N2XSEY XLPE PVC - 18/30 (36)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 Uo/U (Um)
18/30 (36)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 mm²	NOMINAL SCREEN CROSS SECTIONAL AREA mm²	NOMINAL INSULATION THICKNESS mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A9X30KV3050	3	50	16	8	3.1	64.5	4471
A9X30KV3070	3	70	16	8	3.2	68.1	5332
A9X30KV3095	3	95	16	8	3.4	71.3	6324
A9X30KV3120	3	120	16	8	3.5	74.5	7265
A9X30KV3150	3	150	25	8	3.6	78.6	8463
A9X30KV3185	3	185	25	8	3.7	82.1	9720
A9X30KV3240	3	240	25	8	3.9	87.7	11853
A9X30KV3300	3	300	25	8	4	93	13919
A9X30KV3400	3	400	35	8	4.3	99.1	16960
A9X30KV3500	3	500	35	8	4.5	106.8	20577

ELECTRICAL CHARACTERISTICS

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	0.169	0.799	57.52	0.139	7.15	1.75	225	250
70	0.268	0.342	0.19	0.898	64.62	0.130	10.01	1.75	274	306
95	0.193	0.247	0.205	0.968	69.68	0.125	13.585	1.75	329	370
120	0.153	0.196	0.221	1.043	75.09	0.120	17.16	1.75	374	426
150	0.124	0.159	0.239	1.128	81.23	0.116	21.45	2.73	420	484
185	0.0991	0.128	0.256	1.208	86.95	0.112	26.455	2.73	475	553
240	0.0754	0.098	0.283	1.334	96.06	0.107	34.32	2.73	552	652
300	0.0601	0.078	0.31	1.46	105.11	0.103	42.9	2.73	628	758
400	0.047	0.062	0.338	1.595	114.87	0.099	57.2	3.82	706	857
500	0.0366	0.049	0.376	1.772	127.59	0.095	71.5	3.82	799	988

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

UK T 020 7241 8787 | F 020 7241 8700 | sales@elandcables.com | www.elandcables.com
International T +44 20 7241 8740 | F +44 20 7241 8700 | international@elandcables.com