XHIO1AE Cable

Eland Product Group: MP20

APPLICATION

Portuguese Medium Voltage Cable for power distribution and power supply stations used in Utility and Industrial applications, with a rated voltage of 3.6/6kV to 18/30kV. Suitable for fixed installations, including directly buried. Good mechanical protection.

CHARACTERISTICS

Voltage Rating Uo/U (Um)
3.6/6 (7.2)kV,
6/10 (12)kV,
8.7/15 (17.5)kV,
12/20 (24)kV,
18/30 (36)kV

Temperature Rating
Conductor maximum operating temperature: 90°C
Maximum short-circuit temperature: 250°C

Minimum Bending Radius
During installation: 20 x overall diameter
After installation: 15 x overall diameter

CONSTRUCTION

Conductor
Class 2 stranded Copper

Conductor Screen
Semi-conductive XLPE (Cross-Linked Polyethylene)

Insulation
XLPE (Cross-Linked Polyethylene)

Insulation Screen
Semi-conductive XLPE (Cross-Linked Polyethylene)

Metallic Screen
Copper wire screen

Inner Sheath
PVC (Polyvinyl Chloride)

Armour
Two aluminium tapes helically applied

Sheath
PE (Polyethylene) type ST7

Sheath Colour
● Black

STANDARDS

IEC 60228, IEC 60502-2

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 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab®.

DIMENSIONS 3.6/6kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP2006KV01025	1	25	13.0	25.5	960
MP2006KV01035	1	35	14.0	26.5	1080
MP2006KV01050	1	50	15.0	27.5	1230
MP2006KV01070	1	70	16.5	29.5	1470
MP2006KV01095	1	95	18.5	31.0	1760
MP2006KV01120	1	120	20.0	32.5	2035
MP2006KV01150	1	150	21.0	34.0	2325
MP2006KV01185	1	185	22.5	35.5	2700
MP2006KV01240	1	240	25.5	38.5	3340
MP2006KV01300	1	300	28.5	42.0	4050
MP2006KV01400	1	400	32.0	45.5	5045
MP2006KV01500	1	500	35.5	49.0	6070
MP2006KV01630	1	630	41.0	53.0	7775

ELECTRICAL CHARACTERISTICS 3.6/6kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	CURRENT CARRYING CAPACITY Amps		CONDUCTOR MAXIMUM SHORT-CIRCUIT CURRENT. T=1S kA	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C ohm/km	INDUCTANCE mH/km	CAPACITANCE µF/km
		In air	Buried				
1	25	164	164	3.6	0.7270	0.44	0.27
1	35	198	196	5.0	0.5240	0.42	0.30
1	50	238	231	7.2	0.3870	0.40	0.33
1	70	296	282	10.0	0.2680	0.38	0.38
1	95	360	338	13.6	0.1930	0.36	0.43
1	120	417	384	17.2	0.1530	0.34	0.48
1	150	470	428	21.5	0.1240	0.33	0.51
1	185	535	481	26.5	0.0991	0.33	0.54
1	240	635	557	34.3	0.0754	0.31	0.60
1	300	729	625	42.9	0.0601	0.31	0.63
1	400	844	708	57.2	0.0470	0.30	0.66
1	500	971	797	71.5	0.0366	0.29	0.69
1	630	1 109	892	90.1	0.0283	0.28	0.76

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DIMENSIONS 6/10kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP2010KV01025	1	25	15.0	27.5	1050
MP2010KV01035	1	35	16.0	28.5	1175
MP2010KV01050	1	50	17.0	29.5	1325
MP2010KV01070	1	70	18.5	31.5	1575
MP2010KV01095	1	95	20.5	33.0	1865
MP2010KV01120	1	120	22.0	35.0	2170
MP2010KV01150	1	150	23.0	36.0	2445
MP2010KV01185	1	185	24.5	37.5	2845
MP2010KV01240	1	240	27.0	40.0	3445
MP2010KV01300	1	300	30.0	43.0	4130
MP2010KV01400	1	400	33.0	46.0	5105
MP2010KV01500	1	500	36.0	49.5	6100
MP2010KV01630	1	630	41.5	53.0	7815

ELECTRICAL CHARACTERISTICS 6/10kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	CURRENT CARRYING CAPACITY Amps		CONDUCTOR MAXIMUM SHORT-CIRCUIT CURRENT. T=1S kA	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C ohm/km	INDUCTANCE mH/km	CAPACITANCE µF/km
		In air	Buried				
1	25	166	163	3.6	0.7270	0.46	0.22
1	35	201	196	5.0	0.5240	0.44	0.24
1	50	240	231	7.2	0.3870	0.41	0.27
1	70	299	282	10.0	0.2680	0.39	0.30
1	95	364	338	13.6	0.1930	0.37	0.34
1	120	420	383	17.2	0.1530	0.36	0.37
1	150	474	428	21.5	0.1240	0.35	0.39
1	185	539	471	26.5	0.0991	0.34	0.42
1	240	636	555	34.3	0.0754	0.32	0.48
1	300	731	625	42.9	0.0601	0.31	0.53
1	400	846	708	57.2	0.0470	0.30	0.59
1	500	972	797	71.5	0.0366	0.29	0.65
1	630	1 110	892	90.1	0.0283	0.28	0.72

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DIMENSIONS 8.7/15kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP2015KV01025	1	25	17.0	29.5	1155
MP2015KV01035	1	35	18.0	30.5	1285
MP2015KV01050	1	50	19.0	32.0	1440
MP2015KV01070	1	70	21.0	33.5	1690
MP2015KV01095	1	95	22.5	35.5	2010
MP2015KV01120	1	120	24.5	37.0	2300
MP2015KV01150	1	150	25.5	38.5	2600
MP2015KV01185	1	185	26.5	39.5	2985
MP2015KV01240	1	240	29.5	42.5	3615
MP2015KV01300	1	300	32.0	45.5	4315
MP2015KV01400	1	400	35.0	48.5	5300
MP2015KV01500	1	500	38.0	52.0	6335
MP2015KV01630	1	630	44.0	55.5	8045

ELECTRICAL CHARACTERISTICS 8.7/15kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	CURRENT CARRYING CAPACITY Amps		CONDUCTOR MAXIMUM SHORT-CIRCUIT CURRENT. T=1S kA	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C ohm/km	INDUCTANCE mH/km	CAPACITANCE µF/km
		In air	Buried				
1	25	168	163	3.6	0.7270	0.48	0.18
1	35	203	195	5.0	0.5240	0.45	0.20
1	50	243	231	7.2	0.3870	0.43	0.21
1	70	302	282	10.0	0.2680	0.41	0.24
1	95	366	337	13.6	0.1930	0.39	0.27
1	120	423	383	17.2	0.1530	0.37	0.29
1	150	477	428	21.5	0.1240	0.36	0.31
1	185	541	480	26.5	0.0991	0.35	0.33
1	240	640	555	34.3	0.0754	0.34	0.38
1	300	736	626	42.9	0.0601	0.32	0.42
1	400	850	709	57.2	0.0470	0.31	0.46
1	500	976	798	71.5	0.0366	0.30	0.51
1	630	1 115	894	90.1	0.0283	0.29	0.56

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DIMENSIONS 12/20kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP2020KV01035	1	35	20.0	32.5	1390
MP2020KV01050	1	50	21.0	34.0	1565
MP2020KV01070	1	70	23.0	35.5	1825
MP2020KV01095	1	95	24.5	37.5	2150
MP2020KV01120	1	120	26.5	39.5	2445
MP2020KV01150	1	150	27.5	40.5	2750
MP2020KV01185	1	185	28.5	42.0	3140
MP2020KV01240	1	240	31.5	45.0	3780
MP2020KV01300	1	300	34.0	47.5	4490
MP2020KV01400	1	400	37.0	51.0	5515
MP2020KV01500	1	500	40.0	54.5	6535
MP2020KV01630	1	630	46.0	58.0	8300

ELECTRICAL CHARACTERISTICS 12/20kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	CURRENT CARRYING CAPACITY Amps		CONDUCTOR MAXIMUM SHORT-CIRCUIT CURRENT. T=1S kA	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C ohm/km	INDUCTANCE mH/km	CAPACITANCE µF/km
		In air	Buried				
1	35	204	195	5.0	0.5240	0.47	0.17
1	50	244	231	7.2	0.3870	0.44	0.19
1	70	304	282	10.0	0.2680	0.42	0.21
1	95	368	337	13.6	0.1930	0.40	0.23
1	120	425	383	17.2	0.1530	0.38	0.25
1	150	479	427	21.5	0.1240	0.37	0.27
1	185	544	479	26.5	0.0991	0.36	0.28
1	240	643	555	34.3	0.0754	0.35	0.32
1	300	739	626	42.9	0.0601	0.33	0.35
1	400	853	709	57.2	0.0470	0.32	0.39
1	500	979	799	71.5	0.0366	0.31	0.43
1	630	1 119	896	90.1	0.0283	0.30	0.47

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DIMENSIONS 18/30kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP2030KV01050	1	50	26.0	39.0	1890
MP2030KV01070	1	70	28.0	41.0	2180
MP2030KV01095	1	95	29.5	43.0	2500
MP2030KV01120	1	120	31.5	44.5	2835
MP2030KV01150	1	150	32.5	46.0	3125
MP2030KV01185	1	185	33.5	47.5	3550
MP2030KV01240	1	240	36.5	50.5	4245
MP2030KV01300	1	300	39.0	53.5	4985
MP2030KV01400	1	400	42.0	56.5	6040
MP2030KV01500	1	500	45.0	59.5	7060
MP2030KV01630	1	630	51.0	63.5	8875

ELECTRICAL CHARACTERISTICS 18/30kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	CURRENT CARRYING CAPACITY Amps		CONDUCTOR MAXIMUM SHORT-CIRCUIT CURRENT. T=1S kA	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C ohm/km	INDUCTANCE mH/km	CAPACITANCE µF/km
		In air	Buried				
1	50	248	230	7.2	0.3870	0.48	0.14
1	70	307	281	10.0	0.2680	0.45	0.16
1	95	372	335	13.6	0.1930	0.43	0.18
1	120	429	382	17.2	0.1530	0.41	0.19
1	150	484	426	21.5	0.1240	0.40	0.20
1	185	549	479	26.5	0.0991	0.39	0.21
1	240	648	555	34.3	0.0754	0.37	0.24
1	300	744	627	42.9	0.0601	0.36	0.26
1	400	858	710	57.2	0.0470	0.34	0.29
1	500	985	801	71.5	0.0366	0.33	0.31
1	630	1 126	900	90.1	0.0283	0.32	0.34

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