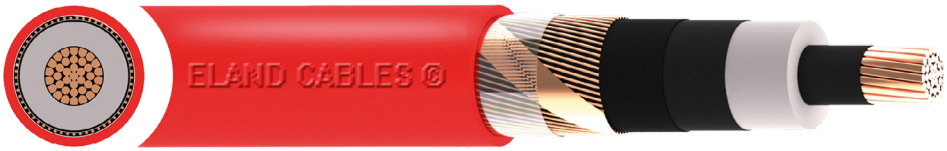
EXCVB Cable



Eland Product Group: B4N

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 (Uo/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
15 x overall diameter

CONSTRUCTION

Conductor
Class 2 Stranded copper conductor

Conductor Screen
Semi-conductive material (Bonded Type)

Insulation
XLPE (Cross-Linked Polyethylene)

Insulation Screen
Semi-conductive material (Strippable Type)

Screen
Copper wires with Open Helix Copper Tape Screen

Sheath
PVC (Polyvinyl Chloride)

Sheath Colour
Red Black

STANDARDS

IEC 60502-2, EN 60228

Generally to HD620 10B

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

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 8.7/15 (17.5)KV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL SCREEN CROSS SECTIONAL AREA mm²	NOMINAL INSULATION THICKNESS mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B4N15KV01050	1	50	16	4.5	1.7	23.8	967
B4N15KV01095	1	95	16	4.5	1.8	27.1	1466
B4N15KV01150	1	150	25	4.5	2	30.7	2125
B4N15KV01240	1	240	25	4.5	2.1	34.6	3055
B4N15KV01400	1	400	35	4.5	2.3	40.2	4591
B4N15KV01630	1	630	35	4.5	2.5	48.7	7064

ELECTRICAL CHARACTERISTICS 8.7/15 (17.5)KV

NOMINAL CROSS SECTIONAL AREA mm²	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	0.387	0.494	0.214	0.586	20.37	0.128	7.15	1.75	234	245
95	0.193	0.247	0.267	0.73	25.39	0.116	13.585	1.75	335	373
150	0.124	0.159	0.317	0.868	30.20	0.108	21.45	2.73	425	489
240	0.0754	0.098	0.383	1.047	36.42	0.101	34.32	2.73	553	665
400	0.047	0.062	0.466	1.275	44.35	0.094	57.2	3.82	694	883
630	0.0283	0.039	0.601	1.643	57.17	0.090	90.09	3.82	866	1152

Laying conditions at trefoil formation are as below:

-Soil thermal resistivity 120 °C.Cm/Watt

-Burial depth 0.5 m

-Ground temperature 15 °C

-Air temperature 25 °C

-Frequency 50 Hz

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DIMENSIONS 12/20 (24)KV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL SCREEN CROSS SECTIONAL AREA mm²	NOMINAL INSULATION THICKNESS mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B4N20KV01050	1	50	16	5.5	1.8	26	1056
B4N20KV01095	1	95	16	5.5	1.9	29.3	1567
B4N20KV01150	1	150	25	5.5	2	32.7	2221
B4N20KV01240	1	240	25	5.5	2.2	36.8	3182
B4N20KV01400	1	400	35	5.5	2.3	42.2	4715
B4N20KV01630	1	630	35	5.5	2.5	50.7	7215

ELECTRICAL CHARACTERISTICS 12/20 (24)KV

NOMINAL CROSS SECTIONAL AREA mm²	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	0.387	0.494	0.184	0.693	33.24	0.133	7.15	3.2	234	245
95	0.193	0.247	0.227	0.855	41.03	0.121	13.585	3.2	337	378
150	0.124	0.159	0.268	1.01	48.48	0.112	21.45	5.0	428	491
240	0.0754	0.098	0.321	1.21	58.08	0.104	34.32	5.0	553	669
400	0.047	0.062	0.388	1.465	70.33	0.097	57.2	7.1	697	883
630	0.0283	0.039	0.498	1.876	90.08	0.092	90.09	7.1	866	1153

Laying conditions at trefoil formation are as below:

-Soil thermal resistivity 120 °C.Cm/Watt

-Burial depth 0.5 m

-Ground temperature 15 °C

-Air temperature 25 °C

-Frequency 50 Hz

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DIMENSIONS 18/30 (36)KV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL SCREEN CROSS SECTIONAL AREA mm²	NOMINAL INSULATION THICKNESS mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
B4N30KV01050	1	50	16	8	2	31.4	1304
B4N30KV01095	1	95	16	8	2.1	34.5	1827
B4N30KV01150	1	150	25	8	2.2	37.9	2506
B4N30KV01240	1	240	25	8	2.3	42	3501
B4N30KV01400	1	400	35	8	2.5	47.6	5105
B4N30KV01630	1	630	35	8	2.7	56.1	7677

ELECTRICAL CHARACTERISTICS 18/30 (36)KV

NOMINAL CROSS SECTIONAL AREA mm²	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	0.387	0.494	0.141	0.799	57.52	0.145	7.15	3.2	234	249
95	0.193	0.247	0.171	0.968	69.68	0.131	13.585	3.2	340	382
150	0.124	0.159	0.199	1.128	81.23	0.121	21.45	5.0	431	494
240	0.0754	0.098	0.236	1.334	96.06	0.113	34.32	5.0	557	673
400	0.047	0.062	0.282	1.595	114.87	0.105	57.2	7.1	699	887
630	0.0283	0.039	0.356	2.015	145.11	0.098	90.09	7.1	868	1153

Laying conditions at trefoil formation are as below:

-Soil thermal resistivity 120 °C.Cm/Watt

-Burial depth 0.5 m

-Ground temperature 15 °C

-Air temperature 25 °C

-Frequency 50 Hz

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