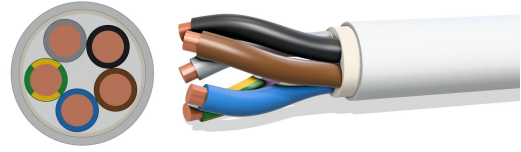


Application

NHXMH is a halogen-free sheathed installation cable for a rated voltage of 300/500 V to DIN VDE 0250-214, with plain copper conductors (solid class 1 up to 10 mm², stranded class 2 from 16 mm²), a halogen-free cross-linked core insulation and a halogen-free, low-smoke (LSZH) outer sheath. It is the halogen-free counterpart of NYM: in the event of fire it is flame-retardant, emits no corrosive halogen gases and produces only a low, non-opaque smoke, so it is used for fixed indoor wiring in and under plaster, in masonry and concrete, in public buildings and other installations with high safety requirements. On escape routes where the Bbl requires Dca, the class Cca-s1,d2,a1 complies; on an extra protected escape route the Bbl requires B2ca. The -J version carries a green/yellow protective conductor; the -O version has the same construction and dimensions without it. It is available from 1.5 to 35 mm² in the common multi-core configurations.



CONSTRUCTION

Conductor	Plain (bare) copper, solid class 1 (1.5-10 mm ²) or stranded class 2 (16-35 mm ²) acc. to IEC 60228 / DIN VDE 0295.
Insulation	Halogen-free cross-linked polymer (XLPE-based, type HX).
Filler	Halogen-free filling compound / core wrapping over the laid-up cores.
Sheath	Halogen-free, low-smoke polymer (LSZH) acc. to DIN VDE 0207-24; grey.
Core identification	Acc. to HD 308 S2 / VDE 0293-308; -J with green/yellow protective conductor, -O without.

ELECTRICAL & THERMAL PROPERTIES

Rated voltage U₀/U	300/500 V.
Test voltage	2 kV.
Standard	DIN VDE 0250-214; conductors acc. to IEC 60228 / DIN VDE 0295.
Flame-retardant	Acc. to IEC 60332-1-2; non flame-propagating acc. to IEC 60332-3-24 (cat. C).
Halogen-free / low-smoke	Halogen-free acc. to IEC 60754-1 / EN 60754; low smoke density acc. to IEC 61034-2 / EN 61034.
Max. conductor temperature	+70 °C in normal operation.
Min. bending radius, fixed	4 × outer diameter.
Reaction to fire (CPR)	Cca-s1,d2,a1 (EN 50575, halogen-free).

DIMENSIONS & TECHNICAL DATA

Cores × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
2 × 1.5	12.1	9.4	120
3 × 1.5	12.1	9.8	133
4 × 1.5	12.1	10.5	142
5 × 1.5	12.1	11.5	183
7 × 1.5	12.1	12	250
2 × 2.5	7.41	10.5	150
3 × 2.5	7.41	11	176
4 × 2.5	7.41	11.5	188
5 × 2.5	7.41	12.5	249
7 × 2.5	7.41	14	350
2 × 4	4.61	12	215
3 × 4	4.61	12.5	247
4 × 4	4.61	14	279
5 × 4	4.61	15.5	370
2 × 6	3.08	13.2	295
3 × 6	3.08	14	335
4 × 6	3.08	15.5	371
5 × 6	3.08	16.5	488
2 × 10	1.83	16.2	448
3 × 10	1.83	16.5	496
4 × 10	1.83	18	569
5 × 10	1.83	19.5	739
3 × 16	1.15	21.5	755
4 × 16	1.15	22.5	849
2 × 25	0.727	25.5	1080
3 × 25	0.727	25.3	1200
4 × 25	0.727	28	1298
2 × 35	0.524	26.6	1400
3 × 35	0.524	28.1	1300
4 × 35	0.524	31	1731
5 × 35	0.524	34.5	2210

Outer diameters and weights are the nominal manufacturer values of the leading reference source for the -J construction; the -O construction shares the same dimensions. Conductor resistance is the IEC 60228 class 1/2 maximum. All values are indicative and non-binding.