



FR-N20XA8E-R 18/30kV Cable

NF C 33-226 - Cu/XLPE/MDPE



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

Aluminium Tape
Applied Longitudinally

Sheath
MDPE (Medium Density Polyethylene)

Sheath Colour
● Black

STANDARDS

NF C 33-226, IEC 60502-2, EN 60228

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 CONDUCTOR SCREEN THICKNESS mm	NOMINAL INSULATION THICKNESS mm	NOMINAL INSULATION SCREEN THICKNESS mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A9XNF30KV31050	3	50	18	0.6	6.7	0.7	1.9	66.1	3306
A9XNF30KV31070	3	70	20	0.6	6.7	0.7	1.9	70	4050
A9XNF30KV31095	3	95	21	0.6	6.7	0.7	2	73.2	4914
A9XNF30KV31120	3	120	22	0.6	6.7	0.7	2.1	76.7	5755
A9XNF30KV31150	3	150	23	0.6	6.7	0.7	2.1	80.1	6683
A9XNF30KV31185	3	185	24	0.6	6.7	0.7	2.2	83.8	7811
A9XNF30KV31240	3	240	25	0.6	6.7	0.7	2.2	89	9646
A9XNF30KV31300	3	300	27	0.6	6.7	0.7	2.3	94.6	11501
A9XNF30KV31400	3	400	29	0.6	6.7	0.7	2.4	100.7	14139

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	SCREEN S.C.C FOR 1 SEC KA	CURRENT RATING A	
									Laid in ground	Laid in free air
50	0.387	0.4937	0.157	0.887	63.85	0.192	7.15	1.3	596	717
70	0.268	0.3421	0.177	0.999	71.90	0.183	10.02	1.44	228	819
95	0.193	0.2466	0.191	1.079	77.65	0.178	13.59	1.52	276	230
120	0.153	0.1957	0.206	1.164	83.81	0.174	17.17	1.59	331	286
150	0.124	0.159	0.223	1.261	90.80	0.168	21.46	1.66	666	353
185	0.0991	0.1275	0.239	1.352	97.33	0.165	26.47	1.73	376	407
240	0.0754	0.0977	0.264	1.496	107.72	0.160	34.34	1.8	419	456
300	0.0601	0.0787	0.29	1.64	118.07	0.156	42.93	1.95	473	527
400	0.047	0.0627	0.317	1.795	129.24	0.152	57.23	2.09	531	621

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.