62	14.6	340
3 x 6 RE	3.08	82	52	15.4	401
4 x 6 RE	3.08	82	52	16.6	443
5 x 6 RE	3.08	82	52	18.0	562
2 x 10 RE	1.83	129	85	16.2	458
3 x 10 RE	1.83	109	71	17.1	555
4 x 10 RE	1.83	109	71	18.5	672
5 x 10 RE	1.83	109	71	20.1	802
1 x 16 RM	1.15	229	136	12.2	287
2 x 16 RM	1.15	167	112	18.1	618
3 x 16 RM	1.15	141	94	19.1	764
4 x 16 RM	1.15	141	94	20.9	948
5 x 16 RM	1.15	141	94	22.8	1143
1 x 25 RM	0.727	293	180	14.1	411
3 x 25 RM	0.727	182	126	23.5	1148
3 x 25 + 16 RM/RE	0.727 / 1.15	182	126	24.6	1337
3 x 25 + 16 RM/RM	0.727 / 1.15	182	126	24.7	1345
4 x 25 RM	0.727	182	126	26.8	1545
5 x 25 RM	0.727	182	126	29.2	1858
1 x 35 RM	0.524	354	220	15.2	514
3 x 35 RM	0.524	219	155	27.0	1611
3 x 35 + 16 RM/RM	0.524 / 1.15	219	155	27.9	1758
4 x 35 RM	0.524	219	155	29.3	1984
5 x 35 RM	0.524	219	155	32.9	2471
1 x 50 RM	0.387	419	268	17.0	663



Number of cores x nominal cross-section (mm <sup>2</sup> )	Max. conductor resistance (Ω/km)	Current rating in the earth (A)	Current rating in the air (A)	Outer diameter appr. (mm)	Total weight appr. (kg/km)
3 x 50 RM	0.387	259	189	30.7	2123
3 x 50 + 25 RM/RM	0.387 / 0.727	259	189	32.8	2427
4 x 50 RM	0.387	259	189	34.3	2695
5 x 50 RM	0.387	259	189	37.8	3275
1 x 70 RM	0.268	515	336	18.7	881
3 x 70 RM	0.268	317	238	35.1	2918
3 x 70 + 50 RM/RM	0.268 / 0.387	317	238	37.7	3418
4 x 70 RM	0.268	317	238	38.6	3644
5 x 70 RM	0.268	317	238	42.5	4440
1 x 95 RM	0.193	616	412	20.9	1166
3 x 95 RM	0.193	379	294	39.9	3913
3 x 95 + 50 RM/RM	0.193 / 0.387	379	294	41.9	4369
4 x 95 RM	0.193	379	294	44.6	4976
5 x 95 RM	0.193	379	294	49.2	6071
1 x 120 RM	0.153	703	479	22.3	1411
3 x 120 RM	0.153	432	341	43.0	4757
3 x 120 + 70 RM/RM	0.153 / 0.268	432	341	46.0	5484
4 x 120 RM	0.153	432	341	47.9	6043
5 x 120 RM	0.153	432	341	53.0	7397
1 x 150 RM	0.124	787	547	24.3	1709
3 x 150 RM	0.124	483	391	47.9	6043
3 x 150 + 70 RM/RM	0.124 / 0.268	483	391	50.4	6553
3 x 150 + 95 RM/RM	0.124 / 0.193	483	391	51.1	6813
4 x 150 RM	0.124	483	391	52.9	7398
5 x 150 RM	0.124	483	391	58.8	9108
1 x 185 RM	0.099	887	630	26.5	2094
3 x 185 RM	0.099	544	451	52.8	7252
3 x 185 + 95 RM/RM	0.099 / 0.193	544	451	55.6	8177
4 x 185 RM	0.099	544	451	58.6	9190
5 x 185 RM	0.075	544	451	64.9	11257
1 x 240 RM	0.075	1030	750	29.5	2686
3 x 240 RM	0.075	629	534	59.6	9403
3 x 240 + 120 RM/RM	0.075 / 0.153	629	534	62.0	10436
4 x 240 RM	0.075	629	534	66.2	11912

## CONTACT PERSON

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

