

FR-N20XA8E-R Triplex 12/20kV Cable

Gen to NF C 33-226 - Cu/XLPE/MDPE



Eland Product Group: A9X

CHARACTERISTICS

Voltage Rating U_0/U
12/20 (24)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

Gen to NF C 33-226, IEC 60502-2, EN 60228
Halogen free to IEC/EN 60754-1
Water resistant to AD7
UV resistant to ISO 4892

THE CABLE LAB®

AN ISO/IEC 17025 AND IECCE 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
A9XNF20KV31050	3	50	15	0.6	4.5	0.7	2.1	55.7	2682
A9XNF20KV31070	3	70	17	0.6	4.5	0.7	1.8	60	3415
A9XNF20KV31095	3	95	18	0.6	4.5	0.7	1.8	62.9	4220
A9XNF20KV31120	3	120	19	0.6	4.5	0.7	1.9	66.3	5025
A9XNF20KV31150	3	150	20	0.6	4.5	0.7	1.9	69.8	5921
A9XNF20KV31185	3	185	21	0.6	4.5	0.7	2	73.4	7011
A9XNF20KV31240	3	240	22	0.6	4.5	0.7	2.1	79.1	8829
A9XNF20KV31300	3	300	24	0.6	4.5	0.7	2.1	84.2	10593
A9XNF20KV31400	3	400	26	0.6	4.5	0.7	2.3	90.7	13206

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	0.207	0.78	37.43	0.181	7.15	1.08	228	226
70	0.268	0.3421	0.235	0.888	42.63	0.174	10.02	1.23	276	286
95	0.193	0.2466	0.256	0.966	46.36	0.169	13.59	1.3	328	349
120	0.153	0.1958	0.278	1.049	50.36	0.165	17.17	1.37	374	403
150	0.124	0.1591	0.303	1.144	54.92	0.160	21.46	1.44	417	453
185	0.0991	0.1276	0.327	1.233	59.18	0.157	26.47	1.52	470	523
240	0.0754	0.0979	0.364	1.374	65.97	0.152	34.34	1.59	527	618
300	0.0601	0.079	0.402	1.516	72.75	0.149	42.93	1.73	592	713
400	0.047	0.063	0.442	1.668	80.08	0.145	57.23	1.88	664	815

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.