

LXHIOAV Cable



Eland Product Group: MP50

APPLICATION

Portuguese reference medium voltage cable for power distribution and power supply stations used in Utility and Industrial applications, for rated voltages up to 3.6/6kV to 18/30kV. Suitable for fixed installations, directly buried. Good mechanical protection.

CHARACTERISTICS

Voltage Rating U_0/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: 15 x overall diameter
After installation: 10 x overall diameter

CONSTRUCTION

Conductor

Class 2 stranded Aluminium,

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

Tape

Plastic tape is applied over the screen

Filler

Extruded polymeric material

Bedding

PVC (Polyvinyl Chloride)

Armour

STA (Steel Tape Armoured)

Sheath

PVC (Polyvinyl Chloride) type ST2

Sheath Colour

● Black

STANDARDS

IEC 60228, IEC 60502-2
Flame retardant to IEC 60332-1-2,

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



SCIENCE
BASED
TARGETS

BUSINESS
AMBITION FOR 1.5°C



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 mm ²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP5006KV03025	3	25	12.5	44.0	2 860
MP5006KV03035	3	35	13.5	46.5	3 140
MP5006KV03050	3	50	15.0	49.5	3 460
MP5006KV03070	3	70	16.5	53.5	3 965
MP5006KV03095	3	95	18.0	57.5	4 575
MP5006KV03120	3	120	20.0	61.0	5 095
MP5006KV03150	3	150	21.0	64.5	5 650
MP5006KV03185	3	185	22.5	68.0	6 320
MP5006KV03240	3	240	25.5	74.5	7 545
MP5006KV03300	3	300	28.5	82.0	8 845
MP5006KV03400	3	400	32.0	91.0	11 485

ELECTRICAL CHARACTERISTICS (3.6/6kV)

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	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				
3	25	111	115	2.4	1.2000	0.38	0.27
3	35	133	136	3.3	0.8680	0.36	0.30
3	50	159	162	4.7	0.6410	0.35	0.33
3	70	196	198	6.6	0.4430	0.32	0.38
3	95	238	236	9.0	0.3200	0.30	0.42
3	120	274	268	11.3	0.2530	0.29	0.47
3	150	309	302	14.2	0.2060	0.29	0.51
3	185	354	342	17.5	0.1640	0.28	0.55
3	240	415	395	22.7	0.1250	0.27	0.60
3	300	472	444	28.3	0.1000	0.26	0.63
3	400	545	504	37.8	0.0778	0.26	0.66

DIMENSIONS (6/10kV)

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP5010KV03025	3	25	14.5	49.0	3 310
MP5010KV03035	3	35	15.5	51.5	3 620
MP5010KV03050	3	50	17.0	54.0	3 965
MP5010KV03070	3	70	18.5	58.0	4 500
MP5010KV03095	3	95	20.0	62.0	5 075
MP5010KV03120	3	120	22.0	66.0	5 690
MP5010KV03150	3	150	23.0	69.5	6 305
MP5010KV03185	3	185	24.5	72.5	6 975
MP5010KV03240	3	240	27.0	78.0	8 015
MP5010KV03300	3	300	30.0	85.0	9 305
MP5010KV03400	3	400	32.5	93.0	11 775



ELECTRICAL CHARACTERISTICS (6/10kV)

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	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				
3	25	111	115	2.4	1.2000	0.40	0.22
3	35	133	136	3.3	0.8680	0.39	0.24
3	50	159	162	4.7	0.6410	0.37	0.26
3	70	196	198	6.6	0.4430	0.34	0.30
3	95	238	236	9.0	0.3200	0.32	0.33
3	120	274	268	11.3	0.2530	0.31	0.37
3	150	309	302	14.2	0.2060	0.30	0.39
3	185	354	342	17.5	0.1640	0.29	0.43
3	240	415	395	22.7	0.1250	0.28	0.47
3	300	472	444	28.3	0.1000	0.27	0.53
3	400	545	504	37.8	0.0778	0.26	0.59

DIMENSIONS (8.7/15kV)

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP5015KV03025	3	25	17.0	54.5	3 870
MP5015KV03035	3	35	18.0	57.0	4 200
MP5015KV03050	3	50	19.0	59.0	4 530
MP5015KV03070	3	70	20.5	63.5	5 100
MP5015KV03095	3	95	22.5	67.0	5 750
MP5015KV03120	3	120	24.0	71.5	6 405
MP5015KV03150	3	150	25.5	74.5	7 075
MP5015KV03185	3	185	27.0	77.5	7 670
MP5015KV03240	3	240	29.0	83.5	8 845
MP5015KV03300	3	300	32.0	91.5	11 075
MP5015KV03400	3	400	35.0	98.5	12 785

ELECTRICAL CHARACTERISTICS (8.7/15kV)

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	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				
3	25	111	115	2.4	1.2000	0.43	0.18
3	35	133	136	3.3	0.8680	0.41	0.19
3	50	159	162	4.7	0.6410	0.39	0.21
3	70	196	198	6.6	0.4430	0.36	0.24
3	95	238	236	9.0	0.3200	0.34	0.27
3	120	274	268	11.3	0.2530	0.33	0.29
3	150	309	302	14.2	0.2060	0.32	0.31
3	185	354	342	17.5	0.1640	0.31	0.34
3	240	415	395	22.7	0.1250	0.30	0.37
3	300	472	444	28.3	0.1000	0.29	0.42
3	400	545	504	37.8	0.0778	0.27	0.46



DIMENSIONS (12/20kV)

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP5020KV03035	3	35	20,0	61,0	4 685
MP5020KV03050	3	50	21,0	64,0	5 110
MP5020KV03070	3	70	22,5	68,0	5 710
MP5020KV03095	3	95	24,5	72,0	6 435
MP5020KV03120	3	120	26,0	76,0	7 080
MP5020KV03150	3	150	27,5	79,0	7 680
MP5020KV03185	3	185	29,0	82,5	8 445
MP5020KV03240	3	240	31,0	89,5	10 535
MP5020KV03300	3	300	34,0	96,5	11 970
MP5020KV03400	3	400	37,0	103,0	13 730

ELECTRICAL CHARACTERISTICS (12/20kV)

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	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				
3	35	133	136	3.3	0.8680	0.43	0.17
3	50	159	162	4.7	0.6410	0.41	0.18
3	70	196	198	6.6	0.4430	0.38	0.21
3	95	238	236	9.0	0.3200	0.36	0.23
3	120	274	268	11.3	0.2530	0.34	0.25
3	150	309	302	14.2	0.2060	0.33	0.27
3	185	354	342	17.5	0.1640	0.32	0.29
3	240	415	395	22.7	0.1250	0.31	0.32
3	300	472	444	28.3	0.1000	0.30	0.35
3	400	545	504	37.8	0.0778	0.29	0.39

DIMENSIONS (18/30kV)

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP5030KV03050	3	50	26.0	76.0	6 700
MP5030KV03070	3	70	27.5	80.0	7 445
MP5030KV03095	3	95	29.5	85.5	9 015
MP5030KV03120	3	120	31.0	89.5	9 895
MP5030KV03150	3	150	32.5	92.5	10 515
MP5030KV03185	3	185	34.0	96.0	11 420
MP5030KV03240	3	240	36.0	101.5	12 750
MP5030KV03300	3	300	39.0	108.0	14 320
MP5030KV03400	3	400	42.0	115.0	16 220



ELECTRICAL CHARACTERISTICS (18/30kV)

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	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				
3	50	159	162	4.7	0.6410	0.45	0.14
3	70	196	198	6.6	0.4430	0.41	0.16
3	95	238	236	9.0	0.3200	0.39	0.17
3	120	274	268	11.3	0.2530	0.38	0.19
3	150	309	302	14.2	0.2060	0.37	0.20
3	185	354	342	17.5	0.1640	0.35	0.21
3	240	415	395	22.7	0.1250	0.34	0.24
3	300	472	444	28.3	0.1000	0.32	0.26
3	400	545	504	37.8	0.0778	0.31	0.29

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.