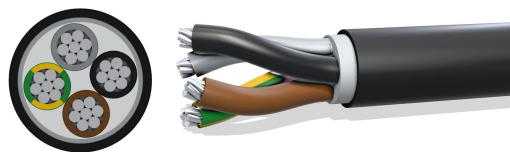


Application

NAYY (also (N)AYY) is the aluminium version of NYY: a PVC-insulated power and underground cable for a rated voltage of 0.6/1 kV to DIN VDE 0276-603 (HD 603 S1), with aluminium conductors (solid class 1 / stranded class 2, circular or sector-shaped), PVC core insulation, an inner PVC covering (bedding) and a black PVC outer sheath. It is used for fixed power distribution and mains supply in buildings, cable ducts and outdoors, and may be laid directly in the ground; the light aluminium conductor makes it economical for the larger cross-sections of a distribution network. The -J version carries a green/yellow protective conductor; the -O version has the same construction and dimensions without it. It is available as single-core, 4- and 5-core cables from 16 to 630 mm².



CONSTRUCTION

Conductor	Aluminium, solid class 1 or stranded class 2 acc. to IEC 60228 / DIN VDE 0295; circular (RE/RM) or sector-shaped (SE/SM) in the larger multicore sizes.
Insulation	Polyvinyl chloride (PVC), compound type DIV4 acc. to HD 603 S1.
Bedding	Inner PVC covering (bedding) over the laid-up cores.
Sheath	Polyvinyl chloride (PVC), compound type DMV5 acc. to HD 603 S1; black.
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	0.6/1 kV (600/1000 V).
Test voltage	4 kV AC.
Standard	DIN VDE 0276-603 (HD 603 S1); IEC 60502-1; conductors acc. to IEC 60228.
Flame-retardant	Acc. to IEC 60332-1-2 / DIN EN 60332-1-2.
Max. conductor temperature	+70 °C in normal operation.
Max. short-circuit temperature	+160 °C (≤ 300 mm ²), +140 °C (> 300 mm ²), up to 5 s.
Min. bending radius, fixed	12 × outer diameter (multicore); 15 × for single-core.
Reaction to fire (CPR)	Eca (EN 50575).

DIMENSIONS & TECHNICAL DATA

Cores × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
4 × 16	1.91	20	750
5 × 16	1.91	21.5	832
4 × 25	1.2	26	950
5 × 25	1.2	28	1175
1 × 35	0.868	13	240
4 × 35	0.868	28.5	1120
5 × 35	0.868	31	1399
1 × 50	0.641	15	360
4 × 50	0.641	30	1151
5 × 50	0.641	35	1855
1 × 70	0.443	16.5	410
4 × 70	0.443	35	1549
5 × 70	0.443	40	2351
1 × 95	0.32	19	570
4 × 95	0.32	39.5	2030
5 × 95	0.32	49.6	3071
1 × 120	0.253	20.5	691
4 × 120	0.253	44	2400
5 × 120	0.253	49	3631
1 × 150	0.206	22.5	804
4 × 150	0.206	46	3030
5 × 150	0.206	57.8	4405
1 × 185	0.164	25	979
4 × 185	0.164	51	3650
5 × 185	0.164	61.5	5420
1 × 240	0.125	26.5	1253
4 × 240	0.125	56	4800
5 × 240	0.125	70	6860
1 × 300	0.1	30	1395
4 × 300	0.1	64	5596
1 × 400	0.0778	34	1890
1 × 500	0.0605	38	2600
1 × 630	0.0469	39.5	2780

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