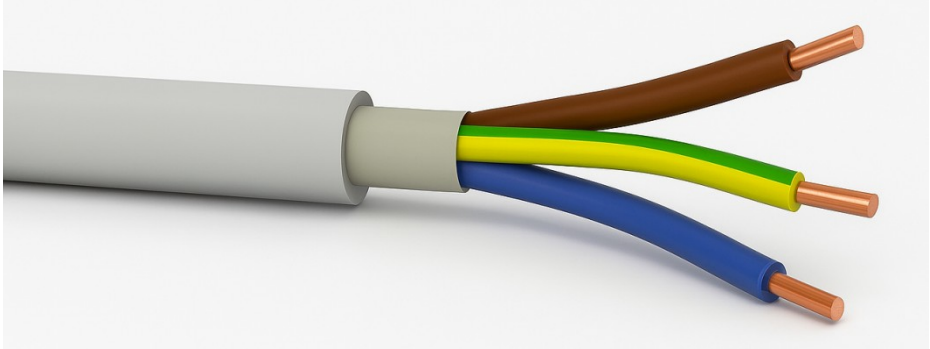
CABLE DATA for NYM

General Information



Cable standard(s)

- IEC 60227-4

Construction Product Regulation (CPR) Classification

- Regulation: Compliant with the EU Regulation (EU) No. 305/2011 on construction products.
- Intended Use: Suitable for general applications in construction works with fire safety requirements.
- Harmonized Standard: EN 50575:2014+A1:2016
- Reaction to Fire Classification: Eca (according to EN 13501-6).
- Release of Dangerous Substances: N.P.D. (No Performance Determined).

Flame Retardant Properties

- The cable complies with the self–extinguishing requirements specified in EN 60332-1-2 (single vertical wire flame test).

Temperature Ratings

- Minimum installation and handling temperature: -5°C
- Maximum continuous conductor operating temperature: +70°C
- Maximum conductor temperature during short-circuit (≤ 5 seconds): +160°C
- Permissible ambient temperature range during operation: –30°C to +50°C

Minimum Bending Radius *(D = external diameter of the cable)*

- 8 × D for single core cable.
- 6 × D for multi-core cable

Application of the cable:

- NYM cables are high-quality installation cables engineered for permanent wiring in buildings. Suitable for use in dry, damp, and protected outdoor environments, they are ideal for power distribution in walls, ceilings, and embedded concrete (excluding dry or pre-stressed concrete). Their solid copper conductors and double-layer insulation ensure long-term reliability and mechanical protection.
- Suitable for:
  - Indoor power circuits
  - Embedded concrete installations
  - Damp rooms and utility spaces
  - Protected outdoor routing
- Not suitable for:
  - Direct burial without additional protection
  - Direct sun exposure (not UV-resistant unless specially treated)
  - Flexible or mobile applications

Cable Construction and Electrical Properties

Conductor(s)

- Copper conductor: solid (Class 1) round (RE) or stranded (Class 2) round (RM) according to IEC 60228.

Insulation

- PVC insulation compound TI1, according to EN 50363-3.
- Wire cores concentrically stranded, with or without a yellow-green protective conductor.
- Insulation color coding according to HD 308 S2.

Filler

- EPDM extruded elastomer or plastomer compound, or wrapped thermoplastic tape.

Sheath

- PVC outer sheath, compound type TM1, according to EN 50363-4-1.
- Sheath color: Gray.

Rated Voltage

- Uo/U = 300/500 V

Test Voltage

- 2 kV AC

Ampacity chart

Cross section [mm2]	Insulated tubes, thermally insulated wall		Insulated tubes, on a wall		Open air against wall		Open air, min 1D space from wall	
								
1,5	15,5	13,0	16,5	15,0	19,5	17,5	22,0	18,5
2,5	18,5	17,5	23,0	20,0	27,0	24,0	30,0	25,0
4	25,0	23,0	30,0	27,0	36,0	32,0	40,0	34,0
6	32,0	29,0	38,0	37,0	46,0	41,0	51,0	43,0
10	43,0	39,0	52,0	46,0	63,0	57,0	70,0	60,0
16	57,0	52,0	69,0	62,0	85,0	76,0	94,0	80,0
25	75,0	68,0	90,0	80,0	112,0	96,0	119,0	101,0
35	92,0	83,0	111,0	99,0	138,0	119,0	148,0	126,0

- These charts are extracted in abbreviated form from DIN VDE 0298 Part 4 and relate to multicore sheathed cables for fixed wiring in buildings based on 30°C operating temperature at conductor and 30°C ambient air temperature. The figures shown are to be considered as guiding values only. For higher ambient temperatures, apply derating factors.

Dimensional Specifications

№	Construction [n×mm²]	Metal index [kg/km]	Weight(approx.) [kg/km]	Diameter (range) [mm]	Resistance at 20°C [Ω/km]
1	1×1,5RE	14,4	45	5,2-6,2	12,1
2	1×2,5RE	24,0	70	5,8-6,8	7,41
3	1×4RE	38,4	80	6,4-7,6	4,61
4	1×6RE	57,6	105	6,8-8,2	3,08
5	1×10RE	96,0	155	8,0-9,4	1,83
6	1×16RM	154,0	230	9,4-11,0	1,21
7	1×25RM	240,0	325	12,2-13,3	0,78
8	2×1,5RE	28,8	115	8,4-9,8	12,1
9	2×2,5RE	48,0	190	9,6-11,0	7,41
10	2×4RE	76,8	220	11,0-12,5	4,61
11	3×1,5RE	43,2	135	8,8-10,5	12,1
12	3×2,5RE	72,0	190	10,0-11,5	7,41
13	3×4RE	115,2	265	11,5-13,0	4,61
14	3×6RE	172,8	315	12,0-15,0	3,08
15	3×10RE	288,0	465	16,0-18,0	1,83
16	4×1,5RE	57,6	160	9,5-11,0	12,1
17	4×2,5RE	96,0	230	11,0-12,5	7,41
18	4×4RE	153,6	330	12,5-14,5	4,61
19	4×6RE	230,4	460	14,5-16,5	3,08
20	4×10RE	384,0	690	16,5-19,0	1,83
21	4×16RM	614,4	1090	20,5-23,5	1,21
22	4×25RM	960,0	1640	25,0-28,5	0,78
23	4×35RM	1344,0	2090	27,5-32,0	0,554
24	5×1,5RE	72,0	190	9,9-12,0	12,1
25	5×2,5RE	120,0	270	11,5-13,5	7,41
26	5×4RE	192,0	410	14,0-16,5	4,61
27	5×6RE	288,0	540	15,5-18,0	3,08
28	5×10RE	480,0	870	18,5-21,5	1,83
29	5×16RM	768,0	1350	22,5-26,0	1,21
30	5×25RM	1200,0	1990	27,5-31,5	0,78