ELAND CABLES

N2XCY Cable

Eland Product Group: B2O

APPLICATION

The N2XCY cable is suitable for installation in ground, indoors, cable trunking and outdoors. Used for power distribution in industrial application, including urban networks and household feeders.

CHARACTERISTICS

Voltage Rating Uo/U
0.6/1kV

Test Voltage
3.5kV

Temperature Rating
Maximum Operating: +90°C
Maximum Short-Circuit: +250°C

Minimum Bending Radius
15 x overall diameter

CONSTRUCTION

Conductor
Class 2 Stranded copper

Insulation
XLPE (Cross-Linked Polyethylene)

Filler
PVC (Polyvinyl chloride)

Concentric Conductor
Copper

Tape
Protective Copper Tape

Outer Sheath
PVC (Polyvinyl chloride)

Core Identification
2 core: Brown Blue
3 core: Green/Yellow Blue Brown
4 core: Green/Yellow Brown Black Grey
5 core: Green/Yellow Blue Brown Black Grey
7 core and above: Black Green/Yellow

Outer Sheath Colour
Black

STANDARDS

IEC 60502-1, VDE 0276-603, IS 1516.1

Flame retardant according to IEC 60332-1

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.

UKAS ISO/IEC 17025 Accredited Testing Laboratory 8578

bsi. ISO 9001 Quality Management FS 672069 | ISO 14001 Environmental Management EMS 672067 | ISO 45001 Occupational Health and Safety Management OHS 672066

REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.

CPR COMPLIANT EN 50575

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™.

bsi. RoHS Trusted KITEMARK™ KM 634267 RoHS CE

DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF OUTER SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B2O0020015BK	2	1.5/1.5	1.37	0.70	1.24	12	186
B2O0020025BK	2	2.5/2.5	1.76	0.70	1.24	13	233
B2O0020040BK	2	4/4	2.21	0.70	1.24	14	298
B2O0020060BK	2	6/6	2.71	0.70	1.24	15	380
B2O002010BK	2	10/10	3.85	0.70	1.24	17	560
B2O002016BK	2	16/10	4.8	0.70	1.24	20	801
B2O002025BK	2	25/16	5.8	0.90	1.24	23	1063
B2O002035BK	2	35/16	6.85	0.90	1.24	25	1312
B2O002050BK	2	50/25	8.1	1.00	1.32	29	1761
B2O002070BK	2	70/35	9.7	1.10	1.40	33	2445
B2O002095BK	2	95/50	11.4	1.10	1.48	37	3230
B2O002120BK	2	120/70	13.1	1.20	1.64	42	4137
B2O002150BK	2	150/70	14.5	1.40	1.72	46	4897
B2O002185BK	2	185/95	16.0	1.60	1.88	51	6097
B2O002240BK	2	240/120	18.6	1.70	2.04	57	7923
B2O002300BK	2	300/150	21.0	1.80	2.20	63	9819
B2O0030015BK	3	1.5/1.5	1.3	0.7	1.24	12	203
B2O0030025BK	3	2.5/2.5	1.76	0.7	1.24	13	260
B2O0030040BK	3	4/4	2.21	0.7	1.24	14	336
B2O0030060BK	3	6/6	2.71	0.7	1.24	16	433
B2O003010BK	3	10/10	3.8	0.7	1.24	18	637
B2O003016BK	3	16/10	4.8	0.7	1.24	22	1044
B2O003025BK	3	25/16	5.9	0.9	1.24	27	1421
B2O003035BK	3	35/16	6.9	0.9	1.32	29	1763
B2O003050BK	3	50/25	8.2	1	1.4	33	2369
B2O003070BK	3	70/35	9.7	1.1	1.56	38	3250
B2O003095BK	3	95/50	11.4	1.1	1.64	42	4337
B2O003120BK	3	120/70	13.1	1.2	1.8	48	5526
B2O003150BK	3	150/70	14.2	1.4	1.88	51	6486
B2O003185BK	3	185/95	15.8	1.6	2.04	57	8108
B2O003240BK	3	240/120	18.6	1.7	2.2	64	10459
B2O003300BK	3	300/150	21	1.8	2.36	68	12541
B2O0040015BK	4	1.5/1.5	1.3	0.7	1.24	13	245
B2O0040025BK	4	2.5/2.5	1.76	0.7	1.24	14	317
B2O0040040BK	4	4/4	2.21	0.7	1.24	16	415
B2O0040060BK	4	6/6	2.71	0.7	1.24	17	537
B2O004010BK	4	10/10	3.9	0.7	1.24	20	806
B2O004016BK	4	16/10	4.8	0.7	1.24	22	1137
B2O004025BK	4	25/16	5.9	0.9	1.24	27	1593
B2O004035BK	4	35/16	6.9	0.9	1.32	30	2059
B2O004050BK	4	50/25	8.2	1	1.4	34	2753
B2O004070BK	4	70/35	9.7	1.1	1.56	39	3821
B2O004095BK	4	95/50	11.4	1.1	1.72	44	5111
B2O004120BK	4	120/70	13.1	1.2	1.88	50	6501
B2O004150BK	4	150/70	14.2	1.4	1.96	53	7748
B2O004185BK	4	185/95	15.8	1.6	2.12	59	9609
B2O004240BK	4	240/120	18.6	1.7	2.28	67	12480
B2O004300BK	4	300/150	21	1.8	2.52	75	15709

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DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF OUTER SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B2O050015BK	5	1.5/1.5	1.3	0.7	1.24	14	271
B2O050025BK	5	2.5/2.5	1.76	0.7	1.24	16	384
B2O050040BK	5	4/4	2.21	0.7	1.24	17	509
B2O050060BK	5	6/6	2.71	0.7	1.24	19	641
B2O05010BK	5	10/10	3.9	0.7	1.24	22	974
B2O05016BK	5	16/10	4.8	0.7	1.24	25	1414
B2O05025BK	5	25/16	5.9	0.9	1.32	30	1993
B2O05035BK	5	35/16	6.9	0.9	1.4	33	2503
B2O05050BK	5	50/25	8.2	1	1.56	38	3453
B2O070015BK	7	1.5/1.5	1.37	0.7	1.24	15	332
B2O070025BK	7	2.5/2.5	1.76	0.7	1.24	16	432
B2O080015BK	8	1.5/1.5	1.37	0.7	1.24	16	388
B2O080025BK	8	2.5/2.5	1.76	0.7	1.24	18	507
B2O100015BK	10	1.5/1.5	1.37	0.7	1.24	18	470
B2O100025BK	10	2.5/2.5	1.76	0.7	1.24	19	616
B2O120015BK	12	1.5/1.5	1.37	0.7	1.24	18	507
B2O120025BK	12	2.5/2.5	1.76	0.7	1.24	20	671
B2O140015BK	14	1.5/1.5	1.37	0.7	1.24	19	556
B2O140025BK	14	2.5/2.5	1.76	0.7	1.24	21	740
B2O160015BK	16	1.5/1.5	1.37	0.7	1.24	20	612
B2O160025BK	16	2.5/2.5	1.76	0.7	1.24	22	819
B2O190015BK	19	1.5/1.5	1.37	0.7	1.24	20	679
B2O190025BK	19	2.5/2.5	1.76	0.7	1.24	23	916
B2O210015BK	21	1.5/1.5	1.37	0.7	1.24	21	745
B2O210025BK	21	2.5/2.5	1.76	0.7	1.24	24	1006
B2O240015BK	24	1.5/1.5	1.37	0.7	1.24	23	835
B2O240025BK	24	2.5/2.5	1.76	0.7	1.24	25	1132

CONDUCTORS

NOMINAL CROSS SECTIONAL AREA mm²	MINIMUM NO. OF WIRES IN CONDUCTOR						MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km
	Circular		Circular Compacted		Shaped		Annealed Copper Conductor
	Cu	Al	Cu	Al	Cu	Al	Plain Wires
1.5	7	-	6	-	-	-	12.1
2.5	7	-	6	-	-	-	7.41
4	7	-	6	-	-	-	4.61
6	7	-	6	-	-	-	3.08
10	7	7	6	6	-	-	1.83
16	7	7	6	6	-	-	1.15
25	7	7	6	6	6	6	0.727
35	7	7	6	6	6	6	0.524
50	19	19	6	6	6	6	0.387
70	19	19	12	12	12	12	0.268
95	19	19	15	15	15	15	0.193
120	37	37	18	15	18	15	0.153
150	37	37	18	15	18	15	0.124
185	37	37	30	30	30	30	0.0991
240	37	37	34	30	34	30	0.0754
300	61	61	34	30	34	30	0.0601

The above table is in accordance with EN 60228

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity at 30°C

NOMINAL CROSS SECTIONAL AREA mm²	NO. OF CORES													
	2, 3, 4 & 5 Core		7 Core		8 Core		10 Core		12 Core		14, 16 & 19 Core		21 & 24 Core	
	In ground A	In Air A	In ground A	In Air A	In ground A	In Air A	In ground A	In Air A	In ground A	In Air A	In ground A	In Air A	In ground A	In Air A
1.5	31	25	18.6	16.3	16	12	15.5	13.8	15	12.5	12.4	11.3	10.9	10
2.5	40	33	24.6	21.5	24	16	20.5	18.2	18.5	16.5	16.2	14.9	14.4	13.2
4	52	43	-	-	-	-	-	-	-	-	-	-	-	-
6	65	54	-	-	-	-	-	-	-	-	-	-	-	-
10	87	75	-	-	-	-	-	-	-	-	-	-	-	-
16	113	100	-	-	-	-	-	-	-	-	-	-	-	-
25	146	136	-	-	-	-	-	-	-	-	-	-	-	-
35	176	165	-	-	-	-	-	-	-	-	-	-	-	-
50	208	201	-	-	-	-	-	-	-	-	-	-	-	-
70	156	255	-	-	-	-	-	-	-	-	-	-	-	-
95	307	314	-	-	-	-	-	-	-	-	-	-	-	-
120	349	364	-	-	-	-	-	-	-	-	-	-	-	-
150	391	416	-	-	-	-	-	-	-	-	-	-	-	-
185	442	480	-	-	-	-	-	-	-	-	-	-	-	-
240	509	565	-	-	-	-	-	-	-	-	-	-	-	-
300	580	638	-	-	-	-	-	-	-	-	-	-	-	-

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