

N2XSEY XLPE PVC - 12/20 (24)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 e.g. in industrial and switchboard plants.

CHARACTERISTICS

Voltage Rating U₀/U (Um)
12/20 (24)kV

Temperature Range

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 copper conductor

Inner Layer

Extruded Inner Semi Conductor (Bonded Type)

Insulation

XLPE (Cross-Linked Polyethylene)

Outer Layer

Extruded Outer Semi Conductor (Strippable Type)

Screen

Copper wires with Open Helix Copper Tape Screen

Outer Sheath

PVC (Polyvinyl Chloride)

Sheath Colour

● Red ● Black

STANDARDS

IEC 60228, IEC 60502-2

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
A9X20KV3050	3	50	16	5.5	2.8	53.3	3474
A9X20KV3070	3	70	16	5.5	2.9	57.3	4288
A9X20KV3095	3	95	16	5.5	3	59.9	5173
A9X20KV3120	3	120	16	5.5	3.1	62.9	6028
A9X20KV3150	3	150	25	5.5	3.2	67	7155
A9X20KV3185	3	185	25	5.5	3.3	70.5	8352
A9X20KV3240	3	240	25	5.5	3.5	76.1	10383
A9X20KV3300	3	300	25	5.5	3.6	81.4	12356
A9X20KV3400	3	400	35	5.5	3.9	87.7	15322
A9X20KV3500	3	500	35	5.5	4.1	95.2	18760

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	0.22	0.693	33.24	0.126	7.15	1.75	223	240
70	0.268	0.342	0.25	0.787	37.78	0.118	10.01	1.75	274	299
95	0.193	0.247	0.272	0.855	41.03	0.113	13.585	1.75	328	363
120	0.153	0.196	0.295	0.928	44.52	0.109	17.16	1.75	374	417
150	0.124	0.159	0.321	1.01	48.48	0.105	21.45	2.73	420	475
185	0.0991	0.128	0.346	1.087	52.18	0.102	26.455	2.73	474	543
240	0.0754	0.098	0.385	1.21	58.08	0.098	34.32	2.73	551	643
300	0.0601	0.078	0.424	1.333	63.97	0.095	42.9	2.73	628	751
400	0.047	0.062	0.466	1.465	70.33	0.091	57.2	3.82	704	848
500	0.0366	0.049	0.521	1.638	78.63	0.088	71.5	3.82	796	977

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.