NHXMH-O/-J halogen-free plastic sheathed cable 300/500 V, VDE approved

Technical data

- Halogen-free plastic-sheathed cable with enhanced characteristics in case of fire, according to DIN VDE 0250 part 214
- **Conductor resistance** (at 20°C) according to DIN VDE 0295 and IEC 60228
- Max. **temperature at the conductor** during operation +70°C in case of short circuit +250°C
- **Temperature range** during installation -5°C to +50°C fixed installation -30°C to +70°C
- **Nominal voltage** U_0/U 300/500 V
- **Test voltage** 2000 V
- **Minimum bending radius** single-core approx. 15x cable Ø multi-core approx. 10x cable Ø
- **Caloric load values** see Technical Informations

Note

- re = round conductor, single-wire; rm = round conductor, multiple-wire.
- **LSOH** = Low Smoke Zero Halogen-free.

Cable construction

- Plain copper conductor, single core up to 10 mm² multi-core from 16-35 mm² according to DIN VDE 0295 cl. 1 or 2, BS 6360 cl. 1 or 2 and IEC 60228 cl. 1 or 2
- Core insulation of cross-linked polymer compound 2XI1 to DIN VDE 0207 part 22
- Colour code according to DIN VDE 0293-308
- ≥3 cores with green-yellow earth core for 1 core cable core colour black
- Cores stranded in layer
- Overall core jacket of halogen-free filling compound (not for single-core cables)
- Outer jacket, flame-retardant polymer compound HM2 according to DIN VDE 0207 part 24, halogen-free
- Jacket colour grey (RAL 7001)

Properties

- Flame-retardant
- Halogen-free, no liberation of corrosive or toxic gases
- Limited propagation of fire
- Low smoke development
- Ozone resistant
- **Tests**
  Flame test to DIN VDE 0482 part 266-2/ HD 405.3, BS 4066 part 3/ EN 50266-2/ IEC 60332-3 (equivalent DIN VDE 0472 part 804 test method C)
  Corrosiveness of combustion gases according to DIN VDE 0482 part 267/ EN 50267-2-2/ IEC 60754-2 (equivalent DIN VDE 0472 part 813)
  Halogen-free according to DIN VDE 0482 part 267/ EN 50267-2-1/ IEC 60754-1 (equivalent DIN VDE 0472 part 815)
  Smoke density according to DIN VDE 0482 part 268, HD 606, EN 50268-12/ IEC 61034-12, BS 7622 part 12 (equivalent DIN VDE 0472 part 816)
  Ozone resistance according to DIN VDE 0472 part 805

Application

Halogen-free plastic-sheathed cables with enhanced characteristics in case of fire are used for applications where harm to human life and damage to property must be prevented in the event of fire, e.g. in industrial installations, communal establishments, hotels, airports, underground stations, railway stations, hospitals, departmental stores, banks, schools, theatres, multi-storey buildings, process control centres etc.
Suitable for installation in dry, damp or wet environments, for installation above, on, in and beneath plaster as well as in masonry walls and in concrete, not however for direct embedding in vibration, compacted or tamped concrete.
These cables are also suitable for outdoor applications.
CE = The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

NHXMH-O

Part No.	No.cores x cross-sec. mm²		Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
53300	1 x 1,5	re	7,0	15,0	49,0	16
53306	2 x 1,5	re	8,9	29,0	110,0	16
53301	1 x 2,5	re	7,6	24,0	60,0	14
53307	2 x 2,5	re	10,0	48,0	136,0	14
53302	1 x 4	re	8,6	39,0	80,0	12
53308	2 x 4	re	11,4	77,0	202,0	12
53303	1 x 6	re	9,9	58,0	111,0	10
53304	1 x 10	re	11,2	96,0	160,0	8
53305	1 x 16	rm	11,9	154,0	232,0	6

NHXMH-J

Part No.	No.cores x cross-sec. mm²		Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
53350	3 G 1,5	re	9,4	43,0	130,0	16
53358	4 G 1,5	re	10,2	58,0	151,0	16
53366	5 G 1,5	re	10,8	72,0	177,0	16
53374	7 G 1,5	re	11,4	101,0	209,0	16
53351	3 G 2,5	re	10,4	72,0	163,0	14
53359	4 G 2,5	re	11,3	96,0	200,0	14
53367	5 G 2,5	re	11,9	120,0	238,0	14
53375	7 G 2,5	re	13,5	168,0	300,0	14
53352	3 G 4	re	11,8	115,0	235,0	12
53360	4 G 4	re	13,3	154,0	300,0	12
53368	5 G 4	re	14,8	192,0	345,0	12
53353	3 G 6	re	13,4	173,0	323,0	10
53361	4 G 6	re	14,8	230,0	400,0	10
53369	5 G 6	re	16,0	288,0	475,0	10
53354	3 G 10	re	16,0	288,0	485,0	8
53362	4 G 10	re	17,4	384,0	603,0	8
53370	5 G 10	re	18,9	480,0	720,0	8
53355	3 G 16	rm	19,7	461,0	850,0	6
53363	4 G 16	rm	21,6	615,0	940,0	6
53371	5 G 16	rm	23,8	768,0	1142,0	6
53356	3 G 25	rm	24,3	720,0	1152,0	4
53364	4 G 25	rm	27,0	960,0	1432,0	4
53372	5 G 25	rm	29,0	1200,0	1800,0	4
53357	3 G 35	rm	27,2	1008,0	1503,0	2
53365	4 G 35	rm	29,9	1344,0	1930,0	2
53373	5 G 35	rm	32,7	1680,0	2490,0	2

Dimensions and specifications may be changed without prior notice.