

ELAND[®]
CABLES

YMz1K Flex LSZH Cable



Eland Product Group: B1C

APPLICATION

These power cables are used for electricity supply in low voltage installation system. 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 and are suitable for duct installation.

CHARACTERISTICS

Voltage Rating Uo/U
0.6/1kV

Test Voltage
3.5kV

Temperature Rating
Fixed: -15°C to +90°C

Minimum Bending Radius
Fixed: 6 x overall diameter

CONSTRUCTION

Conductor
Class 5, Fine Stranded Copper Conductor

Insulation
XLPE (Cross-Linked Polyethylene)

Bedding
LSZH-FRNC (Low Smoke Zero Halogen - Flame Retardant NonCorrosive)

Sheath
LSZH-FRNC (Low Smoke Zero Halogen - Flame Retardant NonCorrosive)

Core Identification

- 1 core: ● Black
- 2 core: ● Blue ● Brown
- 3 core including earth: ● Blue ● Brown ● Green/Yellow
- 3 core: ● Brown ● Black ● Grey
- 4 core including earth: ● Brown ● Black ● Grey ● Green/Yellow
- 5 core including earth core: ● Brown ● Black ● Grey ● Green/Yellow ● Blue

Outer Sheath Colour
● Black

CABLE THIRD-PARTY ACCREDITATION



Cables are tested and accredited by KEMA Laboratories in The Netherlands to KEMA K42C-1-5

STANDARDS

VDE0274 Part 604, VDE0276 Part 604, HD 604 S1, IEC 60364, BS EN 60228, BS EN 62230, DIN VDE 0100, CEI 20-60, NEN 1010, NF C15-100, IEC 61034-2, IEC 60754-1/2, EN 50396, EN 60229-4.1

Flame retardant according to IEC 60332-3-24, 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	NOMINAL DIAMETER OF CONDUCTOR mm	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF OUTER SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B1C01035BK	1	35	7.50	0.90	0.92	13	383
B1C01050BK	1	50	9.05	1.00	0.92	14	526
B1C01070BK	1	70	10.95	1.10	0.92	16	716
B1C01095BK	1	95	12.35	1.10	1.00	18	938
B1C01120BK	1	120	14.00	1.20	1.00	20	1172
B1C01150BK	1	150	15.80	1.40	1.08	22	1454
B1C01185BK	1	185	18.50	1.60	1.12	25	1795
B1C01240BK	1	240	20.50	1.70	1.16	27	2312
B1C01300BK	1	300	23.10	1.80	1.24	30	2847
B1C01400BK	1	400	28.50	2.00	1.32	36	3731
B1C01500BK	1	500	30.00	2.20	1.40	39	4701
B1C01630BK	1	630	33.00	2.40	1.56	42	6146
B1C02035BK	2	35	7.50	0.90	1.24	24	1095
B1C02050BK	2	50	9.05	1.00	1.24	27	1486
B1C02070BK	2	70	10.95	1.10	1.24	32	2012
B1C02095BK	2	95	12.35	1.10	1.40	35	2615
B1C02120BK	2	120	14.00	1.20	1.48	40	3285
B1C02150BK	2	150	15.80	1.40	1.56	45	4134
B1C02185BK	2	185	18.50	1.60	1.64	51	5214
B1C03035BK	3	35	7.50	0.90	1.24	26	1390
B1C03050BK	3	50	9.05	1.00	1.24	30	1901
B1C03070BK	3	70	10.95	1.10	1.32	34	2603
B1C03095BK	3	95	12.35	1.10	1.40	38	3386
B1C03120BK	3	120	14.00	1.20	1.48	42	4260
B1C03150BK	3	150	15.80	1.40	1.64	48	5368
B1C03185BK	3	185	18.50	1.60	1.72	55	6724
B1C04035BK	4	35	7.50	0.90	1.24	28	1751
B1C04050BK	4	50	9.05	1.00	1.32	33	2422
B1C04070BK	4	70	10.95	1.10	1.40	38	3323
B1C04095BK	4	95	12.35	1.10	1.48	42	4331
B1C04120BK	4	120	14.00	1.20	1.64	47	5475
B1C04150BK	4	150	15.80	1.40	1.76	54	6870
B1C04185BK	4	185	18.50	1.60	1.88	61	8607
B1C04240BK	4	240	20.50	1.70	2.04	67	10967
B1C04300BK	4	300	23.10	1.80	2.20	74	13486
B1C05035BK	5	35	7.50	0.90	1.24	31	2154
B1C05050BK	5	50	9.05	1.00	1.40	36	3002
B1C05070BK	5	70	10.95	1.10	1.48	42	4121
B1C05095BK	5	95	12.35	1.10	1.64	46	5390
B1C05120BK	5	120	14.00	1.20	1.72	52	6782
B1C05150BK	5	150	15.80	1.40	1.88	59	8515
B1C05185BK	5	185	18.50	1.60	2.04	68	10679

ELECTRICAL CHARACTERISTICS

Single Core

NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITY A				MAXIMUM CONDUCTOR RESISTANCE AT 20°C Ω/km
	IN CONDUIT		IN AIR		
	Flat Formation	Trefoil Formation	Flat Formation	Trefoil Formation	
35	207	173	206	165	0.524
50	243	205	250	202	0.386
70	298	251	318	257	0.272
95	355	301	392	319	0.206
120	404	341	457	370	0.161
150	451	384	525	425	0.129
185	510	436	607	492	0.106
240	592	505	727	588	0.0801
300	668	569	838	676	0.0641
400	764	649	987	792	0.0486
500	862	726	1138	905	0.0384
630	961	810	1200	986	0.0287

Multi Core

NOMINAL CROSS SECTIONAL AREA mm ²	CURRENT CARRYING CAPACITY IN AIR A	MAXIMUM CONDUCTOR RESISTANCE AT 20°C Ω/km
35	155	0.554
50	189	0.386
70	240	0.272
95	296	0.206
120	344	0.161
150	395	0.129
185	455	0.106
240	534	0.0801
300	619	0.0641

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.