

## LXHIOAE Cable



Eland Product Group: MP51

### APPLICATION

Portuguese reference Medium Voltage cable for power distribution and power supply stations used in Utility and Industrial applications, for rated voltages of 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, 7.5/15 (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

PE (Polyethylene)

#### Armour

STA (Steel Tape Armoured)

#### Sheath

PE (Polyethylene) type ST7

#### Sheath Colour

● Black

### STANDARDS

IEC 60228, IEC 60502-2

### ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



OHS 672066

### 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 3.6/6kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP5106KV03025	3	25	12.5	44.0	2860
MP5106KV03035	3	35	13.5	46.5	3140
MP5106KV03050	3	50	15.0	49.5	3460
MP5106KV03070	3	70	16.5	53.5	3965
MP5106KV03095	3	95	18.0	57.5	4575
MP5106KV03120	3	120	20.0	61.0	5095
MP5106KV03150	3	150	21.0	64.5	5650
MP5106KV03185	3	185	22.5	68.0	6320
MP5106KV03240	3	240	25.5	74.5	7545
MP5106KV03300	3	300	28.5	82.0	8845
MP5106KV03400	3	400	32.0	91.0	11485

## ELECTRICAL CHARACTERISTICS 3.6/6kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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 GROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP5110KV03025	3	25	14.5	49.0	3310
MP5110KV03035	3	35	15.5	51.5	3620
MP5110KV03050	3	50	17.0	54.0	3460
MP5110KV03070	3	70	18.5	58.0	4500
MP5110KV03095	3	95	20.0	62.0	5075
MP5110KV03120	3	120	22.0	66.0	5690
MP5110KV03150	3	150	23.0	69.5	6305
MP5110KV03185	3	185	24.5	72.5	6975
MP5110KV03240	3	240	27.0	78.0	8015
MP5110KV03300	3	300	30.0	85.0	9305
MP5110KV03400	3	400	32.5	93.0	11775

## ELECTRICAL CHARACTERISTICS 6/10kV

NO. OF CORES	NOMINAL GROSS SECTIONAL AREA mm <sup>2</sup>	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 7.5/15kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP5115KV03025	3	25	17.0	54.5	3870
MP5115KV03035	3	35	18.0	57.0	4200
MP5115KV03050	3	50	19.0	59.0	4530
MP5115KV03070	3	70	20.5	63.5	5100
MP5115KV03095	3	95	22.5	67.0	5750
MP5115KV03120	3	120	24.0	71.5	6405
MP5115KV03150	3	150	25.5	74.5	7075
MP5115KV03185	3	185	27.0	77.5	7670
MP5115KV03240	3	240	29.0	83.5	8845
MP5115KV03300	3	300	32.0	91.5	11075
MP5115KV03400	3	400	35.0	98.5	12785

## ELECTRICAL CHARACTERISTICS 7.5/15kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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 <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP5120KV03035	3	35	20,0	61,0	4685
MP5120KV03050	3	50	21,0	64,0	5110
MP5120KV03070	3	70	22,5	68,0	5710
MP5120KV03095	3	95	24,5	72,0	6435
MP5120KV03120	3	120	26,0	76,0	7080
MP5120KV03150	3	150	27,5	79,0	7680
MP5120KV03185	3	185	29,0	82,5	8445
MP5120KV03240	3	240	31,0	89,5	10535
MP5120KV03300	3	300	34,0	96,5	11970
MP5120KV03400	3	400	37,0	103,0	13370

## ELECTRICAL CHARACTERISTICS 12/20kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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 <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP5130KV03050	3	50	26.0	76.0	6700
MP5130KV03070	3	70	27.5	80.0	7445
MP5130KV03095	3	95	29.5	85.5	9015
MP5130KV03120	3	120	31.0	89.5	9895
MP5130KV03150	3	150	32.5	92.5	10515
MP5130KV03185	3	185	34.0	96.0	11420
MP5130KV03240	3	240	36.0	101.5	12750
MP5130KV03300	3	300	39.0	108.0	14320
MP5130KV03400	3	400	42.0	115.0	16220

## ELECTRICAL CHARACTERISTICS 18/30kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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.