



YMz1Krvasdlwd-AL 12/20kV Cable



Eland Product Group: B1E

APPLICATION

LSZH Medium Voltage cable with aluminium conductors offering a lightweight alternative to copper conductor alternatives. Suitable for use in conduit and for fixed, protected installation. For installations where fire, smoke emission and toxic fume create a potential risk to life and equipment.

CHARACTERISTICS

Voltage Rating U₀/U
12/20kV

Temperature Rating

Fixed: 0°C to +90°C
Maximum Conductor Short-Circuit Temp up to 5 sec: 250°C

Minimum Bending Radius

Single Core: 15 x overall diameter
Multi Core: 12 x overall diameter

CONSTRUCTION

Conductor

Class 2 Stranded Aluminium

Inner Semi-Conductive Layer

Semi-Conductive Material

Insulation

XLPE (Cross-Linked Polyethylene)

Outer Semi-Conductive Layer

Semi-Conductive Material

Screen

Copper wires and tape

Tape

Longitudinal and Radial Water Blocking

Outer Sheath

LSZH (Low Smoke Zero Halogen) UV Resistant

Core Identification

Multi Cores: ● Brown ● Black ● Grey

Sheath Colour

● Red

STANDARDS

Generally to HD 620-10J / NEN 3620
Flame Retardant to IEC/EN 60332-1-2, IEC/EN 60332-3-24 Cat.C

THE CABLE LAB[®]

AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.



SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability



REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab[®].





DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL CROSS SECTIONAL AREA OF SCREEN mm ²	NOMINAL DIAMETER OVER CONDUCTOR mm	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF SEMI-CONDUCTIVE LAYER mm		NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
						Inner	Outer			
B1E20KV01050RD	1	50	25	8.10	4.50	0.50	0.40(fully bonded)	2.50	30	1100
B1E20KV01070RD	1	70	25	9.70	4.50	0.50	0.40(fully bonded)	2.50	31	1200
B1E20KV01095RD	1	95	25	11.40	4.50	0.50	0.40(fully bonded)	2.50	33	1300
B1E20KV01120RD	1	120	25	12.60	4.50	0.50	0.40(fully bonded)	2.50	34	1400
B1E20KV01150RD	1	150	25	14.10	4.50	0.50	0.40(fully bonded)	2.50	36	1500
B1E20KV01185RD	1	185	25	15.80	4.50	0.50	0.40(fully bonded)	2.50	37	1700
B1E20KV01240RD	1	240	25	18.10	4.50	0.50	0.40(fully bonded)	2.50	40	1900
B1E20KV01300RD	1	300	25	20.20	4.50	0.50	0.40(fully bonded)	2.50	42	2200
B1E20KV01400RD	1	400	50	23.00	4.50	0.50	0.40(fully bonded)	2.50	45	2750
B1E20KV01500RD	1	500	50	26.00	4.50	0.50	0.40(fully bonded)	2.50	48	3250
B1E20KV01630RD	1	630	50	30.10	4.50	0.50	0.40(fully bonded)	2.50	52	3750
B1E20KV03050RD	3	50	70	8.10	4.50	0.50	0.40(fully bonded)	3.20	60	3250
B1E20KV03070RD	3	70	70	9.70	4.50	0.50	0.40(fully bonded)	3.20	63	3700
B1E20KV03095RD	3	95	70	11.40	4.50	0.50	0.40(fully bonded)	3.20	67	4000
B1E20KV03120RD	3	120	70	12.60	4.50	0.50	0.40(fully bonded)	3.20	70	4500
B1E20KV03150RD	3	150	70	14.10	4.50	0.50	0.40(fully bonded)	3.20	73	4900
B1E20KV03185RD	3	185	70	15.80	4.50	0.50	0.40(fully bonded)	3.20	77	5400
B1E20KV03240RD	3	240	70	18.10	4.50	0.50	0.40(fully bonded)	3.20	82	6200

ELECTRICAL CHARACTERISTICS

Single Core

NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL SHORT-CIRCUIT OF CONDUCTOR CURRENT FOR 1 SECOND kA	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/km	CONDUCTOR AC RESISTANCE BY MAXIMUM TEMPERATURE Ω/km	CURRENT CARRYING CAPACITY A		CONDUCTOR LOSSES IN THE GROUND kW/km
				In Ground 20°C	In Air 30°C	
50	4.70	0.0641	0.825	195	217	31.4
70	6.58	0.0443	0.570	237	270	32.0
95	8.93	0.320	0.412	282	328	32.8
120	11.28	0.253	0.328	320	378	33.6
150	14.10	0.206	0.268	353	425	33.4
185	17.39	0.164	0.213	396	485	33.4
240	22.56	0.125	0.163	457	573	34.0
300	28.20	0.100	0.132	511	652	34.5
400	37.60	0.0778	0.103	566	740	33.0
500	47.00	0.0605	0.0810	630	838	32.1
630	59.22	0.0469	0.0640	701	882	-



ELECTRICAL CHARACTERISTICS

Multi Core

NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL SHORT- CIRCUIT OF CONDUCTOR CURRENT FOR 1 SECOND kA	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/km	CONDUCTOR AC RESISTANCE BY MAXIMUM TEMPERATURE Ω/km	CURRENT CARRYING CAPACITY A	
				In Ground 20°C	In Air 30°C
50	4.70	0.641	0.825	167	167
70	6.58	0.443	0.570	205	208
95	8.93	0.320	0.412	244	251
120	11.28	0.253	0.328	279	291
150	14.10	0.206	0.268	312	329
185	17.39	0.164	0.213	355	379
240	22.56	0.125	0.163	412	446

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.