NHXMH-J / NHXMH-O

enhanced characteristics during fire conditions

TECHNICAL DATA

Installation cable acc. to DIN VDE 0250-214

Temperature range	fixed -30°C to +70°C during installation +5°C to +70°C
Permissible operating temperature of the conductor	+70°C
Short circuit temperature at the conductor	+250°C
Nominal voltage	AC U_0/U 300/500 V
Test voltage core/core	2000 V
Minimum bending radius	fixed 4x Outer-Ø

CABLE STRUCTURE

- Copper conductor bare, 1.5 - 10 mm²: solid acc. to DIN VDE 0295 Class 1 / IEC 60228 Class 1;16 - 35 mm²: stranded acc. to DIN VDE 0295 Class 2 / IEC 60228 Class 2
- Core insulation: XLPE
- Core identification acc. to DIN VDE 0293-308,
  1 core(s): black oder green-yellow
  2 - 5 core(s): colour coded
  7 core(s): black cores with consecutive labeling in white digits
- G = with protective conductor GN-YE,
  x = without protective conductor
- Cores stranded in layers with optimal lay lengths
- Core sheating (filling compound) for multi-core cables
- Outer sheath: halogen-free polymer acc. to DIN VDE 0207-24 (compound type HM2)
- Sheath colour: grey (RAL 7035)

PROPERTIES

- resistant to: ozone
- halogen-free
- flame-retardant
- reduced fire propagation, low smoke development

TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- corrosiveness of combustion gases acc. to DIN VDE 0482-754-2 / DIN EN 60754-2 / IEC 60754-2
- bundle fire test acc. to DIN VDE 0482-332-3-24 / DIN EN 60332-3-24 / IEC 60332-3-24
- smoke density acc. to DIN VDE 0482-1034-1+2 / DIN EN 61034-1+2 / IEC 61034-1+2
- ozone-resistant acc. to DIN VDE 0473-396 / DIN EN 50396

APPLICATION

Halogen-free installation 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 facilities, municipal facilities, hotels, airports, underground stations, railway stations, hospitals, department stores, banks, schools, theatres, cinemas, high-rise buildings, process control centres etc. Suitable for installation in dry, damp or wet environments; for installation above, on, in and under plaster as well as in masonry walls and in concrete, however not for direct embedding in vibration, compacted or tamped concrete. Suitable for outdoor installation as long as the cable is protected against direct sunlight.

NOTES

- re = round, solid conductor
  rm = round, stranded conductor
- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only

NHXMH-O

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer-ø min - max mm	Cu-weight kg/km	Weight kg/km, approx.
53300	1 x 1.5 re	16	5.0 - 8.4	15.0	49.0
53306	2 x 1.5 re	16	7.6 - 9.2	29.0	110.0
53301	1 x 2.5 re	14	5.4 - 8.8	24.0	60.0
53307	2 x 2.5 re	14	8.4 - 10.1	48.0	136.0
53302	1 x 4 re	12	6.0 - 9.5	39.0	80.0
53308	2 x 4 re	12	9.6 - 11.6	77.0	202.0
53303	1 x 6 re	10	6.4 - 10.0	58.0	111.0
53304	1 x 10 re	8	7.4 - 11.3	96.0	160.0
53305	1 x 16 rm	6	8.5 - 12.4	154.0	232.0

NHXMH-J

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer-ø min - max mm	Cu-weight kg/km	Weight kg/km, approx.
53350	3 G 1.5 re	16	8.0 - 9.6	43.0	130.0
53358	4 G 1.5 re	16	8.5 - 10.3	58.0	151.0
53366	5 G 1.5 re	16	9.1 - 11.0	72.0	177.0
53374	7 G 1.5 re	16	9.9 - 11.9	101.0	209.0
53351	3 G 2.5 re	14	8.7 - 10.6	72.0	163.0
53359	4 G 2.5 re	14	9.5 - 11.5	96.0	200.0
53367	5 G 2.5 re	14	10.4 - 12.3	120.0	238.0
53375	7 G 2.5 re	14	11.4 - 13.8	168.0	300.0
53192	1 G 4 re	12	6.0 - 9.5	39.0	80.0
53352	3 G 4 re	12	10.1 - 12.2	115.0	235.0

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Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer-ø min - max mm	Cu-weight kg/km	Weight kg/km, approx.
53360	4 G 4 re	12	11.3 - 13.7	154.0	300.0
53368	5 G 4 re	12	12.5 - 15.1	192.0	345.0
53193	1 G 6 re	10	6.4 - 10.0	58.0	111.0
53353	3 G 6 re	10	11.5 - 13.9	173.0	323.0
53361	4 G 6 re	10	12.7 - 15.3	230.0	400.0
53369	5 G 6 re	10	13.7 - 16.6	288.0	475.0
53194	1 G 10 re	8	7.4 - 11.3	96.0	160.0
53354	3 G 10 re	8	13.8 - 16.7	288.0	485.0
53362	4 G 10 re	8	15.1 - 18.2	384.0	603.0
53370	5 G 10 re	8	16.3 - 19.7	480.0	720.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer-ø min - max mm	Cu-weight kg/km	Weight kg/km, approx.
53195	1 G 16 rm	6	8.5 - 12.4	154.0	232.0
53355	3 G 16 rm	6	16.5 - 20.0	461.0	850.0
53363	4 G 16 rm	6	18.0 - 21.8	615.0	940.0
53371	5 G 16 rm	6	19.7 - 23.8	768.0	1142.0
53356	3 G 25 rm	4	20.4 - 24.6	720.0	1152.0
53364	4 G 25 rm	4	22.6 - 27.3	960.0	1432.0
53372	5 G 25 rm	4	24.7 - 29.8	1200.0	1800.0
53357	3 G 35 rm	2	22.7 - 27.4	1008.0	1503.0
53365	4 G 35 rm	2	24.9 - 30.0	1344.0	1930.0
53373	5 G 35 rm	2	27.5 - 33.2	1680.0	2490.0