



Eland Product Group: B4Y

APPLICATION

Medium voltage cables for distribution networks; also for connection to generation units and plant and process connection. To be laid directly in ground, outdoors, indoors and in cable ducts.

CHARACTERISTICS

Voltage Rating U_0/U (Um)

8.7/15 (17.5)kV
12/20 (24)kV
18/30 (36)kV

Temperature Rating

Maximum conductor operating temperature: 90°C
Initial temperature at S.C.C for metallic screen: 80°C
Maximum conductor temperature during S.C: 250°C

Minimum Bending Radius

10 x overall diameter

CONSTRUCTION

Conductor

Class 2 stranded aluminium conductor

Conductor Screen

Semi-conductive material

Insulation

XLPE (Cross-Linked Polyethylene)

Insulation Screen

Semi-conductive material

Screen

Copper wires

Sheath

PVC (Polyvinyl Chloride)

Sheath Colour

● Red

STANDARDS

EN 60228, IEC 60502-2

Generally to HD620 10B

Flame Retardant according to IEC/EN 60332-1-2

THE CABLE LAB®

AN ISO/IEC 17025 AND IECCE 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 8.7/15 (17.5)KV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL SCREEN CROSS SECTIONAL AREA mm ²	MINIMUM SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B4Y15KV01050	1	50	16	1.24	23.8	691
B4Y15KV01095	1	95	16	1.24	27.1	901.8
B4Y15KV01150	1	150	25	1.4	31.3	1257.7
B4Y15KV01240	1	240	25	1.88	34.6	1578.4
B4Y15KV01400	1	400	35	1.56	40.1	2258.6
B4Y15KV01630	1	630	35	1.72	48.4	3263.5

ELECTRICAL CHARACTERISTICS 8.7/15 (17.5)KV

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20 °C Ω/Km	MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP. AND 50HZ Ω/Km	CAPACITANCE μF/Km	CHARGING CURRENT A/Km	DIELECTRIC LOSSES W/Km	REACTANCE AT 50 HZ ohm/km	CONDUCTOR S.C.C FOR 1 SEC KA	COPPER SCREEN S.C.C FOR 1 SEC KA	CURRENT RATING A	
									Laid in ground	Laid in free air
50	0.641	0.822	0.214	0.586	20.37	0.128	4.69	1.75	180	184
95	0.32	0.411	0.267	0.73	25.39	0.116	8.90	1.75	265	280
150	0.206	0.265	0.327	0.895	31.16	0.107	14.06	2.73	338	369
240	0.125	0.161	0.383	1.047	36.42	0.101	22.49	2.73	431	505
400	0.0778	0.101	0.464	1.27	44.20	0.094	37.48	3.82	548	675
630	0.0469	0.062	0.596	1.629	56.70	0.090	59.03	3.82	731	912

Laying conditions at trefoil formation are as below:

- Soil thermal resistivity 100 °C.Cm/Watt
- Burial depth 0.8 m
- Ground temperature 20 °C
- Air temperature 30 °C
- Frequency 50 Hz

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.



DIMENSIONS 12/20 (24)KV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²		NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
		Conductor	Copper Wire Screen		
B4Y20KV01050	1	50	16	33	950
B4Y20KV01095	1	95	16	36	1150
B4Y20KV01150	1	150	25	39	1500
B4Y20KV01240	1	240	25	44	1850
B4Y20KV01400	1	400	35	49	2550

ELECTRICAL CHARACTERISTICS 12/20 (24)KV

NOMINAL CROSS SECTIONAL AREA mm ²		CURRENT CARRYING CAPACITY Amps	
Conductor	Copper Wire Screen	In Ground	In Air
50	16	172	185
95	16	251	280
150	25	319	366
240	25	417	496
400	35	535	660

DIMENSIONS 18/30 (36)KV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²		NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
		Conductor	Copper Wire Screen		
B4Y30KV01050	1	50	16	41	1190
B4Y30KV01095	1	95	16	43	1450
B4Y30KV01150	1	150	25	47	1800
B4Y30KV01240	1	240	25	51	2230
B4Y30KV01400	1	400	35	56	2920

ELECTRICAL CHARACTERISTICS 18/30 (36)KV

NOMINAL CROSS SECTIONAL AREA mm ²		CURRENT CARRYING CAPACITY Amps	
Conductor	Copper Wire Screen	In Trefoil	
		In Ground	In Air
50	16	175	187
95	16	256	281
150	25	324	365
240	25	426	494
400	35	545	654

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