



## XHIOE Cable



Eland Product Group: MP04

### APPLICATION

Portuguese referenced Medium Voltage cable for power distribution and power supply stations used in Utility and Industrial applications, for rated voltages from 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<sub>o</sub>/U (U<sub>m</sub>)

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

Stranded copper conductor

#### Conductor Screen

Semi-conductive XLPE (Cross-Linked Polyethylene)

#### Insulation

XLPE (Cross-Linked Polyethylene)

#### Insulation Screen

Semi-conductive XLPE (Cross-Linked Polyethylene) and tape

#### Metallic Screen

Copper wires

#### Outer 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
MP0406K01025	1	25	13.0	20.0	655
MP0406K01035	1	35	14.0	21.0	770
MP0406K01050	1	50	15.0	22.5	905
MP0406K01070	1	70	16.5	24.0	1120
MP0406K01095	1	95	18.5	26.0	1400
MP0406K01120	1	120	20.0	28.0	1675
MP0406K01150	1	150	21.0	29.0	1930
MP0406K01185	1	185	22.5	30.5	2305
MP0406K01240	1	240	25.5	33.5	2885
MP0406K01300	1	300	28.5	37.0	3555
MP0406K01400	1	400	32.0	40.5	4505
MP0406K01500	1	500	35.5	44.0	5480
MP0406K01600	1	630	41.0	47.5	7110
MP0406K03025	3	25	13.0	39.5	2395
MP0406K03035	3	35	14.0	42.0	2770
MP0406K03050	3	50	15.0	44.5	3270
MP0406K03070	3	70	16.5	48.5	4085
MP0406K03095	3	95	18.5	52.5	5005
MP0406K03120	3	120	20.0	56.5	5910
MP0406K03150	3	150	21.0	59.0	6825
MP0406K03185	3	185	22.5	62.0	8055
MP0406K03240	3	240	25.5	69.0	10180
MP0406K03300	3	300	28.5	76.0	12490
MP0406K03400	3	400	32.0	84.0	15820

## 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	3.6	0.7270	0.41	0.27	157	160
1	35	5.0	0.5240	0.39	0.30	190	191
1	50	7.5	0.3870	0.37	0.33	229	227
1	70	10.0	0.2680	0.35	0.38	286	278
1	95	13.6	0.1930	0.33	0.43	350	333
1	120	17.2	0.1530	0.32	0.48	406	380
1	150	21.5	0.1240	0.31	0.51	461	426
1	185	26.5	0.0991	0.30	0.54	526	481
1	240	34.3	0.0754	0.29	0.60	630	560
1	300	42.9	0.0601	0.28	0.63	731	634
1	400	57.2	0.0470	0.28	0.66	851	721
1	500	71.5	0.0366	0.27	0.69	986	816
1	630	90.1	0.0283	0.27	0.76	1 135	921
3	25	3.6	0.7270	0.38	0.27	142	148
3	35	5.0	0.5240	0.36	0.30	170	175
3	50	7.5	0.3870	0.34	0.33	204	209
3	70	10.0	0.2680	0.32	0.38	253	256



## 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	13.6	0.1930	0.30	0.43	304	303
3	120	17.2	0.1530	0.29	0.48	351	345
3	150	21.5	0.1240	0.28	0.51	398	390
3	185	26.5	0.0991	0.28	0.54	455	440
3	240	34.3	0.0754	0.27	0.60	531	507
3	300	42.9	0.0601	0.26	0.63	606	571
3	400	57.2	0.0470	0.26	0.66	696	645

## 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
MP0410K01025	1	25	15.0	22.0	730
MP0410K01035	1	35	16.0	23.0	835
MP0410K01050	1	50	17.0	24.5	985
MP0410K01070	1	70	18.5	26.0	1210
MP0410K01095	1	95	20.5	28.0	1500
MP0410K01120	1	120	22.0	30.0	1760
MP0410K01150	1	150	23.0	31.0	2040
MP0410K01185	1	185	24.5	32.5	2405
MP0410K01240	1	240	27.0	35.5	2990
MP0410K01300	1	300	30.0	38.0	3640
MP0410K01400	1	400	33.0	41.5	4580
MP0410K01500	1	500	36.0	44.5	5530
MP0410K01600	1	630	41.5	48.0	7140
MP0410K03025	3	25	15.0	44.0	2715
MP0410K03035	3	35	16.0	46.5	3115
MP0410K03050	3	50	17.0	49.0	3640
MP0410K03070	3	70	18.5	53.0	4480
MP0410K03095	3	95	20.5	57.0	5460
MP0410K03120	3	120	22.0	61.0	6395
MP0410K03150	3	150	23.0	63.5	7335
MP0410K03185	3	185	24.5	66.5	8590
MP0410K03240	3	240	27.0	72.5	10605
MP0410K03300	3	300	30.0	79.0	12880
MP0410K03400	3	400	33.0	85.5	16050

## 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 uF/km	CURRENT CARRYING CAPACITY Amps	
						In Air	Buried
1	25	3.6	0.7270	0.43	0.22	160	160
1	35	5.0	0.5240	0.41	0.24	194	191
1	50	7.5	0.3870	0.39	0.27	233	226
1	70	10.0	0.2680	0.36	0.30	291	278
1	95	13.6	0.1930	0.35	0.34	355	333



## 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 uF/km	CURRENT CARRYING CAPACITY Amps	
						In Air	Buried
1	120	17.2	0.1530	0.33	0.37	411	380
1	150	21.5	0.1240	0.32	0.39	466	426
1	185	26.5	0.0991	0.32	0.42	532	480
1	240	34.3	0.0754	0.30	0.48	634	559
1	300	42.9	0.0601	0.29	0.53	733	633
1	400	57.2	0.0470	0.28	0.59	853	720
1	500	71.5	0.0366	0.27	0.65	987	817
1	630	90.1	0.0283	0.27	0.72	1136	920
3	25	3.6	0.7270	0.40	0.22	142	148
3	35	5.0	0.5240	0.38	0.24	170	175
3	50	7.5	0.3870	0.37	0.27	204	209
3	70	10.0	0.2680	0.34	0.30	253	256
3	95	13.6	0.1930	0.32	0.34	304	303
3	120	17.2	0.1530	0.31	0.37	351	345
3	150	21.5	0.1240	0.30	0.39	398	390
3	185	26.5	0.0991	0.29	0.42	455	440
3	240	34.3	0.0754	0.28	0.48	531	507
3	300	42.9	0.0601	0.27	0.53	606	571
3	400	57.2	0.0470	0.26	0.59	696	645

## 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
MP0415K01025	1	25	17.0	24.5	820
MP0415K01035	1	35	18.0	25.5	930
MP0415K01050	1	50	19.0	26.5	1 075
MP0415K01070	1	70	21.0	28.5	1 320
MP0415K01095	1	95	22.5	30.5	1 595
MP0415K01120	1	120	24.5	32.0	1 880
MP0415K01150	1	150	25.5	33.5	2 145
MP0415K01185	1	185	26.5	35.0	2 535
MP0415K01240	1	240	29.5	37.5	3 130
MP0415K01300	1	300	32.0	40.5	3 775
MP0415K01400	1	400	35.0	43.5	4 720
MP0415K01500	1	500	38.0	47.0	5 685
MP0415K01600	1	630	44.0	50.5	7 315
MP0415K03025	3	25	17.0	49.0	3 125
MP0415K03035	3	35	18.0	51.5	3 540
MP0415K03050	3	50	19.0	54.5	4 135
MP0415K03070	3	70	21.0	58.0	4 965
MP0415K03095	3	95	22.5	62.0	5 950
MP0415K03120	3	120	24.5	66.0	6 915
MP0415K03150	3	150	25.5	68.5	7 940
MP0415K03185	3	185	26.5	71.5	9 160
MP0415K03240	3	240	29.5	78.0	11 265
MP0415K03300	3	300	32.0	84.0	13 595
MP0415K03400	3	400	35.0	90.5	16 825



## 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 uF/km	CURRENT CARRYING CAPACITY Amps	
						In Air	Buried
1	25	3.6	0.7270	0.45	0.18	163	159
1	35	5.0	0.5240	0.43	0.20	197	191
1	50	7.5	0.3870	0.41	0.21	236	226
1	70	10.0	0.2680	0.38	0.24	295	277
1	95	13.6	0.1930	0.36	0.27	359	333
1	120	17.2	0.1530	0.35	0.29	416	379
1	150	21.5	0.1240	0.34	0.31	471	425
1	185	26.5	0.0991	0.33	0.33	537	479
1	240	34.3	0.0754	0.32	0.38	639	558
1	300	42.9	0.0601	0.30	0.42	738	632
1	400	57.2	0.0470	0.29	0.46	858	720
1	500	71.5	0.0366	0.28	0.51	993	817
1	630	90.1	0.0283	0.28	0.56	1 143	922
3	25	3.6	0.7270	0.43	0.18	142	148
3	35	5.0	0.5240	0.41	0.20	170	175
3	50	7.5	0.3870	0.39	0.21	204	209
3	70	10.0	0.2680	0.36	0.24	253	256
3	95	13.6	0.1930	0.34	0.27	304	303
3	120	17.2	0.1530	0.33	0.29	351	345
3	150	21.5	0.1240	0.32	0.31	398	390
3	185	26.5	0.0991	0.31	0.33	455	440
3	240	34.3	0.0754	0.30	0.38	531	507
3	300	42.9	0.0601	0.29	0.42	606	571
3	400	57.2	0.0470	0.27	0.46	696	645

## 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
MP0420K01035	1	35	20.0	27.5	1025
MP0420K01050	1	50	21.0	29.0	1170
MP0420K01070	1	70	23.0	31.0	1425
MP0420K01095	1	95	24.5	32.5	1705
MP0420K01120	1	120	26.5	34.5	2000
MP0420K01150	1	150	27.5	35.5	2270
MP0420K01185	1	185	28.5	37.0	2660
MP0420K01240	1	240	31.5	39.5	3250
MP0420K01300	1	300	34.0	42.5	3920
MP0420K01400	1	400	37.0	45.5	4880
MP0420K01500	1	500	40.0	49.0	5855
MP0420K01630	1	630	46.0	52.5	7510
MP0420K03035	3	35	20.0	56.0	3950
MP0420K03050	3	50	21.0	59.0	4525
MP0420K03070	3	70	23.0	63.0	5470
MP0420K03095	3	95	24.5	67.0	6485
MP0420K03120	3	120	26.5	70.5	7480



## 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
MP0420K03150	3	150	27.5	73.5	8465
MP0420K03185	3	185	28.5	76.5	9775
MP0420K03240	3	240	31.5	82.5	11930
MP0420K03300	3	300	34.0	88.5	14270
MP0420K03400	3	400	37.0	95.5	17600

## 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 uF/km	CURRENT CARRYING CAPACITY Amps	
						In Air	Buried
1	35	5.0	0.5240	0.44	0.20	197	191
1	50	7.5	0.3870	0.42	0.21	236	226
1	70	10.0	0.2680	0.40	0.24	295	277
1	95	13.6	0.1930	0.38	0.27	359	333
1	120	17.2	0.1530	0.36	0.29	416	379
1	150	21.5	0.1240	0.35	0.31	471	425
1	185	26.5	0.0991	0.34	0.33	537	479
1	240	34.3	0.0754	0.33	0.38	639	558
1	300	42.9	0.0601	0.32	0.42	738	632
1	400	57.2	0.0470	0.30	0.46	858	720
1	500	71.5	0.0366	0.29	0.51	993	817
1	630	90.1	0.0283	0.29	0.56	1 143	922
3	35	5.0	0.5240	0.43	0.17	170	175
3	50	7.5	0.3870	0.41	0.19	204	209
3	70	10.0	0.2680	0.37	0.21	253	256
3	95	13.6	0.1930	0.36	0.23	304	303
3	120	17.2	0.1530	0.34	0.25	351	345
3	150	21.5	0.1240	0.27	0.31	398	390
3	185	26.5	0.0991	0.28	0.33	455	440
3	240	34.3	0.0754	0.32	0.38	531	507
3	300	42.9	0.0601	0.35	0.42	606	571
3	400	57.2	0.0470	0.39	0.46	696	645

## 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
MP0330K01050	1	50	26.0	34.5	1445
MP0330K01070	1	70	28.0	36.0	1695
MP0330K01095	1	95	29.5	38.0	2015
MP0330K01120	1	120	31.5	39.5	2300
MP0330K01150	1	150	32.5	41.0	2600
MP0330K01185	1	185	33.5	42.0	2985
MP0330K01240	1	240	36.5	45.0	3620
MP0330K01300	1	300	39.0	48.0	4315
MP0330K01400	1	400	42.0	51.0	5305
MP0330K01500	1	500	45.0	54.5	6310



## 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
MP0330K01630	1	630	51.0	58.0	8010
MP0330K03050	3	50	26.0	70.5	5800
MP0330K03070	3	70	28.0	74.5	6795
MP0330K03095	3	95	29.5	78.5	7985
MP0330K03120	3	120	31.5	82.5	9060
MP0330K03150	3	150	32.5	85.0	10030
MP0330K03185	3	185	33.5	88.0	11475
MP0330K03240	3	240	36.5	94.0	13630
MP0330K03300	3	300	39.0	100.0	16145
MP0330K03400	3	400	42.0	107.0	19650

## 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	7.5	0.3870	0.42	0.21	236	226
1	70	10.0	0.2680	0.40	0.24	295	277
1	95	13.6	0.1930	0.38	0.27	359	333
1	120	17.2	0.1530	0.36	0.29	416	379
1	150	21.5	0.1240	0.35	0.31	471	425
1	185	26.5	0.0991	0.34	0.33	537	479
1	240	34.3	0.0754	0.33	0.38	639	558
1	300	42.9	0.0601	0.32	0.42	738	632
1	400	57.2	0.0470	0.30	0.46	858	720
1	500	71.5	0.0366	0.29	0.51	993	817
1	630	90.1	0.0283	0.29	0.56	1 143	922
3	50	7.5	0.3870	0.41	0.19	204	209
3	70	10.0	0.2680	0.37	0.21	253	256
3	95	13.6	0.1930	0.36	0.23	304	303
3	120	17.2	0.1530	0.34	0.25	351	345
3	150	21.5	0.1240	0.27	0.31	398	390
3	185	26.5	0.0991	0.28	0.33	455	440
3	240	34.3	0.0754	0.32	0.38	531	507
3	300	42.9	0.0601	0.35	0.42	606	571
3	400	57.2	0.0470	0.39	0.46	696	645

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.