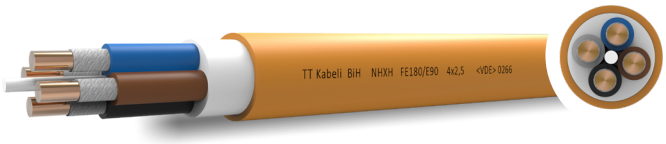
ttcables
ELECTRIC CABLE WORKS



NHXH FE180/E90

Halogen-free power and signal cable 0,6/1 kV, with improved properties under fire, and 90-minute circuit integrity maintenance

APPLICATION

NHXH cables are suitable for fixed installation in dry and damp environment, on or under plaster, on cable trays, same as in walls and concrete. Not intended for direct laying in ground or water. For outdoor application can be laid in tubes, but in that case should be taken all precautionary measures necessary to prevent water penetration into the tubes. Suitable for electric installations with marked fire-fighting and function preserving requirements, for alarm systems, fire sensors, evacuation elevators and other supply systems in an emergency. Appropriate for application in all situations where people and material goods need to be protected in case of fire. Recommended for public buildings frequented by a lot of people, and for buildings of high material value, for industrial complexes, electric power plants, transformer stations, municipal facilities, hotels, shopping malls, hospitals, schools, airports, underground railways and similar. Important- NHXH cables should not be laid on common trays, but on fire-resistant trays which retain their geometry in case of fire. Keeping NHXH cables in the same position in case of fire, enables additional protection of cable conductivity, by means of the mineral layer discharged around the cable at increased temperature.

CORE IDENTIFICATION

According to HD 308 S2

Insulation Color:

Single-core: Green/Yellow OR Black
3-core (a): Green/Yellow Brown Blue
3-core (b): Black Brown Grey
4-core (a): Green/Yellow Brown Black Grey
4-core (b): Blue Brown Black Grey
5-core: Green/Yellow Blue Brown Black Grey

Outer Sheath Colour:

Orange
Other colours available on request

TECHNICAL CHARACTERISTICS

Test voltage: 4 kV
Rated voltage: 0,6/1 kV
Bending radius (min): single-core- 15D; multicore- 12D
Min. laying temperature: -5°C
Max. short-circuit temperature: 250°C
Operating temperature: -35°C to 90°C

STANDARD

DIN VDE 0266, HD 604 S1

CONSTRUCTION

Conductors: Cu annealed conductors, class 1 or class 2 according to EN 60228
Insulation: XLPE compound DIX 3
Bedding: Extruded elastomere or plastomere compound or plastic tape
Sheath: HFFR compound HXM1

CERTIFICATION

CE
IEC International Electrotechnical Commission
REACH COMPLIANT
RoHS compliant

NOMINAL CROSS-SECTION	CONDUCTOR CONSTRUCTION	MAX. RESISTANCE AT 20°C	CURRENT CAPACITY IN AIR	OUTER DIAM. (APPROX.)	METAL WEIGHT	CABLE WEIGHT (APPROX.)
mm2		Ω/km	A	mm	kg/km	kg/km
1x10	RE	1,830	77	8,6	96,0	169
1x16	RE/RM	1,150	102	9,5	153,6	238
1x25	RM	0,727	138	11,0	240,0	347
1x35	RM	0,524	170	12,1	336,0	457
1x50	RM	0,387	207	13,6	480,0	624
1x70	RM	0,268	263	15,2	672,0	841
1x95	RM	0,193	325	16,8	912,0	1103
1x120	RM	0,153	380	18,4	1152,0	1370
1x150	RM	0,124	437	20,2	1440,0	1695
1x185	RM	0,0991	507	22,1	1776,0	2071
1x240	RM	0,0754	604	24,5	2304,0	2644
1x300	RM	0,0601	697	26,7	2880,0	3264
1x400	RM	0,0470	811	30,4	3840,0	4315
2x1,5	RE	12,1	26	11,7	28,8	196
2x2,5	RE	7,41	34	12,5	48,0	237
2x4	RE	4,61	44	13,5	76,8	295
2x6	RE	3,08	56	14,5	115,2	363
2x10	RE	1,830	74	16,4	192,0	492
2x16	RE/RM	1,150	98	18,0	307,2	672
2x25	RM	0,727	133	21,0	480,0	970
2x35	RM	0,524	162	23,2	672,0	1257
2x50	RM	0,387	197	26,8	960,0	1738
3x1,5	RE	12,1	24	12,2	43,2	216
3x2,5	RE	7,41	32	13,0	72,0	267
3x4	RE	4,61	42	14,0	115,2	339
3x6	RE	3,08	53	15,2	172,8	427
3x10	RE	1,830	74	16,9	288,0	593
3x16	RE/RM	1,150	98	18,9	460,8	828
3x25	RM	0,727	133	22,2	720,0	1213
3x35	RM	0,524	162	24,5	1008,0	1592
3x50	RM	0,387	197	28,0	1440,0	2182
3x70	RM	0,268	250	31,8	2016,0	2959
3x95	RM	0,193	308	36,1	2736,0	3933
3x120	RM	0,153	359	39,7	3456,0	4885
3x150	RM	0,124	412	43,8	4320,0	6047
3x185	RM	0,0991	475	48,7	5328,0	7477
3x240	RM	0,0754	564	54,0	6912,0	9506
3x300	RM	0,0601	649	59,6	8640,0	11781
3x25+16	RM	0,727/1,150	133	22,6	873,6	1165
3x35+16	RM	0,524/1,150	162	24,6	1161,6	1511
3x50+25	RM	0,387/0,727	197	28,4	1680,0	2114

NOMINAL CROSS-SECTION	CONDUCTOR CONSTRUCTION	MAX. RESISTANCE AT 20°C	CURRENT CAPACITY IN AIR	OUTER DIAM. (APPROX.)	METAL WEIGHT	CABLE WEIGHT (APPROX.)
mm2		Ω/km	A	mm	kg/km	kg/km
3x70+35	RM	0,268/0,524	250	32,8	2352,0	2929
3x95+50	RM	0,193/0,387	308	26,8	3216,0	3920
3x120+70	RM	0,153/0,268	359	40,9	4128,0	4957
3x150+70	RM	0,124/0,268	412	45,0	4992,0	6023
3x185+95	RM	0,0991/0,193	475	49,8	6240,0	7454
3x240+120	RM	0,0754/0,153	564	55,7	8064,0	9562
3x300+150	RM	0,0601/0,124	649	61,4	10080,0	11888
4x1,5	RE	12,1	24	12,9	57,6	253
4x2,5	RE	7,41	32	13,9	96,0	316
4x4	RE	4,61	42	15,1	153,6	407
4x6	RE	3,08	53	16,3	230,4	517
4x10	RE	1,830	74	18,3	384,0	728
4x16	RE/RM	1,150	98	20,5	614,4	1029
4x25	RM	0,727	133	24,1	960,0	1515
4x35	RM	0,524	162	26,8	1344,0	1998
4x50	RM	0,387	197	30,6	1920,0	2746
4x70	RM	0,268	250	35,3	2688,0	3776
4x95	RM	0,193	308	39,5	3648,0	4967
4x120	RM	0,153	359	44,0	4608,0	6230
4x150	RM	0,124	412	48,6	5760,0	7712
4x185	RM	0,0991	475	53,5	7104,0	9458
4x240	RM	0,0754	564	59,9	9216,0	12116
4x300	RM	0,0601	649	65,6	11520,0	14994
5x1,5	RE	12,1	24	13,8	72,0	288
5x2,5	RE	7,41	32	14,9	120,0	365
5x4	RE	4,61	42	16,2	192,0	474
5x6	RE	3,08	53	17,6	288,0	608
5x10	RE	1,830	74	19,8	480,0	863
5x16	RE/RM	1,150	98	22,3	768,0	1230
5x25	RM	0,727	133	26,4	1200,0	1821
5x35	RM	0,524	162	29,3	1680,0	2411
5x50	RM	0,387	197	34,0	2400,0	3364
5x70	RM	0,268	250	38,7	3360,0	4575
5x95	RM	0,193	308	43,4	4560,0	6030
5x120	RM	0,153	359	48,3	5760,0	7567
5x150	RM	0,124	412	53,4	7200,0	9376
5x185	RM	0,0991	475	59,3	8880,0	11577
5x240	RM	0,0754	564	66,0	11520,0	14751
5x300	RM	0,0601	649	72,4	14400,0	18200