

CABLE DATA for N2XY

General Information



Cable standard(s)

- HD603 S1.

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.
- 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: +90 °C
- Maximum conductor temperature during short-circuit (≤ 5 seconds): +250 °C
- Permissible ambient temperature range during operation: -30 °C to +50 °C

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

- $15 \times D$ for single core cable.
- $12 \times D$ for multi-core cable

Application of the cable:

- The **N2XY** cable is a premium energy distribution solution designed for static installations. Its versatile construction allows for deployment in a wide variety of environments
- Installation Environments: Suitable for use underground, submerged in water, enclosed in concrete, routed through cable ducts, or installed indoors.
- Outdoor Use: The cable may be installed outdoors, provided it is shielded from direct UV radiation.
- Usage Constraints: Optimized for conditions where the cable is not subjected to heavy mechanical strain or significant tensile loads.
- Primary Sectors: Widely utilized in industrial facilities, urban power networks, and essential electrical infrastructure

Cable Construction and Electrical Properties

Conductor(s)

- Copper conductor, Class 1 (solid)-round (RE) or Class 2 (stranded), round (RM) or sector-shaped (SM), in accordance with IEC 60228.

Insulation:

- XLPE insulation compound DIX3, according to HD 603-1, Table 2A.
- 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 DMV6, according to HD 603-1, Table 4A.
- Sheath color: Black.

Rated Voltage

- $U_0/U = 0,6/1$ kV

Test Voltage

- 4 kV AC

Dimensional Specifications

№	Construction [n×mm ²]	Metal index [kg/km]	Weight [kg/km]	Diameter [mm]	Resistance at 20°C [Ω/km]	Ampacity* [A]	
						air (30°C)	ground(20°C)
1	1×4 RE	38,4	72	8,0	4,6100	44	54
2	1×6 RE	57,6	92	8,5	3,0800	56	67
3	1×10 RE	96,0	142	9,5	1,8300	77	89
4	1×16 RE	153,6	205	11,7	1,1500	102	115
5	1×25 RM	240,0	303	13,0	0,7270	138	148
6	1×35 RM	336,0	394	14,0	0,5240	170	177
7	1×50 RM	480,0	516	16,0	0,3870	207	209
8	1×70 RM	672,0	721	17,0	0,2680	263	256
9	1×95 RM	912,0	992	19,0	0,1930	325	307
10	1×120 RM	1152,0	1196	21,0	0,1530	380	349
11	1×150 RM	1440,0	1509	23,3	0,1240	437	393
12	1×185 RM	1776,0	1850	25,3	0,0991	507	445
13	1×240 RM	2304,0	2394	28,3	0,0754	604	517
14	1×300 RM	2880,0	3055	30,3	0,0601	697	583
15	2×1,5 RE	28,8	126	9,5	12,1000	24	31
16	2×2,5 RE	48,0	157	10,6	7,4100	32	40
17	2×4 RE	77,0	200	11,5	4,6100	43	53
18	2×6 RE	115,0	253	12,5	3,0800	55	65
19	2×10 RE	192,0	395	14,1	1,8300	75	88
20	2×16 RM	307,0	558	15,9	1,1500	100	114
21	2×25 RM	480,0	811	20,3	0,7270	136	146
22	2×35 RM	672,0	1038	22,2	0,5240	166	175
23	2×50 RM	960,0	1450	25,0	0,3870	202	206
24	3×1,5 RE	43,2	147	12,5	12,1000	24	31
25	3×2,5 RE	72,0	187	13,0	7,4100	32	40
26	3×4 RE	115,0	243	15,0	4,6100	42	52
27	3×6 RE	173,0	315	16,0	3,0800	53	64

Nº	Construction [n×mm²]	Metal index [kg/km]	Weight [kg/km]	Diameter [mm]	Resistance at 20°C [Ω/km]	Ampacity [A] air (30°C) ground(20°C)	
28	3×10 RE	288	495	18	1,830	74	86
29	3×16 RM	461	712	20	1,150	98	112
30	3×25 RM	720	1038	25	0,727	133	145
31	3×35 SM	1008	1342	23	0,524	162	174
32	3×50 SM	1440	1749	26,3	0,387	197	206
33	3×70 SM	2016	2451	30,7	0,268	250	254
34	3×95 SM	2736	3368	34,3	0,193	308	305
35	3×120 SM	3456	4061	38	0,153	359	348
36	3×150 SM	4320	5167	42	0,124	412	392
37	3×185 SM	5328	6363	48	0,0991	475	444
38	3×240 SM	6912	8211	52	0,0754	564	517
39	3×16+10 RM/RE	556	689	19,6	1,150/1,830	77	88
40	3×25+10 RM/RE	816	1035	19,7	0,727/1,830	98	120
41	3×25+16 RM/RM	874	1214	26	0,727/1,15	105	132
42	3×35+16 SM/RM	1162	1507	26,3	0,524/1,15	129	159
43	3×50+25 SM/RM	1680	2006	30,3	0,387/0,727	157	188
44	3×70+35 SM/RM	2352	2834	33,3	0,268/0,524	199	232
45	3×95+50 SM/RM	3216	3867	39,3	0,193/0,387	246	280
46	3×120+70 SM/RM	4128	4740	42,7	0,153/0,268	285	318
47	3×150+70 SM/RM	4992	5766	46,7	0,124/0,268	326	359
48	3×185+95 SM/RM	6240	7258	51,7	0,0991/0,193	374	406
49	3×240+120 SM/RM	8064	9271	58,7	0,0754/0,153	445	473
50	4×1,5 RE	58	173	13,3	12,1	24	31
51	4×2,5 RE	96	224	14,3	7,41	32	40
52	4×4 RE	154	292	16,3	4,610	42	52
53	4×6 RE	230	382	17,3	3,080	53	64
54	4×10 RE	384	612	19,3	1,830	74	86
55	4×16 RM	614	889	22,3	1,150	98	112
56	4×25 RM	960	1328	27,3	0,727	133	145
57	4×35 SM	1344	1723	29,3	0,524	162	174
58	4×50 SM	1920	2267	31,3	0,387	197	206
59	4×70 SM	2688	3204	35,3	0,268	250	254
60	4×95 SM	3648	4380	40,3	0,193	308	305
61	4×120 SM	4608	5306	43,7	0,153	359	348
62	4×150 SM	5760	6657	48,7	0,124	412	392
63	4×185 SM	7104	8281	53,7	0,0991	475	444
64	4×240 SM	9216	10677	63	0,0754	564	517
65	5×1,5 RE	72	205	14	12,1	24	31
66	5×2,5 RE	120	267	15	7,41	32	40
67	5×4 RE	192	358	17	4,610	42	52
68	5×6 RE	288	471	19	3,080	53	64
69	5×10 RE	480	745	21	1,830	74	86
70	5×16 RM	768	1066	23	1,150	98	112
71	5×25 RM	1200	1592	29	0,727	133	145
72	5×35 RM	1680	2072	38	0,524	162	174

- For higher ambient temperatures, apply derating factors.