

CABLE DATA for NA2XY

General Information



Cable standards

- HD 603 S1 Part 5G.

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)

- $18 \times D$ for single core cable.
- $15 \times D$ for multi-core cable

Application of the cable:

- The **NA2XY** 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)

- Stranded round (RM) or sector-shaped (SM) aluminium conductor, in accordance with IEC 60228.
- Copper conductor for signal core - optional.

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 for power cores
- 1,5 kV AC for the optional pilot core, according to HD 603-1 Table 3.1

Dimensional Specifications

Optional signal Cu core:

Nº	Cross section [mm²]	Metal index [kg/km]	Nominal insulation thickness [mm]	Outer Diameter [mm]	Resistance at 20 °C [Ω/km]
1	1,5	14,4	0,7	9,5	1,910
2	2,5	24,0	0,7	11,9	1,200

№	Construction [n×mm ²]	Metal index [kg/km]	Weight (approx.) [kg/km]	Diameter (approx.) [mm]	Resistance at 20 °C [Ω/km]	Ampacity [A]	
						air (30 °C)	ground (20 °C)
1	1×16 RM	47	122	9,5	1,910	85	102
2	1×25 RM	73	175	11,9	1,200	106	114
3	1×35 RM	102	206	13,0	0,868	130	136
4	1×50 RM	145	267	14,9	0,641	161	162
5	1×70 RM	203	358	17,0	0,443	204	199
6	1×95 RM	276,	451	18,9	0,320	252	238
7	1×120 RM	348	546	20,7	0,253	295	272
8	1×150 RM	435	655	22,7	0,206	339	305
9	1×185 RM	537	800	25,1	0,164	395	347
10	1×240 RM	696	987	27,6	0,125	472	404
11	1×300 RM	870	1324	31,9	0,100	547	457
12	3×16 RM	139,2	397	16,5	1,910	65	85
13	3×25 RM	217,5	587	20,0	1,200	100	111
14	3×35 SM	304,5	632	22,5	0,868	122	132
15	3×50 SM	435,0	720	26,0	0,641	147	157
16	3×70 SM	609,0	963	29,7	0,443	180	195
17	3×95 SM	826,5	1246	33,4	0,320	234	234
18	3×120 SM	1044,0	1545	37,1	0,253	270	266
19	3×150 SM	1305,0	1916	41,2	0,206	310	300
20	3×185 SM	1609,5	2347	45,7	0,164	360	342
21	3×240 SM	2088,0	2987	51,6	0,125	435	401
22	3×300 SM	2610,0	3663	56,7	0,100	501	455
23	4×16 RM	186	750	21,5	1,910	65	85
24	4×25 RM	290	950	27,5	1,200	100	111
25	4×35 SM	406	1120	27,5	0,868	122	132
26	4×50 SM	580	1250	28	0,641	147	157
27	4×70 SM	812	1548	34	0,443	180	195
28	4×95 SM	1102	2030	36,5	0,320	234	234
29	4×120 SM	1392	2400	39,5	0,253	270	266
30	4×150 SM	1740	3030	43,5	0,206	310	300
31	4×185 SM	2146	3650	48	0,164	360	342
32	4×240 SM	2784	4800	53	0,125	435	401
33	5×16 RM	235	738	23,1	1,910	65	85
34	5×25 RM	365	992	26,9	1,200	100	111
35	5×35 RM	510	1294	30,4	0,868	122	132

- For higher ambient temperatures, apply derating factors.
- Dimensions with mixed core cross section are available