NA2X2Y Cable 1.8/3kV 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.

Key Features

Voltage Rating
AC: 1.8/3 (3.6)kV
DC: 2.7/5.4 kV

Minimum Bending Radius
15 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

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 1.8/3kV IEC 60502-1 AL/XLPE/MDPE - 16mm² to 1000mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Max Overall Dia	Minimum Bending Radius	Weight(Kg/Km)
3KVNA2X2Y1X16	16	1	11.5	173	130
3KVNA2X2Y1X25	25	1	13.0	195	165
3KVNA2X2Y1X35	35	1	14.0	210	204
3KVNA2X2Y1X50	50	1	15.5	233	255
3KVNA2X2Y1X70	70	1	16.8	252	335
3KVNA2X2Y2X70	70	2	28.0	420	770
3KVNA2X2Y3X70	70	3	26.0	390	890
3KVNA2X2Y4X70	70	4	30.5	458	1100
3KVNA2X2Y1X95	95	1	18.3	275	410
3KVNA2X2Y2X95	95	2	31.0	465	970
3KVNA2X2Y3X95	95	3	29.5	445	1100
3KVNA2X2Y4X95	95	4	33.0	495	1400
3KVNA2X2Y1X120	120	1	20.0	300	505
3KVNA2X2Y2X120	120	2	34.5	518	1225
3KVNA2X2Y3X120	120	3	32.5	488	1395
3KVNA2X2Y4X120	120	4	37.0	555	1785
3KVNA2X2Y1X150	150	1	22.5	338	610
3KVNA2X2Y2X150	150	2	40.0	600	1560
3KVNA2X2Y3X150	150	3	36.0	540	1710
3KVNA2X2Y4X150	150	4	41.5	623	2200
3KVNA2X2Y1X185	185	1	23.5	353	725
3KVNA2X2Y2X185	185	2	42.5	638	1225
3KVNA2X2Y3X185	185	3	40.0	600	2095
3KVNA2X2Y4X185	185	4	46.5	698	2740
3KVNA2X2Y1X240	240	1	26.0	390	895
3KVNA2X2Y2X240	240	2	48.0	720	1575
3KVNA2X2Y3X240	240	3	45.0	675	2660
3KVNA2X2Y4X240	240	4	52.5	788	3480
3KVNA2X2Y1X300	300	1	28.5	428	1090
3KVNA2X2Y2X300	300	2	54.0	810	1900
3KVNA2X2Y3X300	300	3	50.0	750	3270
3KVNA2X2Y4X300	300	4	58.0	870	4295
3KVNA2X2Y1X400	400	1	31.0	465	1365
3KVNA2X2Y2X400	400	2	60.0	900	3800
3KVNA2X2Y3X400	400	3	57.0	855	4300
3KVNA2X2Y4X400	400	4	66.5	998	5685
3KVNA2X2Y1X500	500	1	35.0	525	1695
3KVNA2X2Y1X630	630	1	39.0	585	2185

Reference	Conductor Size (mm2)	No Of Cores	Max Overall Dia	Minimum Bending Radius	Weight(Kg/Km)
3KVNA2X2Y1X800	800	1	45.0	675	2840
3KVNA2X2Y1X1000	1000	1	52.0	780	3580

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