



Eland Product Group: MP60

### APPLICATION

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

### CHARACTERISTICS

#### Voltage Rating U<sub>0</sub>/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 Aluminium, circular, stranded

#### 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

#### Filler

Extruded polymeric material

#### Bedding

PE (Polyethylene)

#### Armour

SWA (Galvanised Steel Wire Armoured)

#### Sheath

PE (Polyethylene)

#### 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.



8578



FS 672069



EMS 672067



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™.



KIM E24267





## DIMENSIONS 3.6/6 (7.2)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP6006KV03025	3	25	12.5	44.0	3 320
MP6006KV03035	3	35	13.5	46.5	3 775
MP6006KV03050	3	50	15.0	49.5	4 340
MP6006KV03070	3	70	16.5	53.5	5 280
MP6006KV03095	3	95	18.0	57.5	6 325
MP6006KV03120	3	120	20.0	61.0	7 290
MP6006KV03150	3	150	21.0	64.5	8 300
MP6006KV03185	3	185	22.5	68.0	9 640
MP6006KV03240	3	240	25.5	74.5	11 985
MP6006KV03300	3	300	28.5	82.0	14 475

## ELECTRICAL CHARACTERISTICS 3.6/6 (7.2)kV

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

## DIMENSIONS 6/10 (12)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP6010KV03025	3	25	14.5	49.0	3310
MP6010KV03035	3	35	15.5	51.5	3620
MP6010KV03050	3	50	17.0	54.0	3965
MP6010KV03070	3	70	18.5	58.0	4500
MP6010KV03095	3	95	20.0	62.0	5075
MP6010KV03120	3	120	22.0	66.0	5690
MP6010KV03150	3	150	23.0	69.5	6305
MP6010KV03185	3	185	24.5	72.5	6975
MP6010KV03240	3	240	27.0	78.0	8015
MP6010KV03300	3	300	30.0	85.0	9305



## ELECTRICAL CHARACTERISTICS 6/10 (12)kV

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	0.40	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

## DIMENSIONS 8.7/15 (17.5)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP6015KV03025	3	25	17.0	54.5	3870
MP6015KV03035	3	35	18.0	57.0	4200
MP6015KV03050	3	50	19.0	59.0	4530
MP6015KV03070	3	70	20.5	63.5	5100
MP6015KV03095	3	95	22.5	67.0	5750
MP6015KV03120	3	120	24.0	71.5	6405
MP6015KV03150	3	150	25.5	74.5	7075
MP6015KV03185	3	185	27.0	77.5	7670
MP6015KV03240	3	240	29.0	83.5	8845

## ELECTRICAL CHARACTERISTICS 8.7/15 (17.5)kV

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



## DIMENSIONS 12/20 (24)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP6020KV03035	3	35	20.0	61.0	4685
MP6020KV03050	3	50	21.0	64.0	5110
MP6020KV03070	3	70	22.5	68.0	5710
MP6020KV03095	3	95	24.5	72.0	6435
MP6020KV03120	3	120	26.0	76.0	7080
MP6020KV03150	3	150	27.5	79.0	7680
MP6020KV03185	3	185	29.0	82.5	8445

## ELECTRICAL CHARACTERISTICS 12/20 (24)kV

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

## DIMENSIONS 18/30 (36)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP6030KV03050	3	50	26.0	76.0	6700
MP6030KV03070	3	70	27.5	80.0	7445
MP6030KV03095	3	95	29.5	85.5	9015
MP6030KV03120	3	120	31.0	89.5	9895

## ELECTRICAL CHARACTERISTICS 18/30 (36)kV

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