

N2XY IEC 60502-1 XLPE PVC 0.6/1kV Cable



Eland Product Group: A2N

APPLICATION

These power and fixed wiring cables are used for electricity supply in low voltage installation systems. They are well adapted to underground use in industrial applications with an additional mechanical protection. These cables can be fixed on cable trays, within conduits or fixed to walls.

CHARACTERISTICS

Voltage Rating Uo/U
0.6/1kV

Temperature Rating
During installation -5°C to +50°C
Fixed Installation: -20°C to +90°C

Minimum Bending Radius
Fixed: 12 x overall diameter

CONSTRUCTION

Conductor

RE: Class 1 solid copper conductor
RM: Class 2 stranded circular or circular compacted
SM: Class 2 stranded sectoral shaped

Insulation

XLPE (Cross-Linked Polyethylene)

Bedding

PVC (Polyvinyl Chloride)

Sheath

PVC (Polyvinyl Chloride)

Core Identification

3 core: ● Green/Yellow ● Blue ● Brown
4 core: ● Green/Yellow ● Brown ● Black ● Grey
5 core: ● Green/Yellow ● Blue ● Brown ● Black ● Grey
7 cores and above: ● Black cores and ○ White numbers

Sheath Colour

● Black

STANDARDS

IEC 60502-1, VDE 0276-603, BS EN 60228

Flame retardant according to BS EN/IEC 60332-1-2



ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



REGULATORY COMPLIANCE

This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.



DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR TYPE	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A2N2XY116	1	16	RM	0.7	1.8	9.8	216
A2N2XY125	1	25	RM	0.9	1.8	11.5	318
A2N2XY135	1	35	RM	0.9	1.8	12.6	415
A2N2XY150	1	50	RM	1	1.8	14.1	543
A2N2XY170	1	70	RM	1.1	1.8	15.6	746
A2N2XY195	1	95	RM	1.1	1.8	17.6	1000
A2N2XY1120	1	120	RM	1.2	1.8	19.2	1239
A2N2XY1150	1	150	RM	1.4	1.8	21.2	1515
A2N2XY1185	1	185	RM	1.6	1.8	23.1	1872
A2N2XY1240	1	240	RM	1.7	1.8	25.8	2403
A2N2XY1300	1	300	RM	1.8	1.8	27.8	2974
A2N2XY1400	1	400	RM	2	1.9	31.1	3834
A2N2XY1500	1	500	RM	2.2	2	34.9	4892
A2N2XY1630	1	630	RM	2.8	2.8	46.6	6544
A2N2XY2015	2	1.5	RE	0.7	1.8	10.1	145
A2N2XY2025	2	2.5	RE	0.7	1.8	10.9	179
A2N2XY2040	2	4	RE	0.7	1.8	11.8	226
A2N2XY2060	2	6	RE	0.7	1.8	12.8	284
A2N2XY210	2	6	RM	0.7	1.8	13.1	295
A2N2XY216	2	10	RM	0.7	1.8	15	416
A2N2XY225	2	16	RM	0.7	1.8	17	581
A2N2XY235	2	25	RM	0.9	1.8	20.4	859
A2N2XY235	2	35	RM	0.9	1.8	22.5	1109
A2N2XY3015	3	1.5	RE	0.7	1.8	10.5	162
A2N2XY3025	3	2.5	RE	0.7	1.8	11.4	205
A2N2XY3040	3	4	RE	0.7	1.8	12.4	265
A2N2XY3060	3	6	RE	0.7	1.8	13.4	338
A2N2XY310	3	10	RM	0.7	1.8	15.8	505
A2N2XY316	3	16	RM	0.7	1.8	18	719
A2N2XY325	3	25	RM	0.9	1.8	21.6	1072
A2N2XY335	3	35	RM	0.9	1.8	23.9	1403
A2N2XY350	3	50	SM	1	1.9	23.8	1581
A2N2XY316/10	3	16/10	SM	0.7	1.8	19.8	875.5
A2N2XY325/16	3	25/16	SM	0.9/0.7	1.8	22.4	1223
A2N2XY335/16	3	35/16	SM	0.9/0.7	1.8	24.3	1557
A2N2XY350/25	3	50/25	SM	1/0.9	1.9	26.9	1863
A2N2XY370/35	3	70/35	SM	1.1/0.9	2	30	2594
A2N2XY395/50	3	95/50	SM	1.1/1	2.2	33.8	3505
A2N2XY3120/70	3	120/70	SM	1.2/1.1	2.3	37	4440
A2N2XY3150/70	3	150/70	SM	1.4/1.1	2.4	41.6	5333
A2N2XY3185/95	3	185/95	SM	1.6/1.1	2.6	45.8	6701
A2N2XY3240/120	3	240/120	SM	1.7/1.2	2.8	51.6	8674
A2N2XY3300/150	3	300/150	SM	1.8/1.4	3	67.2	10624
A2N2XY4015	4	1.5	RE	0.7	1.8	11.3	188
A2N2XY4025	4	2.5	RE	0.7	1.8	12.2	240
A2N2XY4040	4	4	RE	0.7	1.8	13.3	314

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A2N2XY4060	4	6	RE	0.7	1.8	14.5	408
A2N2XY410	4	10	RE	0.7	1.8	17.1	615
A2N2XY416	4	16	RE	0.7	1.8	19.6	885
A2N2XY425	4	25	RE	0.9	1.8	23.7	1330
A2N2XY435	4	35	RE	0.9	1.8	26.2	1758
A2N2XY450	4	50	SM	1	2	27.1	2082
A2N2XY470	4	70	SM	1.1	2.1	31.4	2937
A2N2XY495	4	95	SM	1.1	2.2	35	3955
A2N2XY4120	4	120	SM	1.2	2.4	39.3	4979
A2N2XY4150	4	150	SM	1.4	2.6	43.6	6129
A2N2XY4185	4	185	SM	1.6	2.7	48	7591
A2N2XY4240	4	240	SM	1.7	2.9	53.9	9875
A2N2XY4300	4	300	SM	1.8	2.6	68.9	15124
A2N2XY5015	5	1.5	RE	0.7	1.8	12.1	218
A2N2XY5025	5	2.5	RE	0.7	1.8	13.1	281
A2N2XY5040	5	4	RE	0.7	1.8	14.3	372
A2N2XY5060	5	6	RE	0.7	1.8	15.6	486
A2N2XY510	5	10	RM	0.7	1.8	18.6	740
A2N2XY516	5	16	RM	0.7	1.8	21.3	1071
A2N2XY525	5	25	RM	0.9	1.8	25.9	1619
A2N2XY535	5	35	RM	0.9	1.8	28.8	2138
A2N2XY550	5	50	RM	1	2.1	29.4	2578
A2N2XY570	5	70	RM	1.1	2.2	33.7	3616
A2N2XY595	5	95	RM	1.1	2.4	38.6	4933
A2N2XY5120	5	120	RM	1.2	2.5	42.6	6153
A2N2XY5150	5	150	RM	1.4	2.7	47.7	7587
A2N2XY5185	5	185	RM	1.6	2.9	52.8	9454
A2N2XY5240	5	240	RM	1.7	3.1	58.7	12242
A2N2XY7015	7	1.5	RE	0.7	1.8	12.9	260
A2N2XY7025	7	2.5	RE	0.7	1.8	14	342
A2N2XY7040	7	4	RE	0.7	1.8	15.4	461
A2N2XY10015	10	1.5	RE	0.7	1.8	15.6	357
A2N2XY10025	10	2.5	RE	0.7	1.8	17.2	475
A2N2XY10040	10	4	RE	0.7	1.8	19	646
A2N2XY12015	12	1.5	RE	0.7	1.8	16.1	394
A2N2XY12025	12	2.5	RE	0.7	1.8	17.6	528
A2N2XY14015	14	1.5	RE	0.7	1.8	16.8	436
A2N2XY14025	14	2.5	RE	0.7	1.8	18.5	592
A2N2XY16040	16	4	RM	0.7	1.8	23	971
A2N2XY19015	19	1.5	RE	0.7	1.8	18.4	543
A2N2XY19025	19	2.5	RE	0.7	1.8	20.3	746
A2N2XY24015	24	1.5	RE	0.7	1.8	21.2	675
A2N2XY24025	24	2.5	RE	0.7	1.8	23.4	931
A2N2XY30015	30	1.5	RE	0.7	1.8	22.3	788
A2N2XY30025	30	2.5	RM	0.7	1.8	26.3	1164
A2N2XY40015	40	1.5	RE	0.7	1.8	24.6	995
A2N2XY40025	40	2.5	RE	0.7	1.9	27.5	1416

CONDUCTORS

Class 1 Solid Conductors for Single-Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
	Circular, Annealed Copper Conductors Plain
0.5	36
0.75	24.5
1	18.1
1.5	12.1
2.5	7.41
4	4.61
6	3.08

Class 2 Stranded Conductors for Single-Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm ²	MINIMUM NO. OF WIRES IN THE CONDUCTOR		MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
	Circular	Circular Compacted	Annealed Copper Conductors
	Cu	Cu	Plain Wires
4	7	6	4.51
6	7	6	3.08
10	7	6	1.83
16	7	6	1.15
25	7	6	0.727
35	7	6	0.524
50	19	6	0.387
70	19	12	0.268
95	19	15	0.193
120	37	18	0.153
150	37	18	0.124
185	37	30	0.0991
240	37	34	0.0754
300	61	34	0.0601
400	61	53	0.0470
500	61	53	0.0366

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity at 30°C

NOMINAL CROSS SECTIONAL AREA mm ²	SINGLE CORE				2 - 40 CORE Amps	
	In Ground		In Air		In Ground	In Air
	Flat	Trefoil	Flat	Trefoil		
1.5	-	-	-	-	31	24
2.5	-	-	-	-	40	32
4	82	54	57	44	52	42
6	102	67	72	56	64	53
10	136	89	99	77	86	74
16	176	115	131	102	112	98
25	229	148	177	138	145	133
35	275	177	217	170	174	162
50	326	209	265	207	206	197
70	400	256	336	263	254	250
95	480	307	415	325	305	308
120	548	349	485	380	348	359
150	616	393	557	437	392	412
185	698	445	646	507	444	475
240	815	517	774	604	517	564
300	927	663	901	697	585	649
400	1064	749	1060	811	-	-
500	1227	843	1252	940	-	-

DE-RATING FACTORS

For Ground Temperatures other than 20°C

AIR TEMPERATURE	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
DE-RATING FACTOR	1.07	1.04	1.00	0.96	0.93	0.89	0.85	0.80	0.76

For Air Temperatures other than 30°C

AIR TEMPERATURE	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
DE-RATING FACTOR	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.