



Eland Product Group: MP58

**APPLICATION**

Portuguese referenced 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 tape screen

**Filler**

Extruded polymeric material

**Bedding**

PE (polyethylene)

**Armour**

SWA (Galvanized 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.



**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	
MP5806KV03025	3	25	12.5	44.0	2860
MP5806KV03035	3	35	13.5	46.5	3140
MP5806KV03050	3	50	15.0	49.5	3460
MP5806KV03070	3	70	16.5	53.5	3965
MP5806KV03095	3	95	18.0	57.5	4575
MP5806KV03120	3	120	20.0	61.0	5095
MP5806KV03150	3	150	21.0	64.5	5650
MP5806KV03185	3	185	22.5	68.0	6320
MP5806KV03240	3	240	25.5	74.5	7545
MP5806KV03300	3	300	28.5	82.0	8845

## 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

## 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	
MP5810KV03025	3	25	14.5	49.0	3310
MP5810KV03035	3	35	15.5	51.5	3620
MP5810KV03050	3	50	17.0	54.0	3460
MP5810KV03070	3	70	18.5	58.0	4500
MP5810KV03095	3	95	20.0	62.0	5075
MP5810KV03120	3	120	22.0	66.0	5690
MP5810KV03150	3	150	23.0	69.5	6305
MP5810KV03185	3	185	24.5	72.5	6975
MP5810KV03240	3	240	27.0	78.0	8015
MP5810KV03300	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	
MP5815KV03025	3	25	17.0	54.5	3870
MP5815KV03035	3	35	18.0	57.0	4200
MP5815KV03050	3	50	19.0	59.0	4530
MP5815KV03070	3	70	20.5	63.5	5100
MP5815KV03095	3	95	22.5	67.0	5750
MP5815KV03120	3	120	24.0	71.5	6405
MP5815KV03150	3	150	25.5	74.5	7075
MP5815KV03185	3	185	27.0	77.5	7670
MP5815KV03240	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	
MP5820KV03035	3	35	20.0	61.0	4685
MP5820KV03050	3	50	21.0	64.0	5110
MP5820KV03070	3	70	22.5	68.0	5710
MP5820KV03095	3	95	24.5	72.0	6435
MP5820KV03120	3	120	26.0	76.0	7080
MP5820KV03150	3	150	27.5	79.0	7680
MP5820KV03185	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	
MP5830KV03050	3	50	26.0	76.0	6700
MP5830KV03070	3	70	27.5	80.0	7445
MP5830KV03095	3	95	29.5	85.5	9015
MP5830KV03120	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

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.