



# N2XS(FL)2Y 12/20 (24)kV Cable



Eland Product Group: A9X

## APPLICATION

Medium voltage power cables for distribution networks and generation units, suitable for external installation including direct in ground and in buried cable ducts. UV Resistant.

## CHARACTERISTICS

**Voltage Rating** U<sub>0</sub>/U  
12/20 (24)kV

**Temperature Rating**  
Maximum Conductor Operating Temperature: 90°C  
Maximum Screen Operating Temperature: 80°C  
Maximum Conductor Temperature During S.C.: 250°C

**Minimum Bending Radius**  
20 x Outer Diameter

## CONSTRUCTION

**Conductor**  
Class 2 Stranded Circular Compacted Copper

**Inner Semi Conductor**  
Extruded Inner Semi Conductor (Bonded Type)

**Insulation**  
XLPE (Cross-Linked Polyethylene) 90°C

**Outer Semi Conductor**  
Extruded Outer Semi Conductor (Strippable Type)

**Semi Conductive Water Blocking Tape**

**Screen**  
Copper Wires and Open Helix Copper Tape

**Non-Conductive Water Blocking Tape**

**Tape**  
Aluminium Tape

**Outer Sheath**  
MDPE (Medium Density Polyethylene)

**Sheath Colour**  
● Red ● Black

## STANDARDS

IEC 60502-2, IEC 60228  
UV Resistant

## THE CABLE LAB<sup>®</sup>

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](http://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<sup>®</sup>.





## DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL SCREEN CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL INSULATION THICKNESS mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A9XFL20KV1050**	1	50	16	5.5	1.8	28.8	1092
A9XFL20KV1070**	1	70	16	5.5	1.9	30.8	1337
A9XFL20KV1095**	1	95	16	5.5	1.9	32.1	1600
A9XFL20KV1120**	1	120	16	5.5	2	33.7	1869
A9XFL20KV1150**	1	150	25	5.5	2	35.5	2252
A9XFL20KV1185**	1	185	25	5.5	2.1	37	2605
A9XFL20KV1240**	1	240	25	5.5	2.2	39.6	3205
A9XFL20KV1300**	1	300	25	5.5	2.2	42	3790
A9XFL20KV1400**	1	400	35	5.5	2.3	45	4734
A9XFL20KV1500**	1	500	35	5.5	2.4	48.6	5754
A9XFL20KV1630**	1	630	35	5.5	2.5	53.5	7214
A9XFL20KV1800**	1	800	35	5.5	2.7	58	9043

\*\* replace with sheath colour - RD = Red BK = Black

## ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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	0.184	0.693	33.24	0.140	7.15	1.75	210	221
70	0.268	0.342	0.209	0.787	37.78	0.132	10.01	1.75	255	278
95	0.193	0.247	0.227	0.855	41.03	0.127	13.585	1.75	303	340
120	0.153	0.196	0.246	0.928	44.52	0.122	17.16	1.75	346	393
150	0.124	0.159	0.268	1.01	48.48	0.117	21.45	2.73	385	442
185	0.0991	0.128	0.288	1.087	52.18	0.114	26.455	2.73	434	510
240	0.0754	0.098	0.321	1.21	58.08	0.109	34.32	2.73	498	602
300	0.0601	0.078	0.353	1.333	63.97	0.105	42.9	2.73	559	695
400	0.047	0.062	0.388	1.465	70.33	0.101	57.2	3.82	627	794
500	0.0366	0.049	0.434	1.638	78.63	0.098	71.5	3.82	705	917
630	0.0283	0.039	0.498	1.876	90.08	0.095	90.09	3.82	780	1038
800	0.0221	0.032	0.553	2.084	100.05	0.093	114.4	3.82	850	1169