



FR-N30XA8E-R Cu/XLPE/PE Cable18/30kV



Eland Product Group: A9X

CHARACTERISTICS

Voltage Rating U_0/U
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

20 x Overall diameter

CONSTRUCTION

Conductor

Class 2 Stranded Copper

Conductor Screen

Extruded Inner Semi Conductor (Bonded Type)

Insulation

XLPE (Cross-Linked Polyethylene)

Insulation Screen

Extruded Outer Semi Conductor (Strippable Type)

Waterblocking

Semi Conductive Longitudinal Waterblocking Tape

Screen

Aluminum Tape Screen (0.15mm thickness)

Sheath

PE (Polyethylene)

Sheath Colour

● Black

STANDARDS

Gen to NF C 33-226 & HD 620-10G, IEC 60502-2, EN 60228

Halogen Free to: IEC 60754

Impact Resistant to: AG4 EN 60364-5.51

Vibration Resistant to: AH2 EN 60364-5.51

Abrasion and Tear Resistant: EN 60229-4.1

UV Resistant to: AN3 ISO 4892-3

Water Resistant: AD8

Oil Resistant to: ASTM D471

Conductor Flexibility: Stranded class 2

Presence of Corrosive or Polluting Substances to:
AF2 EN 60364-5.51

Termite resistant to: Annex M of NF C33-226

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 CONDUCTOR SCREEN THICKNESS mm	NOMINAL INSULATION THICKNESS mm	NOMINAL INSULATION SCREEN THICKNESS mm	MINIMUM SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km	MAXIMUM PULLING TENSION KN/Phase
A9XNF30KV01050	1	50	0.6	8	0.7	1.4	33.2	1224	2.5
A9XNF30KV01070	1	70	0.6	8	0.7	1.4	35	1476	3.5
A9XNF30KV01095	1	95	0.6	8	0.7	1.48	36.5	1765	4.75
A9XNF30KV01120	1	120	0.6	8	0.7	1.48	37.9	2036	6
A9XNF30KV01150	1	150	0.6	8	0.7	1.56	39.7	2361	7.5
A9XNF30KV01185	1	185	0.6	8	0.7	1.56	41.2	2735	9.25
A9XNF30KV01240	1	240	0.6	8	0.7	1.64	44.1	3362	12
A9XNF30KV01300	1	300	0.6	8	0.7	1.72	46.4	3980	15
A9XNF30KV01400	1	400	0.6	8	0.7	1.8	49.2	4864	20
A9XNF30KV01500	1	500	0.6	8	0.7	1.88	52.8	5938	22.24
A9XNF30KV01630	1	630	0.6	8	0.7	1.96	56.7	7366	22.24
A9XNF30KV01800	1	800	0.6	8	0.7	2.04	61.8	9246	22.24

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	ALUMINIUM SCREEN S.C.C FOR 1 SEC KA	CURRENT RATING A	
									Laid in ground	Laid in free air
50	0.387	0.4937	0.14	0.791	56.91	0.152	7.15	1	235	238
70	0.268	0.3421	0.157	0.886	63.76	0.140	10.02	1.05	285	295
95	0.193	0.2466	0.169	0.953	68.64	0.135	13.59	1.11	341	364
120	0.153	0.1957	0.181	1.026	73.86	0.130	17.17	1.16	387	420
150	0.124	0.1589	0.196	1.108	79.77	0.124	21.46	1.21	432	471
185	0.0991	0.1274	0.209	1.185	85.29	0.120	26.47	1.26	488	544
240	0.0754	0.0976	0.234	1.322	95.15	0.114	34.34	1.36	548	641
300	0.0601	0.0786	0.252	1.427	102.78	0.111	42.93	1.46	614	740
400	0.047	0.0625	0.275	1.558	112.19	0.107	57.23	1.51	687	845
500	0.0366	0.0501	0.306	1.728	124.44	0.103	71.54	1.66	771	973
630	0.0283	0.0405	0.338	1.913	137.73	0.099	90.14	1.76	853	1099
800	0.0221	0.0337	0.381	2.156	155.27	0.097	114.47	1.96	930	1238

Laying conditions at trefoil formation are as below:

- Soil thermal resistivity 100 °C.Cm/Watt
- Burial depth 0.8 m
- Ground temperature 20 °C
- Air temperature 30 °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.