



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



Eland Product Group: H9C

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 U_0/U
76/132 (145) kV

CONSTRUCTION

Conductor

Copper 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 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 DIAMETER OF CONDUCTOR mm	INSULATION mm		METALLIC SCREEN		NOMINAL OUTER DIAMETER OF CABLE mm	NOMINAL WEIGHT kg/km	MAXIMUM PULLING FORCE kN	MINIMUM BENDING RADIUS m
				Nominal thickness	Nominal diameter over	Nominal cross section mm ²	Nominal diameter over mm				
H9C132KV010185	1	185RM	15.8	18.0	54.8	95	60.6	69	5730	9.3	1.7
H9C132KV010240	1	240RM	18.5	17.0	55.5	95	61.3	70	6220	12.0	1.7
H9C132KV010300	1	300RM	20.5	16.5	55.9	95	61.7	70	6770	15.0	1.8
H9C132KV010400	1	400RM	23.6	16.0	57.6	95	63.4	72	7620	20.0	1.8
H9C132KV010500	1	500RM	26.4	16.0	60.4	95	66.2	75	8800	25.0	1.9
H9C132KV010630	1	630RM	30.3	16.0	64.9	95	70.7	80	10380	31.5	2.0
H9C132KV010800	1	800RM	34.7	16.0	69.3	95	75.1	84	12250	40.0	2.1
H9C132KV011000	1	1000RM	38.3	16.0	72.9	95	78.7	88	14390	50.0	2.2
H9C132KV011200	1	1200RMS	41.6	16.0	77.8	95	83.6	94	16670	60.0	2.3
H9C132KV011400	1	1400RMS	45.8	16.0	82.0	95	87.8	98	18620	70.0	2.5
H9C132KV011600	1	1600RMS	49.6	16.0	85.8	95	91.6	102	20910	80.0	2.6
H9C132KV011800	1	1800RMS	53.2	16.0	89.4	95	95.2	106	23350	90.0	2.7
H9C132KV012000	1	2000RMS	54.6	16.0	90.8	95	96.6	107	24900	100.0	2.7
H9C132KV013000	1	3000RMS	68.4	16.0	105.6	95	111.8	124	36520	100.0	3.1
H9C132KV012500	1	2500RMS	60.0	16.0	97.2	95	103.4	115	30050	100.0	2.9
H9C132KV013000	1	3000RMS	68.4	16.0	105.6	95	111.8	124	36520	100.0	3.1

ELECTRICAL DATA

De – Cable diameter

Cables in flat formation, the distance between the cable axes = $2 \times De$



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



ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	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	0.1272	7.60	2.60	0.125	0.102	0.215	0.155
240RM	0.0973	7.50	2.90	0.145	0.093	0.205	0.145
300RM	0.0781	7.45	3.05	0.150	0.086	0.195	0.140
400RM	0.0619	7.35	3.30	0.165	0.079	0.190	0.130
500RM	0.0492	7.10	3.35	0.180	0.075	0.185	0.125
630RM	0.0395	6.80	3.45	0.200	0.070	0.180	0.120
800RM	0.0325	6.60	3.55	0.215	0.066	0.175	0.120
1000RM	0.0275	6.45	3.65	0.235	0.062	0.170	0.115
1200RMS	0.0222	6.30	3.70	0.255	0.061	0.170	0.115
1400RMS	0.0198	6.15	3.75	0.270	0.058	0.165	0.110



NOMINAL CROSS SECTIONAL AREA mm ²	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   
1600RMS	0.0182	6.10	3.80	0.290	0.056	0.165	0.105
1800RMS	0.0169	6.00	3.85	0.305	0.054	0.160	0.105
2000RMS	0.0158	5.95	3.90	0.310	0.053	0.160	0.105
2500RMS	0.0140	5.85	3.95	0.335	0.051	0.160	0.100
3000RMS	0.0126	5.75	3.95	0.370	0.048	0.155	0.100