

NA2XSH 18/30 (36)kV Cable



Eland Product Group: CX9

APPLICATION

UV resistant Medium voltage cables for distribution networks; also for connection to generation units and plant and process connection. LSZH outer sheath allows internal and external installation including directly in ground and in cable ducts.

CHARACTERISTICS

Voltage Rating U_0/U (Um)
18/30 (36)kV

Temperature Rating

Permissible operating temperature of conductor: +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

Filler

LSZH (Low Smoke Zero Halogen)

Screen

Copper Wires and Copper Tape

Sheath

LSZH (Low Smoke Zero Halogen) - UV Resistant

Sheath Colour

● Red

STANDARDS

IEC 60502-2,

Flame Retardant according to IEC/EN 60332-1-2

Low Smoke Zero Halogen according to IEC/EN 61034-1/2,
IEC/EN 60754-1/2

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 CONDUCTOR DIAMETER mm	NUMBER WIRES CONDUCTOR mm	NOM. THICKNESS SEMI-CON. LAYER		NOMINAL INSULATION THICKNESS mm	MINIMUM INSULATION THICKNESS mm	NOMINAL DIAMETER OVER INSULATION mm
		Conductor	Screen			INNER mm	OUTER mm			
C9XH30KV150RD	1	50	16	8.20	7 x 2.90	0.50	0.40	8.00	7.10	25.2
C9XH30KV170RD	1	70	16	9.70	19 x 2.18	0.50	0.40	8.00	7.10	26.7
C9XH30KV195RD	1	95	16	11.4	19 x 2.55	0.50	0.40	8.00	7.10	28.4
C9XH30KV1120RD	1	120	16	12.65	19 x 2.90	0.50	0.40	8.00	7.10	29.7
C9XH30KV1150RD	1	150	25	14.4	19 x 3.16	0.50	0.40	8.00	7.10	31.4
C9XH30KV1185RD	1	185	25	15.75	37 x 2.55	0.50	0.40	8.00	7.10	33.2
C9XH30KV1240RD	1	240	25	18.2	37 x 2.90	0.50	0.40	8.00	7.10	35.7
C9XH30KV1300RD	1	300	25	20.5	61 x 2.55	0.50	0.40	8.00	7.10	38.0
C9XH30KV1400RD	1	400	35	23.0	61 x 2.90	0.50	0.40	8.00	7.10	40.5
C9XH30KV1500RD	1	500	35	26.0	61 x 3.20	0.50	0.40	8.00	7.10	43.5
C9XH30KV1630RD	1	630	35	30.2	61 x 3.65	0.50	0.40	8.00	7.10	47.7

NOMINAL CROSS SECTIONAL AREA mm ²	NUMBER WIRES SCREEN mm	DIAMETER TAPE SCREEN mm	NOMINAL SHEATH THICKNESS mm	MINIMUM SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km	MAXIMUM SIDEWALL PRESSURE N/cm ²	MAXIMUM PULLING TENSION N
50	44 x 0.66	1x0.1x10	2.00	1.40	32	900	255	1500
70	44 x 0.66	1x0.1x10	2.00	1.40	33	1100	328	2100
95	44 x 0.66	1x0.1x10	2.10	1.48	35	1200	409	2850
120	44 x 0.66	1x0.1x10	2.10	1.48	36	1300	493	3600
150	71 x 0.66	1x0.1x10	2.20	1.56	38	1500	573	4500
185	71 x 0.66	1x0.1x10	2.20	1.56	40	1700	664	5550
240	71 x 0.66	1x0.1x10	2.30	1.64	43	1900	784	7200
300	71 x 0.66	1x0.1x10	2.40	1.72	45	2250	916	9000
400	60 x 0.85	1x0.1x15	2.50	1.80	48	2750	1127	12000
500	60 x 0.85	1x0.1x15	2.60	1.88	51	3000	1299	15000
630	60 x 0.85	1x0.1x15	2.70	1.96	56	3500	1462	18900

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.

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	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 kA	CONDUCTOR LOSSES IN THE GROUND
	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	196	217	0.20	0.43	0.12	4.70	3.2	31.7
70	0.443	0.917	0.570	238	270	0.19	0.41	0.13	6.58	3.2	32.3
95	0.32	0.662	0.412	284	328	0.19	0.39	0.14	8.93	3.2	33.2
120	0.258	0.524	0.328	322	378	0.18	0.38	0.15	11.28	3.2	34.0
150	0.203	0.426	0.268	355	425	0.18	0.36	0.17	14.10	5.0	33.8
185	0.164	0.339	0.213	400	485	0.18	0.35	0.18	17.39	5.0	34.1
240	0.125	0.258	0.160	461	572	0.17	0.33	0.20	22.56	5.0	34.6
300	0.100	0.207	0.132	516	649	0.17	0.32	0.22	28.20	5.0	35.1
400	0.0778	0.161	0.103	572	737	0.16	0.32	0.24	37.60	7.1	33.7
500	0.0605	0.125	0.0810	638	835	0.16	0.30	0.26	47.00	7.1	33.0
630	0.0469	0.0972	0.0640	860	1080	0.15	0.29	0.29	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)