A2XS(FL)2Y MDPE High Voltage 76/132 (145) kV Cable

Eland Product Group: H9F

APPLICATION

High Voltage cables for distribution networks; also for connection to generation units and plant and process connection. For installation in ground, in water outdoors, indoors and in cable ducts for power stations, industry and distribution networks. The water blocking tape avoids water propagation inside the cable.

CHARACTERISTICS

Voltage Rating Uo/U
76/132 (145) kV

CONSTRUCTION

Conductor
Aluminium conductor (optional watertightness – WTC)

Conductor Screen
Semi-conductive screen extruded on the phase conductor

Insulation
XLPE (Cross-linked Polyethylene)

Insulation Screen
Semi-conductive screen extruded on insulation

Wrapping
Semi-conductive water swelling tape

Metallic Screen
Copper wires and equalising tape

Wrapping
Semi-conductive water swelling tape

Tape
Longitudinally applied aluminium tape coated with PE copolymer

Sheath
MDPE (Medium Density Polyethylene)

Optional – semi-conductive layer

Sheath Colour
● Black

STANDARDS

IEC 60840

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 meets the requirements of the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.

DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER OF CONDUCTOR mm	INSULATION mm		METALLIC SCREEN		NOMINAL OUTER DIAMETER OF CABLE mm	NOMINAL WEIGHT kg/km	MAXIMUM PULLING FORCE mm	MINIMUM BENDING RADIUS m
				Nominal thickness	Nominal diamter over	Nominal cross section mm²	Nominal diameter over mm				
H9F132KV010185	1	185RM	15.8	18.0	54.8	95	60.6	69	4600	6.5	1.7
H9F132KV010240	1	240RM	17.9	17.0	54.9	95	60.7	69	4710	8.4	1.7
H9F132KV010300	1	300RM	20.0	16.5	55.4	95	61.2	70	4850	10.5	1.7
H9F132KV010400	1	400RM	22.9	16.0	56.9	95	62.7	71	5140	14.0	1.8
H9F132KV010500	1	500RM	25.7	16.0	59.7	95	65.5	74	5640	17.5	1.9
H9F132KV010630	1	630RM	29.3	16.0	63.9	95	69.7	79	6370	22.1	2.0
H9F132KV010800	1	800RM	33.0	16.0	67.6	95	73.4	83	7090	28.0	2.1
H9F132KV011000	1	1000RM	38.0	16.0	72.6	95	78.4	88	8050	35.0	2.2
H9F132KV011200	1	1200RM	42.5	16.0	77.1	95	82.9	93	9010	42.0	2.3
H9F132KV011200R	1	1200RMS	43.0	16.0	79.2	95	85.0	95	9270	42.0	2.4
H9F132KV011400	1	1400RMS	45.1	16.0	81.3	95	87.1	97	9990	49.0	2.4
H9F132KV011600	1	1600RMS	48.5	16.0	84.7	95	90.5	101	10830	56.0	2.5
H9F132KV011800	1	1800RMS	52.7	16.0	88.9	95	94.7	105	11850	63.0	2.6
H9F132KV012000	1	2000RMS	54.5	16.0	90.7	95	96.5	107	12460	70.0	2.7
H9F132KV012500	1	2500RMS	59.0	16.0	96.2	95	102.4	114	14120	87.5	2.8
H9F132KV013000	1	3000RMS	67.0	16.0	104.2	95	110.4	122	16730	100.0	3.1

ELECTRICAL DATA

De – Cable diameter

Cables in flat formation, the distance between the cable axes = 2 × De

Cables in trefoil formation, the distance between the cable axes = De

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL RESISTANCE OF CONDUCTOR 90 °C Ω/km	ELECTRICAL FIELD STRESS kV/mm		CAPACITANCE µF/km	ZERO REACTANCE Ω/km	INDUCTANCE Ω/km	
		Conductor screen	Insulation			Flat formation	Trefoil formation
185RM	0.2108	7.60	2.60	0.125	0.102	0.215	0.155
240RM	0.1610	7.55	2.90	0.140	0.094	0.205	0.145
300RM	0.1291	7.50	3.05	0.150	0.088	0.200	0.140
400RM	0.1009	7.40	3.25	0.165	0.080	0.190	0.135
500RM	0.0792	7.15	3.35	0.175	0.076	0.185	0.130
630RM	0.0622	6.90	3.45	0.195	0.072	0.180	0.125
800RM	0.0498	6.70	3.55	0.210	0.067	0.175	0.120
1000RM	0.0408	6.45	3.65	0.230	0.063	0.170	0.115
1200RM	0.0359	6.30	3.70	0.250	0.059	0.170	0.110
1200RMS	0.0319	6.25	3.75	0.260	0.060	0.170	0.110

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ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL RESISTANCE OF CONDUCTOR 90 °C Ω/km	ELECTRICAL FIELD STRESS kV/mm		CAPACITANCE µF/km	ZERO REACTANCE Ω/km	INDUCTANCE Ω/km	
		Conductor screen	Insulation			Flat formation	Trefoil formation
1400RMS	0.0275	6.20	3.75	0.270	0.059	0.165	0.110
1600RMS	0.0242	6.10	3.80	0.285	0.056	0.165	0.110
1800RMS	0.0216	6.00	3.85	0.300	0.054	0.160	0.105
2000RMS	0.0195	6.00	3.90	0.310	0.053	0.160	0.105
2500RMS	0.0168	5.90	3.95	0.330	0.052	0.160	0.100
3000RMS	0.0130	5.75	3.95	0.365	0.049	0.155	0.100