



Eland Product Group: B4J

APPLICATION

Suitable for energy transmission between transformer rooms and big power users. For laying on air, into tube or open pass. Can be laid underground, also if not protected, complying with art. 4.3.11 of CEI 11-17 standard.

CHARACTERISTICS

Voltage Rating U₀/U (Um)

6/10 (12)kV
12/20 (24)kV

Temperature Range

Operating temperature: -15°C to +90°C
Minimum installation temperature: 0°C
Maximum short circuit temperature: 250°C

Minimum Bending Radius

16 x overall diameter

CONSTRUCTION

Conductor

Class 2 compact stranded Copper

Conductor Screen

Semi-conductive extruded

Insulation

HEPR (Hard Grade Ethylene Propylene Rubber)

Insulation Screen

Semi-conductive extruded, cold stripping

Screen

Plain annealed copper tapes

Inner Sheath

PVC based compound extruded, penetrating between the cores

Armour

Galvanized steel tapes

Outer Sheath

PVC (Polyvinyl Chloride)

Sheath Colour

● Red

STANDARDS

CEI 20-13, IEC 60502-2, CEI 20-16,
Flame propagation: 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 - 6/10kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL INSULATION THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B4J10KV03016	3	16	3.4	39.5	2805
B4J10KV03025	3	25	3.4	41.4	3055
B4J10KV03035	3	35	3.4	44.9	3805
B4J10KV03050	3	50	3.4	47.4	4415
B4J10KV03070	3	70	3.4	51.5	5415
B4J10KV03095	3	95	3.4	55.5	6545
B4J10KV03120	3	120	3.4	60.1	7855
B4J10KV03150	3	150	3.4	63.8	9000
B4J10KV03185	3	185	3.4	67.9	10510
B4J10KV03240	3	240	3.4	74.9	13005
B4J10KV03300	3	300	3.4	80.5	15460

ELECTRICAL CHARACTERISTICS - 6/10kV

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	NOMINAL CONDUCTOR RESISTANCE AT 90°C AND 50HZ ohms/km	PHASE REACTANCE ohms/km	CURRENT RATING A		CAPACITANCE AT 50HZ µF/km
				in air	buried	
16	1.15	1.47	0.13	105	111	0.18
25	0.727	0.927	0.12	143	145	0.21
35	0.524	0.669	0.11	170	172	0.23
50	0.387	0.494	0.11	205	203	0.26
70	0.268	0.342	0.10	253	250	0.29
95	0.193	0.247	0.097	305	296	0.32
120	0.153	0.197	0.094	353	337	0.36
150	0.124	0.159	0.091	393	375	0.38
185	0.0991	0.129	0.088	447	425	0.42
240	0.0754	0.099	0.085	525	490	0.47
300	0.0601	0.0807	0.084	595	550	0.52



DIMENSIONS - 12/20kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL INSULATION THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B4J20KV03035	3	35	5.5	49.3	5300
B4J20KV03050	3	50	5.5	51.7	5970
B4J20KV03070	3	70	5.5	55.3	7060
B4J20KV03095	3	95	5.5	59.2	8340
B4J20KV03120	3	120	5.5	63.4	9710
B4J20KV03150	3	150	5.5	66.8	11010
B4J20KV03185	3	185	5.5	70.5	12670
B4J20KV03240	3	240	5.5	76.8	15450
B4J20KV03300	3	300	5.5	82.3	18275

ELECTRICAL CHARACTERISTICS - 12/20kV

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km	CONDUCTOR APPARENT RESISTANCE AT 90°C AND 50HZ ohms/km	PHASE REACTANCE ohms/km	CURRENT RATING A		CAPACITANCE AT 50HZ µF/km
				in air	buried	
35	0.524	0.669	0.13	173	177	0.17
50	0.387	0.494	0.12	203	208	0.18
70	0.268	0.342	0.11	251	255	0.21
95	0.193	0.247	0.10	303	301	0.23
120	0.153	0.197	0.10	348	342	0.25
150	0.124	0.159	0.10	393	381	0.27
185	0.0991	0.129	0.098	448	431	0.29
240	0.0754	0.099	0.094	520	495	0.32
300	0.0601	0.0807	0.092	595	555	0.35