



Eland Product Group: MP06

### APPLICATION

Portuguese referenced Medium Voltage cable for power distribution and power supply stations used in Utility and Industrial applications, for rated voltages from to 3.6/6kV to 18/30kV. Suitable for fixed installations, indoor or outdoor, in open air on cable trays, or underground in ducts or directly buried.

### 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

#### Test Voltage

3.6/6 (7.2)kV: 12.6kV  
6/10 (12)kV: 21kV  
8.7/15 (17.5)kV: 30kV  
12/20 (24)kV: 42kV  
18/30 (36)kV: 63kV

#### Temperature Range

Fixed: -20°C to +90°C

#### Minimum Bending Radius

15 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

#### 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 compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.





## DIMENSIONS 3.6/6 (7.2)kV

ELAND PART NO.	NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
MP0606K01025	1	25	12.5	20.0	505
MP0606K01035	1	35	13.5	21.0	560
MP0606K01050	1	50	15.0	22.0	615
MP0606K01070	1	70	16.5	24.0	705
MP0606K01095	1	95	18.0	25.5	830
MP0606K01120	1	120	20.0	27.5	950
MP0606K01150	1	150	21.0	29.0	1055
MP0606K01185	1	185	22.5	30.5	1205
MP0606K01240	1	240	25.5	33.5	1425
MP0606K01300	1	300	28.5	37.0	1695
MP0606K01400	1	400	32.0	40.0	2055
MP0606K01500	1	500	35.0	43.5	2450
MP0606K01600	1	630	40.0	49.0	3040
MP0606K03025	3	25	12.5	39.0	1935
MP0606K03035	3	35	13.5	41.5	2140
MP0606K03050	3	50	15.0	44.0	2395
MP0606K03070	3	70	16.5	48.0	2785
MP0606K03095	3	95	18.0	52.0	3270
MP0606K03120	3	120	20.0	56.0	3725
MP0606K03150	3	150	21.0	59.0	4170
MP0606K03185	3	185	22.5	62.5	4725
MP0606K03240	3	240	25.5	68.5	5750
MP0606K03300	3	300	28.5	76.0	6860
MP0606K03400	3	400	32.0	83.5	8390

## ELECTRICAL CHARACTERISTICS 3.6/6 (7.2)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CONDUCTOR MAXIMUM SHORT CIRCUIT CURRENT T=1S kA	CONDUCTOR DC RESISTANCE AT 20°C ohm/km	INDUCTANCE mH/km	CAPACITANCE μF/km	CURRENT CARRYING CAPACITY Amps	
						In Air	Buried
1	25	2.4	1.2000	0.41	0.27	121	124
1	35	3.3	0.8680	0.39	0.30	147	148
1	50	4.7	0.6410	0.37	0.33	176	175
1	70	6.6	0.4430	0.35	0.38	221	215
1	95	9.0	0.3200	0.33	0.42	270	258
1	120	11.3	0.2530	0.32	0.47	315	295
1	150	14.2	0.2060	0.31	0.51	357	331
1	185	17.5	0.1640	0.30	0.55	411	375
1	240	22.7	0.1250	0.29	0.60	489	436
1	300	28.3	0.1000	0.28	0.63	571	495
1	400	37.8	0.0778	0.28	0.66	670	567
1	500	47.2	0.0605	0.27	0.69	782	649
1	630	59.5	0.0469	0.26	0.79	925	746
3	25	2.4	1.2000	0.38	0.27	142	115
3	35	3.3	0.8680	0.36	0.30	170	136
3	50	4.7	0.6410	0.35	0.33	204	162
3	70	6.6	0.4430	0.32	0.38	253	198



## ELECTRICAL CHARACTERISTICS 3.6/6 (7.2)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CONDUCTOR MAXIMUM SHORT CIRCUIT CURRENT T=1S kA	CONDUCTOR DC RESISTANCE AT 20°C ohm/km	INDUCTANCE mH/km	CAPACITANCE μF/km	CURRENT CARRYING CAPACITY Amps	
						In Air	Buried
3	95	9.0	0.3200	0.30	0.42	304	235
3	120	11.3	0.2530	0.29	0.47	351	268
3	150	14.2	0.2060	0.29	0.51	398	303
3	185	17.5	0.1640	0.28	0.55	455	343
3	240	22.7	0.1250	0.27	0.60	531	397
3	300	28.3	0.1000	0.26	0.63	606	448
3	400	37.8	0.0778	0.26	0.66	696	511

## DIMENSIONS 6/10 (12)kV

ELAND PART NO.	NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
MP0610K01025	1	25	14.5	22.0	575
MP0610K01035	1	35	15.5	23.0	630
MP0610K01050	1	50	17.0	24.5	700
MP0610K01070	1	70	18.5	26.0	795
MP0610K01095	1	95	20.0	28.0	925
MP0610K01120	1	120	22.0	29.5	1040
MP0610K01150	1	150	23.0	31.0	1165
MP0610K01185	1	185	24.5	32.5	1305
MP0610K01240	1	240	27.0	35.0	1525
MP0610K01300	1	300	30.0	38.0	1785
MP0610K01400	1	400	32.5	41.0	2125
MP0610K01500	1	500	35.5	44.5	2500
MP0610K01600	1	630	40.5	49.0	3070
MP0610K03025	3	25	14.5	43.5	2255
MP0610K03035	3	35	15.5	46.0	2480
MP0610K03050	3	50	17.0	49.0	2765
MP0610K03070	3	70	18.5	52.5	3175
MP0610K03095	3	95	20.0	56.5	3720
MP0610K03120	3	120	22.0	60.5	4210
MP0610K03150	3	150	23.0	63.5	4680
MP0610K03185	3	185	24.5	67.0	5260
MP0610K03240	3	240	27.0	72.0	6170
MP0610K03300	3	300	30.0	79.0	7255
MP0610K03400	3	400	32.5	85.5	8620

## ELECTRICAL CHARACTERISTICS 6/10 (12)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CONDUCTOR MAXIMUM SHORT CIRCUIT CURRENT T=1S kA	CONDUCTOR DC RESISTANCE AT 20°C ohm/km	INDUCTANCE mH/km	CAPACITANCE μF/km	CURRENT CARRYING CAPACITY Amps	
						In Air	Buried
1	25	2.4	1.2000	0.43	0.22	124	124
1	35	3.3	0.8680	0.41	0.24	150	148
1	50	4.7	0.6410	0.39	0.26	179	175
1	70	6.6	0.4430	0.37	0.30	225	215
1	95	9.0	0.3200	0.35	0.33	274	258
1	120	11.3	0.2530	0.33	0.37	319	295



## ELECTRICAL CHARACTERISTICS 6/10 (12)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CONDUCTOR MAXIMUM SHORT CIRCUIT CURRENT T=1S kA	CONDUCTOR DC RESISTANCE AT 20°C ohm/km	INDUCTANCE mH/km	CAPACITANCE μF/km	CURRENT CARRYING CAPACITY Amps	
						In Air	Buried
1	150	14.2	0.2060	0.32	0.39	361	330
1	185	17.5	0.1640	0.31	0.43	415	374
1	240	22.7	0.1250	0.30	0.47	493	435
1	300	28.3	0.1000	0.29	0.53	573	495
1	400	37.8	0.0778	0.28	0.59	671	567
1	500	47.2	0.0605	0.28	0.65	783	649
1	630	59.5	0.0469	0.27	0.75	926	745
3	25	2.4	1.2000	0.40	0.22	142	115
3	35	3.3	0.8680	0.39	0.24	170	136
3	50	4.7	0.6410	0.37	0.26	204	162
3	70	6.6	0.4430	0.34	0.30	253	198
3	95	9.0	0.3200	0.32	0.33	304	235
3	120	11.3	0.2530	0.31	0.37	351	268
3	150	14.2	0.2060	0.30	0.39	398	303
3	185	17.5	0.1640	0.29	0.43	455	343
3	240	22.7	0.1250	0.28	0.47	531	397
3	300	28.3	0.1000	0.27	0.53	606	448
3	400	37.8	0.0778	0.26	0.59	696	511

## DIMENSIONS 8.7/15 (17.5)kV

ELAND PART NO.	NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
MP0615K01025	1	25	17.0	24.5	665
MP0615K01035	1	35	18.0	25.5	720
MP0615K01050	1	50	19.0	26.5	785
MP0615K01070	1	70	20.5	28.5	900
MP0615K01095	1	95	22.5	30.0	1020
MP0615K01120	1	120	24.0	32.0	1160
MP0615K01150	1	150	25.5	33.5	1270
MP0615K01185	1	185	27.0	35.0	1435
MP0615K01240	1	240	29.0	37.5	1665
MP0615K01300	1	300	32.0	40.5	1915
MP0615K01400	1	400	35.0	43.5	2270
MP0615K01500	1	500	38.0	46.5	2655
MP0615K01600	1	630	42.5	51.5	3240
MP0615K03025	3	25	17.0	49.0	2665
MP0615K03035	3	35	18.0	51.5	2905
MP0615K03050	3	50	19.0	54.0	3210
MP0615K03070	3	70	20.5	58.0	3650
MP0615K03095	3	95	22.5	61.5	4210
MP0615K03120	3	120	24.0	65.5	4725
MP0615K03150	3	150	25.5	68.5	5285
MP0615K03185	3	185	27.0	72.0	5835
MP0615K03240	3	240	29.0	77.5	6830
MP0615K03300	3	300	32.0	84.0	7965
MP0615K03400	3	400	35.0	90.5	9390



## ELECTRICAL CHARACTERISTICS 8.7/15 (17.5)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CONDUCTOR MAXIMUM SHORT CIRCUIT CURRENT T=1S kA	CONDUCTOR DC RESISTANCE AT 20°C ohm/km	INDUCTANCE mH/km	CAPACITANCE μF/km	CURRENT CARRYING CAPACITY Amps	
						In Air	Buried
1	25	2.4	1.2000	0.45	0.18	126	124
1	35	3.3	0.8680	0.43	0.19	152	148
1	50	4.7	0.6410	0.41	0.21	182	175
1	70	6.6	0.4430	0.38	0.24	228	215
1	95	9.0	0.3200	0.36	0.27	277	257
1	120	11.3	0.2530	0.35	0.29	322	294
1	150	14.2	0.2060	0.34	0.31	365	330
1	185	17.5	0.1640	0.33	0.34	419	373
1	240	22.7	0.1250	0.32	0.37	496	434
1	300	28.3	0.1000	0.30	0.42	577	494
1	400	37.8	0.0778	0.29	0.46	675	566
1	500	47.2	0.0605	0.29	0.51	787	648
1	630	59.5	0.0469	0.27	0.58	929	745
3	25	2.4	1.2000	0.43	0.18	142	115
3	35	3.3	0.8680	0.41	0.19	170	136
3	50	4.7	0.6410	0.39	0.21	204	162
3	70	6.6	0.4430	0.36	0.24	253	198
3	95	9.0	0.3200	0.34	0.27	304	235
3	120	11.3	0.2530	0.33	0.29	351	268
3	150	14.2	0.2060	0.32	0.31	398	303
3	185	17.5	0.1640	0.31	0.34	455	343
3	240	22.7	0.1250	0.30	0.37	531	397
3	300	28.3	0.1000	0.29	0.42	606	448
3	400	37.8	0.0778	0.27	0.46	696	511

## DIMENSIONS 12/20 (24)kV

ELAND PART NO.	NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
MP0620K01035	1	35	20.0	27.5	815
MP0620K01050	1	50	21.0	28.5	880
MP0620K01070	1	70	22.5	30.5	1005
MP0620K01095	1	95	24.5	32.5	1130
MP0620K01120	1	120	26.0	34.0	1275
MP0620K01150	1	150	27.5	35.5	1395
MP0620K01185	1	185	29.0	37.0	1565
MP0620K01240	1	240	31.0	39.5	1785
MP0620K01300	1	300	34.0	42.5	2065
MP0620K01400	1	400	37.0	45.5	2425
MP0620K01500	1	500	40.0	48.5	2825
MP0620K01630	1	630	44.5	53.5	3425
MP0620K03035	3	35	20.0	56.0	3315
MP0620K03050	3	50	21.0	58.5	3645
MP0620K03070	3	70	22.5	62.5	4145
MP0620K03095	3	95	24.5	66.5	4740
MP0620K03120	3	120	26.0	70.5	5285



## DIMENSIONS 12/20 (24)kV

ELAND PART NO.	NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
MP0620K03150	3	150	27.5	73.5	5810
MP0620K03185	3	185	29.0	76.5	6450
MP0620K03240	3	240	31.0	82.0	7495
MP0620K03300	3	300	34.0	88.5	8640
MP0620K03400	3	400	37.0	95.0	10165

## ELECTRICAL CHARACTERISTICS 12/20 (24)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CONDUCTOR MAXIMUM SHORT CIRCUIT CURRENT T=1S kA	CONDUCTOR DC RESISTANCE AT 20°C ohm/km	INDUCTANCE mH/km	CAPACITANCE μF/km	CURRENT CARRYING CAPACITY Amps	
						In Air	Buried
1	35	3.3	0.8680	0.44	0.17	154	148
1	50	4.7	0.6410	0.42	0.18	184	175
1	70	6.6	0.4430	0.40	0.21	230	215
1	95	9.0	0.3200	0.38	0.23	280	257
1	120	11.3	0.2530	0.36	0.25	325	294
1	150	14.2	0.2060	0.35	0.27	368	329
1	185	17.5	0.1640	0.34	0.29	422	373
1	240	22.7	0.1250	0.33	0.32	499	434
1	300	28.3	0.1000	0.32	0.35	579	493
1	400	37.8	0.0778	0.30	0.39	677	566
1	500	47.2	0.0605	0.30	0.43	789	647
1	630	59.5	0.0469	0.28	0.49	930	744
3	35	3.3	0.8680	0.43	0.17	170	136
3	50	4.7	0.6410	0.41	0.18	204	162
3	70	6.6	0.4430	0.38	0.21	253	198
3	95	9.0	0.3200	0.36	0.23	304	235
3	120	11.3	0.2530	0.34	0.25	351	268
3	150	14.2	0.2060	0.33	0.27	398	303
3	185	17.5	0.1640	0.32	0.29	455	343
3	240	22.7	0.1250	0.31	0.32	531	397
3	300	28.3	0.1000	0.30	0.35	606	448
3	400	37.8	0.0778	0.29	0.39	696	511

## DIMENSIONS 18/30 (36)kV

ELAND PART NO.	NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
MP0630K01050	1	50	26.0	34.0	1155
MP0630K01070	1	70	27.5	36.0	1275
MP0630K01095	1	95	29.5	37.5	1435
MP0630K01120	1	120	31.0	39.5	1575
MP0630K01150	1	150	32.5	41.0	1725
MP0630K01185	1	185	34.0	42.5	1890
MP0630K01240	1	240	36.0	45.0	2150
MP0630K01300	1	300	39.0	48.0	2460
MP0630K01400	1	400	42.0	51.0	2850



## DIMENSIONS 18/30 (36)kV

ELAND PART NO.	NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
MP0630K01500	1	500	45.0	54.0	3275
MP0630K01630	1	630	49.5	59.0	3920
MP0630K03050	3	50	26.0	70.0	4915
MP0630K03070	3	70	27.5	74.0	5520
MP0630K03095	3	95	29.5	78.0	( # ) "
MP0630K03120	3	120	31.0	82.0	( * ( ' ) % ' )
MP0630K03150	3	150	32.5	85.0	)* # ( "
MP0630K03185	3	185	34.0	88.5	+ # + "
MP0630K03240	3	240	36.0	93.5	# " ' # ' "
MP0630K03300	3	300	39.0	100.0	# \$ # # "
MP0630K03400	3	400	42.0	106.5	

## ELECTRICAL CHARACTERISTICS 18/30 (36)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CONDUCTOR MAXIMUM SHORT CIRCUIT CURRENT T=1S kA	CONDUCTOR DC RESISTANCE AT 20°C ohm/km	INDUCTANCE mH/km	CAPACITANCE μF/km	CURRENT CARRYING CAPACITY Amps	
						In Air	Buried
1	50	4.7	0.6410	0.46	0.14	188	174
1	70	6.6	0.4430	0.43	0.16	234	214
1	95	9.0	0.3200	0.41	0.17	285	256
1	120	11.3	0.2530	0.39	0.19	330	293
1	150	14.2	0.2060	0.38	0.20	373	327
1	185	17.5	0.1640	0.37	0.21	427	371
1	240	22.7	0.1250	0.36	0.24	504	432
1	300	28.3	0.1000	0.34	0.26	584	491
1	400	37.8	0.0778	0.33	0.29	681	564
1	500	47.2	0.0605	0.32	0.31	792	646
1	630	59.5	0.0469	0.30	0.35	933	743
3	50	4.7	0.6410	0.45	0.14	204	162
3	70	6.6	0.4430	0.41	0.16	253	198
3	95	9.0	0.3200	0.39	0.17	304	235
3	120	11.3	0.2530	0.38	0.19	351	268
3	150	14.2	0.2060	0.37	0.20	398	303
3	185	17.5	0.1640	0.35	0.21	455	343
3	240	22.7	0.1250	0.34	0.24	531	397
3	300	28.3	0.1000	0.32	0.26	606	448
3	400	37.8	0.0778	0.31	0.29	696	511

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.