



N2XSY XLPE PVC - 6/10 (12)kV Cable



Eland Product Group: A9X

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_o/U)(U_m)
6/10 (12)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

Inner Semi-Conductive Layer

Semi-conductive material (Bonded Type)

Insulation

XLPE (Cross-Linked Polyethylene)

Outer Semi-Conductive Layer

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

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

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL SCREEN CROSS SECTIONAL AREA mm ²	NOMINAL INSULATION THICKNESS mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A9X10KV1050	1	50	16	3.4	1.7	21.8	897
A9X10KV1070	1	70	16	3.4	1.7	23.6	1117
A9X10KV1095	1	95	16	3.4	1.8	25.1	1387
A9X10KV1120	1	120	16	3.4	1.8	26.5	1636
A9X10KV1150	1	150	25	3.4	1.9	28.5	2020
A9X10KV1185	1	185	25	3.4	1.9	30	2361
A9X10KV1240	1	240	25	3.4	2	32.6	2952
A9X10KV1300	1	300	25	3.4	2.1	35	3521
A9X10KV1400	1	400	35	3.4	2.2	38	4450
A9X10KV1500	1	500	35	3.4	2.3	41.6	5457
A9X10KV1630	1	630	35	3.4	2.4	46.5	6893
A9X10KV1800	1	800	35	3.4	2.5	50.8	8694

ELECTRICAL CHARACTERISTICS

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	0.387	0.494	0.263	0.496	11.90	0.122	7.15	1.75	234	244
70	0.268	0.342	0.303	0.571	13.71	0.115	10.01	1.75	279	309
95	0.193	0.247	0.332	0.625	15.00	0.111	13.585	1.75	332	373
120	0.153	0.196	0.362	0.683	16.40	0.107	17.16	1.75	376	432
150	0.124	0.159	0.397	0.75	17.99	0.103	21.45	2.73	421	489
185	0.0991	0.128	0.43	0.812	19.47	0.100	26.455	2.73	476	562
240	0.0754	0.098	0.483	0.911	21.85	0.097	34.32	2.73	550	665
300	0.0601	0.078	0.535	1.009	24.22	0.093	42.9	2.73	618	765
400	0.047	0.062	0.592	1.116	26.79	0.091	57.2	3.82	695	882
500	0.0366	0.049	0.666	1.256	30.14	0.088	71.5	3.82	779	1014
630	0.0283	0.039	0.768	1.449	34.77	0.087	90.09	3.82	864	1152
800	0.0221	0.032	0.858	1.617	38.81	0.084	114.4	3.82	945	1295

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

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.