



# NA2XSH 6/10 (12)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<sub>0</sub>/U (Um)  
6/10 (12)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<sup>®</sup>

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](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		NOMINAL CONDUCTOR DIAMETER	NUMBER WIRES CONDUCTOR	NOM. THICKNESS SEMI-CON. LAYER		NOMINAL INSULATION THICKNESS	MINIMUM INSULATION THICKNESS	NOMINAL DIAMETER OVER INSULATION
		mm <sup>2</sup>				INNER	OUTER			
		Conductor	Screen							
C9HA10KV150RD	1	50	16	8.20	7 x 2.90	0.50	0.40	3.40	2.96	16.4
C9XH10KV170RD	1	70	16	9.70	19 x 2.18	0.50	0.40	3.40	2.96	17.9
C9XH10KV195RD	1	95	16	11.4	19 x 2.55	0.50	0.40	3.40	2.96	19.6
C9XH10KV1120RD	1	120	16	12.65	19 x 2.90	0.50	0.40	3.40	2.96	20.9
C9XH10KV1150RD	1	150	25	14.4	19 x 3.16	0.50	0.40	3.40	2.96	22.6
C9XH10KV1185RD	1	185	25	15.75	37 x 2.55	0.50	0.40	3.40	2.96	24.4
C9XH10KV1240RD	1	240	25	18.2	37 x 2.90	0.50	0.40	3.40	2.96	26.9
C9XH10KV1300RD	1	300	25	20.5	61 x 2.55	0.50	0.40	3.40	2.96	29.2
C9XH10KV1400RD	1	400	35	23.0	61 x 2.90	0.50	0.40	3.40	2.96	31.7
C9XH10KV1500RD	1	500	35	26.0	61 x 3.20	0.50	0.40	3.40	2.96	34.7
C9XH10KV1630RD	1	630	35	30.2	61 x 3.65	0.50	0.40	3.40	2.96	38.9

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
mm <sup>2</sup>	mm	mm	mm	mm	mm	kg/km	N/cm <sup>2</sup>	N
50	44 x 0.66	1x0.1x10	1.80	1.24	23	550	331	1500
70	44 x 0.66	1x0.1x10	1.80	1.24	24	650	415	2100
95	44 x 0.66	1x0.1x10	1.80	1.24	26	750	522	2850
120	44 x 0.66	1x0.1x10	1.80	1.24	27	850	621	4500
150	71 x 0.66	1x0.1x10	1.90	1.32	29	1100	708	7500
185	71 x 0.66	1x0.1x10	1.90	1.32	31	1200	809	5550
240	71 x 0.66	1x0.1x10	2.00	1.40	33	1400	938	7200
300	71 x 0.66	1x0.1x10	2.10	1.48	36	1600	1081	9000
400	60 x 0.85	1x0.1x15	2.20	1.56	39	2000	1311	12000
500	60 x 0.85	1x0.1x15	2.30	1.64	42	2500	1471	15000
630	60 x 0.85	1x0.1x15	2.40	1.72	46	3000	1654	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 <sup>2</sup>	CONDUCTOR DC RESISTANCE AT 20°C ohms/km	CONDUCTOR DC RESISTANCE AT 75°C ohms/km	CONDUCTOR AC RESISTANCE BY MAX TEMP ohms/km	CURRENT CARRYING CAPACITY (A)		REACTANCE ohms/km	CHARGING ADMITTANCE A/km	CAPACITANCE uF/km	S.C.C CONDUCTOR 1SEC kA	S.C.C SCREEN 1SEC kA	CONDUCTOR LOSSES IN THE GROUND kW/km
				In Ground 20°C	In Air 30°C						
50	0.641	1.32	0.825	194	215	0.18	0.35	0.22	4.70	3.2	31.0
70	0.443	0.917	0.570	236	269	0.17	0.33	0.24	6.58	3.2	31.7
95	0.32	0.662	0.412	281	327	0.17	0.32	0.28	8.93	3.2	32.5
120	0.258	0.524	0.328	318	377	0.16	0.31	0.30	11.28	3.2	33.2
150	0.203	0.426	0.268	350	424	0.16	0.30	0.33	14.10	5.0	32.8
185	0.165	0.339	0.213	393	485	0.16	0.29	0.36	17.39	5.0	32.9
240	0.125	0.258	0.160	453	573	0.15	0.28	0.40	22.56	5.0	33.4
300	0.100	0.207	0.132	507	652	0.15	0.28	0.45	28.20	5.0	33.9
400	0.0778	0.161	0.103	559	741	0.15	0.27	0.49	37.60	7.1	32.2
500	0.0605	0.125	0.0810	622	838	0.15	0.26	0.54	47.00	7.1	31.3
630	0.0469	0.0972	0.0640	860	1080	0.14	0.25	0.62	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)