

NHXCH E 90

Halogen-Free Cable with Concentric Conductor and Circuit Integrity of 90 Minutes

according to DIN VDE 0266-3 and DIN 4102-12



Construction

Solid or stranded bare copper conductor, insulation of a halogen-free cross-linked polymeric compound, common core covering, concentric conductor formed by copper wires with counter helix of copper tape, flame protective wrapping, outer sheath of flame retardant and halogen-free polymer compound, orange.

Application

Safety cables are used in all locations where a high degree of protection against fire and fire-damage has to be provided for human life and equipment and are, therefore, subject to high security requirements. These cables may be used indoors and outdoors. They may not be installed directly into the ground and into the water. Safety cables are considered as protectively insulated.

Circuit integrity of 90 minutes (system) and insulation integrity of 180 minutes.

Temperature range

During laying - 5°C till + 70°C

After laying - 40°C till + 70°C

Admissible conductor temperature + 90°C

Number of cores and nominal cross section	Price	Copper figure	Conductor construction (approx. value)	Overall diameter	Weight
mm ²	EUR / km	kg / km	mm	ca. mm	ca. kg / km
NHXCH E 90 0,6/1 KV					
2 x 1,5 RE / 1,5	12.995,97	54	1 x 1,38	16,0	300
2 x 2,5 RE / 2,5	13.722,35	83	1 x 1,78	17,0	350
3 x 1,5 RE / 1,5	14.914,37	73	1 x 1,38	17,0	320
3 x 2,5 RE / 2,5	16.065,18	113	1 x 1,78	18,0	380
3 x 4 RE / 4	18.262,70	168	1 x 2,25	19,0	480
3 x 6 RE / 6	20.915,40	250	1 x 2,76	20,0	600
3 x 10 RE / 10	24.781,79	425	1 x 3,56	23,0	850
3 x 16 RM / 16	33.105,24	670	1 x 4,51	26,0	1200
3 x 25 RM / 25	49.267,24	1045	7 x 2,13	30,0	1700
3 x 35 RM / 35	59.088,08	1460	7 x 2,52	32,0	2200
3 x 50 RM / 50	68.644,58	2083	19 x 1,83	37,0	2900
3 x 70 RM / 70	94.020,34	2913	19 x 2,17	42,0	3900
3 x 95 RM / 95	125.735,97	3949	19 x 2,52	48,0	5200
3 x 120 RM / 120	155.433,57	4985	37 x 2,03	52,0	6400
3 x 150 RM / 70	179.339,22	5313	37 x 2,27	56,0	7100
3 x 185 RM / 95	220.370,43	6649	37 x 2,52	62,0	8800
3 x 240 RM / 120	251.459,52	8585	61 x 2,24	70,0	11300

Number of cores and nominal cross section	Price	Copper figure	Conductor construction (approx. value)	Overall diameter	Weight
mm ²	EUR / km	kg / km	mm	ca. mm	ca. kg / km
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4 x 1,5 RE / 1,5	18.559,95	88	1 x 1,38	18,0	450
4 x 2,5 RE / 2,5	19.716,97	138	1 x 1,78	19,0	500
4 x 4 RE / 4	22.167,59	208	1 x 2,25	21,0	600
4 x 6 RE / 6	24.518,34	309	1 x 2,76	22,0	750
4 x 10 RE / 10	31.436,02	525	1 x 3,56	25,0	1100
4 x 16 RM / 16	44.593,54	829	1 x 4,51	29,0	1500
4 x 25 RM / 16	59.416,61	1190	7 x 2,13	32,0	2000
4 x 35 RM / 16	66.095,02	1590	7 x 2,52	35,0	2500
4 x 50 RM / 25	76.022,85	2295	19 x 1,83	40,0	3300
4 x 70 RM / 35	99.701,48	3210	19 x 2,17	44,0	4400
4 x 95 RM / 50	135.118,78	4383	19 x 2,52	52,0	6100
4 x 120 RM / 70	167.701,14	5613	37 x 2,03	57,0	7500
4 x 150 RM / 70	200.976,80	6813	37 x 2,27	62,0	9000
4 x 185 RM / 95	255.120,05	8499	37 x 2,52	68,0	11000
4 x 240 RM / 120	327.467,62	10985	61 x 2,24	76,0	14500
7 x 1,5 RE / 2,5	26.690,09	139	1 x 1,38	22,0	600
10 x 1,5 RE / 2,5	36.844,88	183	1 x 1,38	25,0	700
12 x 1,5 RE / 2,5	40.878,97	214	1 x 1,38	27,0	750
16 x 1,5 RE / 4	52.319,04	280	1 x 1,38	29,0	900
21 x 1,5 RE / 4	68.085,58	384	1 x 1,38	31,0	1100
24 x 1,5 RE / 6	77.767,06	430	1 x 1,38	34,0	1300
30 x 1,5 RE / 6	93.447,86	520	1 x 1,38	36,0	1500
7 x 2,5 RE / 2,5	30.051,68	208	1 x 1,78	22,0	650
10 x 2,5 RE / 4	41.036,31	298	1 x 1,78	27,0	900
12 x 2,5 RE / 4	45.694,60	348	1 x 1,78	28,0	950
16 x 2,5 RE / 6	58.047,12	470	1 x 1,78	30,0	1200
21 x 2,5 RE / 6	76.326,29	595	1 x 1,78	33,0	1400
24 x 2,5 RE / 10	87.588,36	725	1 x 1,78	37,0	1700
30 x 2,5 RE / 10	105.402,00	875	1 x 1,78	39,0	1900

Remark: Insulation integrity under the impact of flames > 180 min. according to DIN VDE 0472-814 / 8.83
function integrity of electrical cable installations > 90 min. according to DIN 4102-12.
in compliance with VDE 0107 and 0108.