

NA2XS(F)H 18/30 (36)kV Cable



Eland Product Group: C9X

APPLICATION

Medium voltage power cables for distribution networks and generation units. LSZH outer sheathing makes the cable suitable for internal installation as well as directly in ground, outdoors, and in cable ducts. UV Resistant.

CHARACTERISTICS

Voltage Rating U_o/U (Um)
18/30 (36)V

Test Voltage
63 kV AC 50Hz (15 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)

Longitudinal Waterblocking
Semi-conductive swellable tape

Screen
Copper wires and copper tape

Longitudinal Waterblocking
Swellable Tapes

Outer Sheath
LSZH (Low Smoke Zero Halogen) - UV Resistant

Sheath Colour
● Red ● Black

STANDARDS

IEC 60502-2, IEC 60228,
Low Smoke Zero Halogen: IEC 60754-1/2, IEC 61034-2
Flame Retardant: EN 60332-3-24 Cat C, IEC 60332-1-2
UV Resistant: EN 50396
Abrasion and Tear Resistant to: EN 60229-4.1
Impact rated to: AG2 EN 60364-5.51

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 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		NOMINAL CONDUCTOR DIAMETER	NUMBER WIRES CONDUCTOR	NOM. THICKNESS SEMI-CON. LAYER		NOMINAL INSULATION THICKNESS	MINIMUM INSULATION THICKNESS	NOMINAL DIAMETER OVER INSULATION
		mm ²				INNER	OUTER			
		Conductor	Screen							
C9XHF30KV1050RDC	1	50	16	8.20	7 x 2.90	0.50	0.40	8.00	7.10	25.2
C9XHF30KV1070RDC	1	70	16	9.70	19 x 2.18	0.50	0.40	8.00	7.10	26.7
C9XHF30KV1095RDC	1	95	16	11.4	19 x 2.55	0.50	0.40	8.00	7.10	28.4
C9XHF30KV1120RDC	1	120	16	12.65	19 x 2.90	0.50	0.40	8.00	7.10	29.7
C9XHF30KV1150RDC	1	150	25	14.4	19 x 3.16	0.50	0.40	8.00	7.10	31.4
C9XHF30KV1185RDC	1	185	25	15.75	37 x 2.55	0.50	0.40	8.00	7.10	33.2
C9XHF30KV1240RDC	1	240	25	18.2	37 x 2.90	0.50	0.40	8.00	7.10	35.7
C9XHF30KV1300RDC	1	300	25	20.5	61 x 2.55	0.50	0.40	8.00	7.10	38.0
C9XHF30KV1400RDC	1	400	35	23.0	61 x 2.90	0.50	0.40	8.00	7.10	40.5
C9XHF30KV1500RDC	1	500	35	26.0	61 x 3.20	0.50	0.40	8.00	7.10	43.5
C9XHF30KV1630RDC	1	630	35	30.2	61 x 3.65	0.50	0.40	8.00	7.10	47.7

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 ²	mm	mm	mm	mm	mm	kg/km	N/cm ²	N
50	44 x 0.66	1x0.1x10	2.00	1.40	32	1000	249	1500
70	44 x 0.66	1x0.1x10	2.00	1.40	34	1100	320	2100
95	44 x 0.66	1x0.1x10	2.10	1.48	36	1300	401	2850
120	44 x 0.66	1x0.1x10	2.10	1.48	37	1400	483	3600
150	71 x 0.66	1x0.1x10	2.20	1.56	39	1600	562	4500
185	71 x 0.66	1x0.1x10	2.20	1.56	41	1800	652	5550
240	71 x 0.66	1x0.1x10	2.30	1.64	43	2000	784	7200
300	71 x 0.66	1x0.1x10	2.40	1.72	46	2250	902	9000
400	60 x 0.85	1x0.1x15	2.50	1.80	49	2750	1111	12000
500	60 x 0.85	1x0.1x15	2.60	1.88	52	3250	1282	15000
630	60 x 0.85	1x0.1x15	2.70	1.96	56	3750	1462	18900



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			kW/km
50	0.641	1.32	0.825	196	217	0.20	0.44	0.12	4.70	3.2	31.7
70	0.443	0.917	0.570	238	270	0.20	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	0.36	0.18	17.39	5.0	34.1
240	0.125	0.258	0.160	461	572	0.17	0.34	0.20	22.56	5.0	34.6
300	0.100	0.207	0.132	516	649	0.17	0.33	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	0.31	0.26	47.00	7.1	33.0
630	0.0469	0.0972	0.0640	860	1080	0.16	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)