



Eland Product Group: MP21

## 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 $U_0/U$ (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: 20 x overall diameter  
After installation: 15 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 tape screen

### Inner Sheath

PVC (Polyvinyl Chloride)

### Armour

Two aluminium tapes helically applied

### 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<sup>®</sup>

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](http://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<sup>®</sup>.





## 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	
MP2106KV01025	1	25	12.5	25.5	810
MP2106KV01035	1	35	13.5	26.5	870
MP2106KV01050	1	50	15.0	27.5	940
MP2106KV01070	1	70	16.5	29.0	1050
MP2106KV01095	1	95	18.0	31.0	1180
MP2106KV01120	1	120	20.0	32.5	1315
MP2106KV01150	1	150	21.0	34.0	1450
MP2106KV01185	1	185	22.5	35.5	1605
MP2106KV01240	1	240	25.5	38.5	1875
MP2106KV01300	1	300	28.5	42.0	2190
MP2106KV01400	1	400	32.0	45.5	2595
MP2106KV01500	1	500	35.0	49.0	3035
MP2106KV01630	1	630	40.0	54.0	3690

## 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				
1	25	127	127	2.4	1.2000	0.44	0.27
1	35	153	151	3.3	0.8680	0.42	0.30
1	50	183	179	4.7	0.6410	0.40	0.33
1	70	229	219	6.6	0.4430	0.38	0.38
1	95	279	262	9.0	0.3200	0.36	0.42
1	120	324	299	11.3	0.2530	0.34	0.47
1	150	366	334	14.2	0.2060	0.33	0.51
1	185	420	377	17.5	0.1640	0.32	0.55
1	240	497	437	22.7	0.1250	0.32	0.60
1	300	575	493	28.3	0.1000	0.31	0.63
1	400	671	563	37.8	0.0778	0.30	0.66
1	500	779	641	47.2	0.0605	0.29	0.69
1	630	915	732	59.5	0.0469	0.28	0.79



## DIMENSIONS 6/10kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP2110KV01025	1	25	14.5	27.5	900
MP2110KV01035	1	35	15.5	28.5	965
MP2110KV01050	1	50	17.0	29.5	1035
MP2110KV01070	1	70	18.5	31.0	1155
MP2110KV01095	1	95	20.0	33.0	1290
MP2110KV01120	1	120	22.0	34.5	1445
MP2110KV01150	1	150	23.0	36.0	1565
MP2110KV01185	1	185	24.5	37.5	1745
MP2110KV01240	1	240	27.0	40.0	1980
MP2110KV01300	1	300	30.0	43.0	2275
MP2110KV01400	1	400	32.5	46.0	2655
MP2110KV01500	1	500	35.5	49.0	3065
MP2110KV01630	1	630	40.5	54.5	3725

## ELECTRICAL CHARACTERISTICS 6/10kV

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				
1	25	129	127	2.4	1.2000	0.46	0.22
1	35	155	151	3.3	0.8680	0.44	0.24
1	50	185	179	4.7	0.6410	0.42	0.26
1	70	232	219	6.6	0.4430	0.39	0.30
1	95	282	262	9.0	0.3200	0.37	0.33
1	120	326	298	11.3	0.2530	0.36	0.37
1	150	369	333	14.2	0.2060	0.35	0.39
1	185	423	377	17.5	0.1640	0.34	0.43
1	240	498	436	22.7	0.1250	0.32	0.47
1	300	576	493	28.3	0.1000	0.31	0.53
1	400	672	564	37.8	0.0778	0.30	0.59
1	500	779	641	47.2	0.0605	0.29	0.65
1	630	915	732	59.5	0.0469	0.28	0.75



## DIMENSIONS 8.7/15kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP2115KV01025	1	25	17.0	29.5	1005
MP2115KV01035	1	35	18.0	30.5	1075
MP2115KV01050	1	50	19.0	31.5	1150
MP2115KV01070	1	70	20.5	33.5	1270
MP2115KV01095	1	95	22.5	35.0	1430
MP2115KV01120	1	120	24.0	37.0	1575
MP2115KV01150	1	150	25.5	38.5	1720
MP2115KV01185	1	185	27.0	40.0	1885
MP2115KV01240	1	240	29.0	42.5	2150
MP2115KV01300	1	300	32.0	45.5	2455
MP2115KV01400	1	400	35.0	48.5	2850
MP2115KV01500	1	500	38.0	52.0	3300
MP2115KV01630	1	630	42.5	56.5	3950

## ELECTRICAL CHARACTERISTICS 8.7/15kV

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				
1	25	130	127	2.4	1.2000	0.48	0.18
1	35	157	151	3.3	0.8680	0.46	0.19
1	50	187	179	4.7	0.6410	0.43	0.21
1	70	234	219	6.6	0.4430	0.41	0.24
1	95	284	261	9.0	0.3200	0.39	0.27
1	120	329	298	11.3	0.2530	0.37	0.29
1	150	372	333	14.2	0.2060	0.36	0.31
1	185	425	376	17.5	0.1640	0.35	0.34
1	240	501	435	22.7	0.1250	0.34	0.37
1	300	579	493	28.3	0.1000	0.32	0.42
1	400	674	563	37.8	0.0778	0.31	0.46
1	500	790	641	47.2	0.0605	0.30	0.51
1	630	917	732	59.5	0.0469	0.29	0.58



## 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	
MP2120KV01035	1	35	20.0	32.5	1180
MP2120KV01050	1	50	21.0	34.0	1275
MP2120KV01070	1	70	22.5	35.5	1405
MP2120KV01095	1	95	24.5	37.5	1570
MP2120KV01120	1	120	26.0	39.0	1720
MP2120KV01150	1	150	27.5	40.5	1875
MP2120KV01185	1	185	29.0	42.0	2045
MP2120KV01240	1	240	31.0	44.5	2315
MP2120KV01300	1	300	34.0	47.5	2635
MP2120KV01400	1	400	37.0	51.0	3060
MP2120KV01500	1	500	40.0	54.0	3500
MP2120KV01630	1	630	44.5	59.0	4200

## 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				
1	35	158	151	3.3	0.8680	0.47	0.17
1	50	189	178	4.7	0.6410	0.45	0.18
1	70	235	219	6.6	0.4430	0.42	0.21
1	95	286	261	9.0	0.3200	0.40	0.23
1	120	330	297	11.3	0.2530	0.38	0.25
1	150	373	333	14.2	0.2060	0.37	0.27
1	185	426	376	17.5	0.1640	0.36	0.29
1	240	503	435	22.7	0.1250	0.35	0.32
1	300	581	493	28.3	0.1000	0.33	0.35
1	400	676	563	37.8	0.0778	0.32	0.39
1	500	783	641	47.2	0.0605	0.31	0.43
1	630	918	732	59.5	0.0469	0.30	0.49



## 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	
MP2130KV01050	1	50	26.0	39.0	1595
MP2130KV01070	1	70	27.5	41.0	1760
MP2130KV01095	1	95	29.5	42.5	1920
MP2130KV01120	1	120	31.0	44.5	2105
MP2130KV01150	1	150	32.5	46.0	2250
MP2130KV01185	1	185	34.0	47.5	2460
MP2130KV01240	1	240	36.0	50.0	2780
MP2130KV01300	1	300	39.0	53.5	3125
MP2130KV01400	1	400	42.0	56.5	3585
MP2130KV01500	1	500	45.0	59.5	4020
MP2130KV01630	1	630	49.5	64.5	4765

## 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				
1	50	191	178	4.7	0.641	0.48	0.14
1	70	238	218	6.6	0.443	0.45	0.16
1	95	288	260	9.0	0.320	0.43	0.17
1	120	333	297	11.3	0.253	0.41	0.19
1	150	376	332	14.2	0.206	0.40	0.20
1	185	430	375	17.5	0.164	0.39	0.21
1	240	506	435	22.7	0.125	0.37	0.24
1	300	584	493	28.3	0.100	0.36	0.26
1	400	679	563	37.8	0.0778	0.34	0.29
1	500	786	642	47.2	0.0605	0.33	0.31
1	630	920	734	59.5	0.0469	0.32	0.35

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.