NA2XS2Y 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 in direct in ground and in buried cable ducts. UV Resistant.

CHARACTERISTICS

Voltage Rating Uo/U (Um)
12/20 (24)kV

Test Voltage
42kV AC 50Hz (5 mins)

Temperature Rating
-20°C to +60°C
Permissible Conductor Operating Temperature: +90°C
Permissible Short Circuit Temperature up to 5 sec: 250°C

Minimum Bending Radius
15 x overall diameter

CONSTRUCTION

Conductor
Class 2 Stranded Aluminium

Conductor Screen
Semi-conductive material

Insulation
XLPE (Cross-Linked Polyethylene)

Insulation Screen
Semi-conductive material (bonded)

Screen
Copper wires and copper tape

Outer Sheath
MDPE (Medium Density Polyethylene)

Sheath Colour
● Red ● Black

STANDARDS

IEC 60502-2, IEC 60228,

UV Resistant: ISO 4892-3
Abrasion and Tear Resistant: EN 60229-4.1
Impact rated to: AG2 EN 60364-5.51

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 is compliant with European Regulation EN 50575, the Construction Products Regulation.

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 CONDUCTOR DIAMETER	NUMBER WIRES CONDUCTOR	NOM. THICKNESS SEMI-CON. LAYER		NOMINAL INSULATION THICKNESS	MINIMUM INSULATION THICKNESS	NOMINAL DIAMETER OVER INSULATION
		Conductor	Screen			INNER	OUTER			
				mm	mm	mm	mm	mm	mm	mm
A9XAY20KV1050	1	50	16	8.20	7 x 2.90	0.50	0.40	5.50	4.85	20.4
A9XAY20KV1070	1	70	16	9.70	19 x 2.18	0.50	0.40	5.50	4.85	21.9
A9XAY20KV1095	1	95	16	11.4	19 x 2.55	0.50	0.40	5.50	4.85	23.6
A9XAY20KV1120	1	120	16	12.65	19 x 2.90	0.50	0.40	5.50	4.85	24.9
A9XAY20KV1150	1	150	25	14.4	19 x 3.16	0.50	0.40	5.50	4.85	26.6
A9XAY20KV1185	1	185	25	15.75	37 x 2.55	0.50	0.40	5.50	4.85	28.4
A9XAY20KV1240	1	240	25	18.2	37 x 2.90	0.50	0.40	5.50	4.85	30.9
A9XAY20KV1300	1	300	25	20.5	61 x 2.55	0.50	0.40	5.50	4.85	33.2
A9XAY20KV1400	1	400	35	23.0	61 x 2.90	0.50	0.40	5.50	4.85	35.7
A9XAY20KV1500	1	500	35	26.0	61 x 3.20	0.50	0.40	5.50	4.85	38.7
A9XAY20KV1630	1	630	35	30.2	61 x 3.65	0.50	0.40	5.50	4.85	42.9

NOMINAL CROSS SECTIONAL AREA	NUMBER WIRES SCREEN	DIAMETER TAPE SCREEN	NOMINAL SHEATH THICKNESS	MINIMUM SHEATH THICKNESS	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT	MAXIMUM SIDEWALL PRESSURE	MAXIMUM PULLING TENSION
mm²	mm	mm	mm	mm	mm	kg/km	N/cm²	N
50	44 x 0.66	1x0.1x10	1.80	1.24	27	700	292	1500
70	44 x 0.66	1x0.1x10	1.90	1.32	28	800	371	2100
95	44 x 0.66	1x0.1x10	1.90	1.32	30	900	479	2850
120	44 x 0.66	1x0.1x10	2.00	1.40	31	1000	550	3600
150	71 x 0.66	1x0.1x10	2.00	1.40	33	1300	633	4500
185	71 x 0.66	1x0.1x10	2.10	1.48	35	1400	729	5550
240	71 x 0.66	1x0.1x10	2.10	1.48	38	1600	870	7200
300	71 x 0.66	1x0.1x10	2.20	1.56	40	1900	992	9000
400	60 x 0.85	1x0.1x15	2.30	1.64	43	2250	1212	12000
500	60 x 0.85	1x0.1x15	2.40	1.72	46	2750	1389	15000
630	60 x 0.85	1x0.1x15	2.50	1.80	51	3250	1571	18900

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

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA	CONDUCTOR DC RESISTANCE AT 20°C	CONDUCTOR DC RESISTANCE AT 75°C	CONDUCTOR AC RESISTANCE BY MAX TEMP	CURRENT CARRYING CAPACITY (A)		REACTANCE	CHARGING ADMITTANCE	CAPACITANCE	S.C.C CONDUCTOR 1SEC kA	S.C.C SCREEN 1SEC	CONDUCTOR LOSSES IN THE GROUND
mm²	ohms/km	ohms/km	ohms/km	In Ground 20°C	In Air 30°C	ohms/km	A/km	uF/km		kA	kW/km
50	0.641	1.32	0.825	195	217	0.19	0.39	0.15	4.70	3.2	31.4
70	0.443	0.917	0.570	237	270	0.18	0.37	0.17	6.58	3.2	32.0
95	0.32	0.662	0.412	282	328	0.18	0.35	0.19	8.93	3.2	32.8
120	0.258	0.524	0.328	320	378	0.17	0.34	0.20	11.28	3.2	33.6
150	0.203	0.426	0.268	353	425	0.17	0.33	0.22	14.10	5.0	33.4
185	0.164	0.339	0.213	396	485	0.17	0.32	0.24	17.39	5.0	33.4
240	0.125	0.258	0.160	457	573	0.16	0.31	0.27	22.56	5.0	34.0
300	0.100	0.207	0.132	511	652	0.16	0.30	0.29	28.20	5.0	34.5
400	0.0778	0.161	0.103	566	740	0.16	0.29	0.32	37.60	7.1	33.0
500	0.0605	0.125	0.0810	630	838	0.15	0.28	0.35	47.00	7.1	32.1
630	0.0469	0.0972	0.0640	860	1080	0.15	0.27	0.40	59.22	7.1	47.3

Derating factor (ground): 1 (Soil thermal resistivity: 1km/W, Depth 0.8m, Flat formation - touching)
Derating factor (air): 1 (Flat formation - touching)