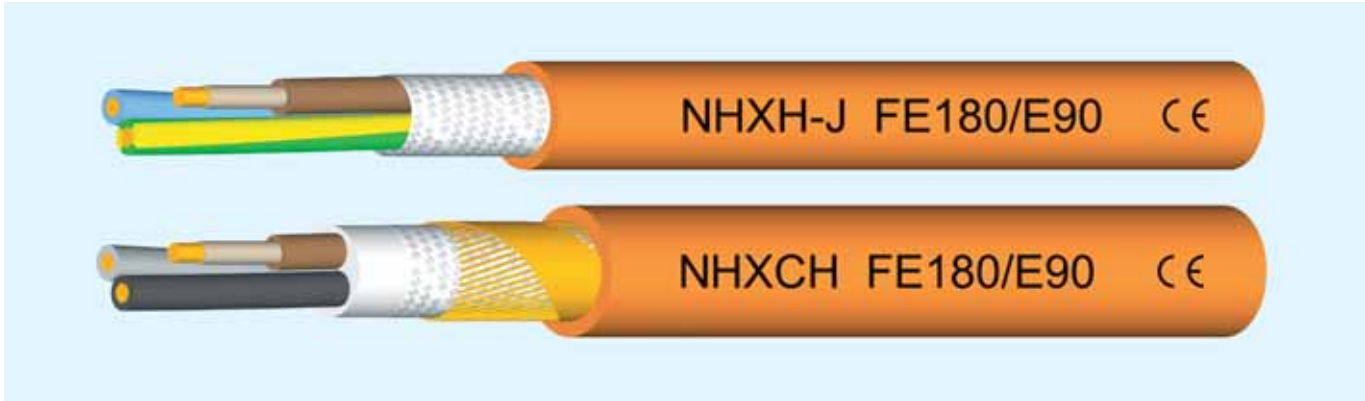


NHXH, NHXCH FE 180/E90

Fire resistant cables with orange sheath, halogen-free



Cable structure

- Bare copper conductor, solid or stranded according to IEC 60228 cl. 1 or 2
- Double core insulation of mica tape and cross-linked polymer compound
- Color coded cores according to DIN VDE 0293-308, green-yellow earth core (3 cores and more)
- Cores stranded in layers and wrapped with glass-fibre tape as flame-protection
- Version NHXCH concentric conductor of copper wires and copper tape
- Orange sheath of halogen-free polymer compound according to DIN VDE 0207 part 24, flame retardant

Tests

- Flame-retardant to DIN VDE 0482 part 266-2 /HD 405.3/BS 4066 PT3/EN 50266-2/IEC 60332-3
- Low corrosiveness of combustion gases to DIN VDE 0482 part 267/BS 6425 PT2/EN 50267-2-2/IEC 60754-2
- Halogen-free to DIN VDE 0482 part 267/BS 6425 PT1/EN 50267-2-1/IEC 60754-1
- Smoke density to DIN VDE 0482 part 268/HD 606/BS 7622 PT1, PT2/EN 50268-1,-2/IEC 61034-1,-2
- Insulation integrity under direct flame propagation according to DIN VDE 0472 part 814, IEC 60331
- Function integrity according to DIN VDE 4102 part 12 of electrical cable system for a period of 90 min.

Color codes of NHXCH

- 2-core cable: blue/brown
- 3-core cable: brown/black/grey
- 4-core cable: blue/brown/black/grey
- 7-cores and more: black cores with white numbering

Application

These flame-resistant cables are used for all locations where a special protection against fire and fire damage to human life and equipment is necessary such as in industry complexes, power stations, public buildings, hotels, airports, subways, theatres, hospitals etc. These cables are suitable for fixed installation in dry or wet areas but not suitable for direct burial into earth.

FE180: Insulation integrity for 180 min. Test according to IEC 60331 and DIN VDE 0472 part 814 Insulation integrity under direct impact of flames for a period of 180 minutes

E90: Function integrity according to DIN VDE 4102 part 12 of electrical cable system for a period of min. 90 minutes assures the functional performance of water-pressure rising systems to avoid smoke and heat in safety stairs, machine rooms, emergency lifts, extract systems etc.

Note

CE = the product is conformed with the EC Low-Voltage Directive 73/23/EEC
Conforms to RoHS.

Technical data

- Halogen-free, flame-resistant cable according to DIN VDE 0266, orange
- **Insulation integrity under the impact** of flames 180 min according to IEC 60331, DIN VDE 0472 part 814
- **Function integrity according to DIN VDE 4102 part 12** E90
- **Temperature range** from -40 °C to +70 °C
max. permitted temperature at conductor +90 °C
- **Nominal voltage** U_0/U 0,6/1 kV
- **Test voltage a.c.** 4000 V
- **Minimum bending radius** approx. 15× cable diameter
- **Radiation resistance** 200×10^6 cJ/kg (up to 200 Mrad)

NHXH, NHXCH FE 180/E90

Fire resistant cables with orange sheath, halogen-free

NHXH FE180/E90

Part No.	Number of cores x core cross section [mm²]		Approx. outer Ø [mm]	Cooper weight [kg/km]	Approx. cable weight [kg/km]
0553000	3×1,5	re	15,0	43	350
0553001	3×2,5	re	16,0	72	390
0553002	3×4	re	17,0	115	475
0553003	3×6	re	18,5	173	560
0553004	3×10	re	19,5	288	720
0553005	3×16	rm	22,0	461	970
0552990	3×25	rm	26,0	720	1400
0552991	3×35	rm	29,0	1008	1770
0552992	3×35+16	rm	29,5	1162	1930
0552993	3×50+25	rm	33,5	1680	2610
0552994	3×70+35	rm	38,0	2352	3470
0552995	3×95+50	rm	43,0	3216	4670
0552996	3×120+70	rm	47,0	4128	5810
0552997	3×150+70	rm	51,0	4992	6840
0552998	3×185+95	rm	57,0	6240	8600
0552999	3×240+120	rm	62,5	8064	10900
0553006	4×1,5	re	16,0	58	380
0553007	4×2,5	re	18,0	96	465
0553008	4×4	re	19,0	154	560
0553009	4×6	re	20,0	230	650
0553010	4×10	re	22,0	384	880
0553011	4×16	rm	24,0	614	1190
0553012	4×25	rm	28,0	960	1730
0555013	4×35	rm	31,0	1344	2200
0553014	4×50	rm	35,0	1920	2890

Part No.	Number of cores x core cross section [mm²]		Approx. outer Ø [mm]	Cooper weight [kg/km]	Approx. cable weight [kg/km]
0553030	4×70	rm	40,0	2688	3920
0553031	4×95	rm	45,0	3648	5210
0553070	4×120	rm	49,0	4608	6370
0553071	4×150	rm	54,0	5760	8070
0553072	4×185	rm	59,0	7104	9970
0553073	4×240	rm	66,0	9216	12830
0553015	5×1,5	re	18,0	72	475
0553016	5×2,5	re	19,0	120	500
0553017	5×4	re	20,0	192	600
0553018	5×6	re	21,0	288	710
0553019	5×10	re	24,0	480	930
0553020	5×16	rm	26,0	768	1430
0553021	5×25	rm	30,0	1200	1910
0553028	5×35	rm	34,0	1680	2800
0553029	5×50	rm	39,0	2500	3730
0553022	7×1,5	re	19,0	101	560
0553027	7×2,5	re	21,0	168	750
0553025	10×1,5	re	23,0	144	750
0553026	10×2,5	re	24,8	240	900
0553023	12×1,5	re	25,0	173	850
0553024	12×2,5	re	26,1	288	990

NHXCH FE180/E90

0553032	3 × 1,5/1,5	re	16,9	66	370
0553033	3 × 2,5/2,5	re	18,0	104	430
0553034	3 × 4/4	re	19,0	161	530
0553035	3 × 6/6	re	20,1	240	640
0553036	3 × 10/10	re	21,8	408	850
0553037	3 × 16/16	rm	24,5	643	1130
0553038	3 × 25/16	rm	29,0	874	1550
0553039	3 × 35/16	rm	30,0	1162	2000
0553040	3 × 50/25	rm	33,0	1680	2600
0553041	3 × 70/35	rm	37,0	2352	3480
0553042	3 × 95/50	rm	43,0	3216	4680
0553043	3 × 120/70	rm	47,0	4128	5800
0553044	3 × 150/70	rm	52,0	4992	6850
0553045	3 × 185/95	rm	57,0	6240	8600
0553046	3 × 240/120	rm	63,0	8064	10980
0553047	4 × 1,5/1,5	re	18,0	81	430
0553048	4 × 2,5/2,5	re	18,9	128	500
0553049	4 × 4/4	re	20,1	200	600
0553050	4 × 6/6	re	21,2	297	730
0553051	4 × 10/10	re	23,0	504	1060

0553052	4 × 16/16	rm	25,2	796	1360
0553053	4 × 25/16	rm	30,0	1142	1900
0553054	4 × 35/16	rm	33,5	1526	2410
0553055	4 × 50/25	rm	38,0	2203	3180
0553056	4 × 70/35	rm	42,5	3082	4385
0553057	4 × 95/50	rm	47,5	4208	5800
0553058	4 × 120/70	rm	51,5	5388	7225
0553059	4 × 150/70	rm	57,0	6540	8710
0553060	4 × 185/95	rm	63,5	8159	10700
0553061	4 × 240/120	rm	71,0	10546	13935
0553062	7 × 1,5/2,5	re	20,8	133	670
0553065	12 × 1,5/2,5	re	27,0	205	1050
0553064	24 × 1,5/6	re	36,5	413	1900
0553065	30 × 1,5/6	re	39,0	499	2200
0553066	7 × 2,5/2,5	re	21,2	200	680
0553067	12 × 2,5/4	re	27,0	334	1050
0553068	24 × 2,5/10	re	37,0	696	1900
0553069	30 × 2,5/10	re	39,0	840	2200