

Installation Cables

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, acc. to DIN VDE 0250 part 214
- **Conductor resistance** (at 20°C) acc. 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** U₀/U 300/500 V
- **Test voltage** 2000 V
- **Minimum bending radius** fixed installation 4x cable Ø
- **Caloric load values** see Technical Informations

Cable structure

- Bare copper-conductor to DIN VDE 0295, BS 6360, IEC 60228 up to 10 mm² cl.1: single-wire 16-35 mm² cl.2: multi-wire
- Core insulation of cross-linked **polymer**, compound type 2X11 to DIN VDE 0207 part 22
- Core identification to DIN VDE 0293-308 1-core version - core colour BK or GN-YE
- Cores stranded in layers with optimal lay-length
- Overall core sheath of halogen-free filling compound (may be omitted for single-core cables)
- Outer sheath of flame-retardant, halogen-free polymer compound type HM2 to DIN VDE 0207 part 24
- Sheath colour grey (RAL 7035)

Properties

- Flame-retardant
- Halogen-free, no liberation of corrosive or toxic gases
- Limited propagation of fire
- Low smoke development
- Ozone resistant

Tests

- Flame test acc. to DIN VDE 0482-332-3, BS 4066 part 3, DIN EN 60332-3, IEC 60332-3 (previously DIN VDE 0472 part 804 test method C)
- Corrosiveness of combustion gases acc. to DIN VDE 0482 part 267, DIN EN 50267-2-2, IEC 60754-2 (equivalent DIN VDE 0472 part 813)
- Halogen-free acc. to DIN VDE 0482 part 267, DIN EN 50267-2-1, IEC 60754-1 (equivalent DIN VDE 0472 part 815)
- Smoke density acc. to DIN VDE 0482 part 268, HD 606, EN 50268-1+2, IEC 61034-1+2, BS 7622 part 1+2 (equivalent DIN VDE 0472 part 816)
- Ozone resistance acc. to DIN VDE 0472 part 805
- Also deliverable in screened (St) version

Note

- re = round conductor, single-wire
rm = round conductor, multi-wire
- **LSOH** = Low Smoke Zero Halogen
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².

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 2006/95/EC.

NHXMH-O

Part no.	No. cores x cross-sec. mm ²	Outer Ø min. - max. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
53300	1 x 1,5 re	5,0 - 8,4	15,0	49,0	16
53306	2 x 1,5 re	7,6 - 9,2	29,0	110,0	16
53301	1 x 2,5 re	5,4 - 8,8	24,0	60,0	14
53307	2 x 2,5 re	8,4 - 10,1	48,0	136,0	14
53302	1 x 4 re	6,0 - 9,5	39,0	80,0	12
53308	2 x 4 re	9,6 - 11,6	77,0	202,0	12
53303	1 x 6 re	6,4 - 10,0	58,0	111,0	10
53304	1 x 10 re	7,4 - 11,3	96,0	160,0	8
53305	1 x 16 rm	8,5 - 12,4	154,0	232,0	6

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Part no.	No. cores x cross-sec. mm ²	Outer Ø min. - max. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
53350	3 G 1,5 re	8,0 - 9,6	43,0	130,0	16
53358	4 G 1,5 re	8,5 - 10,3	58,0	151,0	16
53366	5 G 1,5 re	9,1 - 11,0	72,0	177,0	16
53374	7 G 1,5 re	9,9 - 11,9	101,0	209,0	16
53351	3 G 2,5 re	8,7 - 10,6	72,0	163,0	14
53359	4 G 2,5 re	9,5 - 11,5	96,0	200,0	14
53367	5 G 2,5 re	10,4 - 12,3	120,0	238,0	14
53375	7 G 2,5 re	11,4 - 13,8	168,0	300,0	14

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Part no.	No. cores x cross-sec. mm ²	Outer Ø min. - max. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
53192	1 G 4 re	6,0 - 9,5	39,0	80,0	12
53352	3 G 4 re	10,1 - 12,2	115,0	235,0	12
53360	4 G 4 re	11,3 - 13,7	154,0	300,0	12
53368	5 G 4 re	12,5 - 15,1	192,0	345,0	12
53193	1 G 6 re	6,4 - 10,0	58,0	111,0	10
53353	3 G 6 re	11,5 - 13,9	173,0	323,0	10
53361	4 G 6 re	12,7 - 15,3	230,0	400,0	10
53369	5 G 6 re	13,7 - 16,6	288,0	475,0	10
53194	1 G 10 re	7,4 - 11,3	96,0	160,0	8
53354	3 G 10 re	13,8 - 16,7	288,0	485,0	8
53362	4 G 10 re	15,1 - 18,2	384,0	603,0	8
53370	5 G 10 re	16,3 - 19,7	480,0	720,0	8
53195	1 G 16 rm	8,5 - 12,4	154,0	232,0	6
53355	3 G 16 rm	16,5 - 20,0	461,0	850,0	6
53363	4 G 16 rm	18,0 - 21,8	615,0	940,0	6
53371	5 G 16 rm	19,7 - 23,8	768,0	1142,0	6
53356	3 G 25 rm	20,4 - 24,6	720,0	1152,0	4
53364	4 G 25 rm	22,6 - 27,3	960,0	1432,0	4
53372	5 G 25 rm	24,7 - 29,8	1200,0	1800,0	4
53357	3 G 35 rm	22,7 - 27,4	1008,0	1503,0	2
53365	4 G 35 rm	24,9 - 30,0	1344,0	1930,0	2
53373	5 G 35 rm	27,5 - 33,2	1680,0	2490,0	2