NA2X2Y Cable 0.6/1kV IEC 60502-1 AL/XLPE/MDPE - 16mm² to 1000mm²

Description

NA2X2Y are Low voltage Aluminium, XLPE insulation and MDPE / HDPE sheathed power cables for distribution networks. This cable is used extensively in the renewables and datacentre sectors. NA2X2Y cable is suitable for external installation. Cables can be fixed on cable trays, within conduits or fixed to walls and is suitable for burial in ducts. The MDPE sheath is UV Resistant and water resistant to AD7 and AD8.

Key Features

Voltage Rating
600V-1000V AC
1.8kV DC

Minimum Bending Radius
Single Core 15 x Overall Diameter
Multicore 12 x Overall Diameter

Temperature Limits
Maximum operating temperature of conductor: +90°C
Maximum short-circuit temperature up to 5 sec: +250°C

Standards

- IEC 60502-1
- IEC 60228
- IEC/EN 60754-1/2
- UV Resistant: ISO 4892-2
- AD7 & AD8 water resistance available.

Construction

- **Conductor**: Class 2 Stranded Aluminium Conductor
- **Insulation**: Cross Linked polyethylene (XLPE)
- **Outer Sheath**: Medium Density Polyethylene (MDPE)
- **Sheath Colour**: Black

QA Lab

Cleveland Cable Test & Training Lab
Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.

CPR
Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.

Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.

ecovadis
Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

NA2X2Y Cable 0.6/1kV IEC 60502-1 AL/XLPE/MDPE - 16mm² to 1000mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Insulation Thickness (mm)	Sheath Thickness (mm)	Max Overall Dia	Minimum Bending Radius	Weight(Kg/Km)
1KVNA2X2Y1X16	16	1	0.8	1.5	9.0	135	95
1KVNA2X2Y1X25	25	1	0.9	1.5	10.2	152	125
1KVNA2X2Y1X35	35	1	1.0	1.5	11.2	168	160
1KVNA2X2Y1X50	50	1	1.0	1.5	12.6	190	205
1KVNA2X2Y1X70	70	1	1.1	1.5	14.5	218	275
1KVNA2X2Y2X70	70	2	1.1	1.8	28.0	336	775
1KVNA2X2Y3X70	70	3	1.2	2.0	26.5	320	875
1KVNA2X2Y4X70	70	4	1.1	2.1	30.5	366	1105
1KVNA2X2Y1X95	95	1	1.2	1.5	16.5	248	360
1KVNA2X2Y2X95	95	2	1.2	2.0	32.0	384	995
1KVNA2X2Y3X95	95	3	1.2	2.2	29.5	355	1095
1KVNA2X2Y4X95	95	4	1.1	2.2	33.0	396	1410
1KVNA2X2Y1X120	120	1	1.4	1.6	17.8	268	445
1KVNA2X2Y2X120	120	2	1.4	2.2	34.5	415	1240
1KVNA2X2Y3X120	120	3	1.3	2.3	33.0	396	1400
1KVNA2X2Y4X120	120	4	1.2	2.4	37.0	444	1795
1KVNA2X2Y1X150	150	1	1.6	1.7	20.5	308	550
1KVNA2X2Y2X150	150	2	1.6	2.3	40.0	480	1575
1KVNA2X2Y3X150	150	3	1.4	2.4	36.0	432	1715
1KVNA2X2Y4X150	150	4	1.4	2.6	42.0	504	2220
1KVNA2X2Y1X185	185	1	1.7	1.7	21.8	330	665
1KVNA2X2Y2X185	185	2	1.6	2.5	43.0	516	1895
1KVNA2X2Y3X185	185	3	1.5	2.6	40.0	480	2120
1KVNA2X2Y4X185	185	4	1.5	2.7	46.5	558	2760
1KVNA2X2Y1X240	240	1	1.8	1.8	24.8	372	840
1KVNA2X2Y2X240	240	2	1.8	2.6	48.0	576	2395
1KVNA2X2Y3X240	240	3	1.6	2.8	45.0	540	2680
1KVNA2X2Y4X240	240	4	1.7	3.0	52.5	630	3500
1KVNA2X2Y1X300	300	1	2.0	1.8	27.4	411	1040
1KVNA2X2Y2X300	300	2	1.8	2.8	54.0	648	2995
1KVNA2X2Y3X300	300	3	1.8	3.0	50.0	600	3290
1KVNA2X2Y4X300	300	4	1.9	3.1	58.0	696	4325
1KVNA2X2Y1X400	400	1	2.2	1.9	31.0	465	1340
1KVNA2X2Y2X400	400	2	2.0	3.0	60.0	720	3795
1KVNA2X2Y3X400	400	3	2.0	3.2	57.0	684	4325
1KVNA2X2Y4X400	400	4	2.1	3.3	66.5	792	5695
1KVNA2X2Y1X500	500	1	2.2	2.0	34.5	518	1675

Reference	Conductor Size (mm2)	No Of Cores	Insulation Thickness (mm)	Sheath Thickness (mm)	Max Overall Dia	Minimum Bending Radius	Weight(Kg/Km)
1KVNA2X2Y1X630	630	1	2.4	2.2	39.0	585	2195
1KVNA2X2Y1X800	800	1	2.7	2.2	45.0	675	2850
1KVNA2X2Y1X1000	1000	1	3.0	2.4	50.0	765	3495

Multicore 90°C thermosetting insulated and thermoplastic sheathed cables, non-armoured (COPPER CONDUCTORS) Reproduced from *BS7671:2018 Wiring Regulation*

TABLE 4E2A

CURRENT-CARRYING CAPACITY (amperes)

Ambient temperature: 30°C
Conductor operating temperature:90°C

Conductor cross sectional area	Reference Method A (enclosed in conduit in thermally insulating wall etc.)		Reference Method B (enclosed in conduit on a wall or in trunking etc.)		Reference Method C (clipped direct)		Reference Method E (free air or on a perforated cable tray etc, horizontal or vertical)	
	1 two-core cable*, single-phase AC or DC	1 three- or four-core cable*, three-phase AC	1 two-core cable*, single-phase AC or DC	1 three- or four-core cable*, three-phase AC	1 two-core cable*, single-phase AC or DC	1 three- or four-core cable*, three-phase AC	1 two-core cable*, single-phase AC or DC	1 three- or four-core cable*, three-phase AC
(mm2)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
1	14.5	13	17	15	19	17	21	18
1.5	18.5	16.5	22	19.5	24	22	26	23
2.5	25	22	30	26	33	30	36	32
4	33	30	40	35	45	40	49	42
6	42	38	51	44	58	52	63	54
10	57	51	69	60	80	71	86	75
16	76	68	91	80	107	96	115	100
25	99	89	119	105	138	119	149	127
35	121	109	146	128	171	147	185	158
50	145	130	175	154	209	179	225	192
70	183	164	221	194	269	229	289	246
95	220	197	265	233	328	278	352	298
120	253	227	305	268	382	322	410	346
150	290	259	334	300	441	371	473	399
185	329	295	384	340	506	424	542	456
240	386	346	459	398	599	500	641	538
300	442	396	532	455	693	576	741	621
400	-	-	625	536	803	667	865	741

* with or without a protective conductor

1. Where it is intended to connect the cables in this table to equipment or accessories designed to operate at a temperature lower than the maximum operating temperature of the cable, the cables should be rated at the maximum operating temperature of the equipment or accessory (see Regulation 512.1.5).
2. Where it is intended to group a cable in this table with other cables, the cable should be rated at the lowest of the maximum operating temperatures of any of the cables in the group (see Regulation 512.1.5).
3. For cables having flexible conductors see section 2.4 of this appendix for adjustment factors for current-carrying capacity and voltage drop.

Multicore 90°C thermosetting insulated and thermoplastic sheathed cables, non-armoured (COPPER CONDUCTORS) Reproduced from *BS7671:2018 Wiring Regulations*

TABLE 4E2B

VOLTAGE DROP (per ampere per metre)

Conductor operating temperature:90°C

Conductor cross- sectional area	Two-core cable DC	Two-core cable, single-phase AC			Three- or four-core cable, three-phase AC		
(mm2)	(mV/A/m)	(mV/A/m)			(mV/A/m)		
1	46	46			40		
1.5	31	31			27		
2.5	19	19			16		
4	12	12			10		
6	7.9	7.9			6.8		
10	4.7	4.7			4.0		
16	2.9	2.9			2.5		
		R	X	Z	R	X	Z
25	1.85	1.85	0.160	1.90	0.160	0.140	1.65
35	1.35	1.35	0.151	1.35	1.15	0.135	1.15
50	0.98	0.99	0.155	1.00	0.86	0.1351	0.87
70	0.67	0.67	0.150	0.69	0.59	0.130	0.60
95	0.49	0.50	0.150	0.52	0.43	0.130	0.45
120	0.39	0.40	0.145	0.42	0.34	0.130	0.37
150	0.31	0.32	0.145	0.35	0.28	0.125	0.30
185	0.25	0.26	0.145	0.29	0.22	0.125	0.26
240	0.195	0.200	0.140	0.24	0.175	0.125	0.21
300	0.155	0.160	0.140	0.21	0.140	0.120	0.185
400	0.120	0.130	0.140	0.115	0.115	0.120	0.165