



## XHIE Cable



Eland Product Group: MP02

### APPLICATION

Portuguese MV Cable for power distribution and power supply stations used in Utility and Industrial applications, for rated voltages to 3.6/6kV. Suitable for fixed installations, indoor or outdoor including directly buried.

### CHARACTERISTICS

#### Voltage Rating U<sub>0</sub>/U (Um)

3.6/6 (12)kV  
6/10 (12)kV  
8.7/15 (17.5)kV  
12/20 (24)kV  
18/30 (36)kV

#### Test Voltage

12.6kV  
21kV  
30kV  
42kV  
63kV

#### Temperature Range

Fixed: -20°C to +90°C  
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

Stranded copper conductor

#### Inner Layer

Semi-conductive material

#### Insulation

XLPE (Cross-Linked Polyethylene)

#### Outer Layer

Semi-conductive material and tape

#### Screen

Copper tape

#### 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 (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
MP0206K01035	1	25	13.0	20.0	655
MP0206K01050	1	35	14.0	21.0	770
MP0206K01070	1	50	15.0	22.5	905
MP0206K01095	1	70	16.5	24.0	1120
MP0206K01120	1	95	18.5	26.0	1400
MP0206K01150	1	120	20.0	28.0	1675
MP0206K01185	1	150	21.0	29.0	1930
MP0206K01240	1	185	22.5	30.5	2305
MP0206K01300	1	240	25.5	33.5	2885
MP0206K01500	1	300	28.5	37.0	3555
MP0206K01630	1	400	32.0	40.5	4505
MP0206K01500	1	500	35.5	44.0	5480
MP0206K01630	1	630	41.0	47.5	7110
MP0206K03035	3	25	13.0	39.5	2395
MP0206K03050	3	35	14.0	42.0	2770
MP0206K03070	3	50	15.0	44.5	3270
MP0206K03095	3	70	16.5	48.5	4085
MP0206K03120	3	95	18.5	52.5	5005
MP0206K03150	3	120	20.0	56.5	5910
MP0206K03185	3	150	21.0	59.0	6825
MP0206K03240	3	185	22.5	62.0	8055
MP0206K03300	3	240	25.5	69.0	10280
MP0206K03500	3	300	28.5	76.0	12490
MP0206K03630	3	400	32.0	84.0	15820

## ELECTRICAL CHARACTERISTICS 3.6/6 (12)kV

NO. 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	1135	921



## ELECTRICAL CHARACTERISTICS 3.6/6 (12)kV

NO. 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	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
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
MP0210K01025	1	25	15.0	22.0	730
MP0210K01035	1	35	16.0	23.0	835
MP0210K01050	1	50	17.0	24.5	985
MP0210K01070	1	70	18.5	26.0	1210
MP0210K01095	1	95	20.5	28.0	1500
MP0210K01120	1	120	22.0	30.0	1760
MP0210K01150	1	150	23.0	31.0	2040
MP0210K01185	1	185	24.5	32.5	2405
MP0210K01240	1	240	27.0	35.5	2990
MP0210K01300	1	300	30.0	38.0	3640
MP0210K01400	1	400	33.0	41.5	4580
MP0210K01500	1	500	36.0	44.5	5530
MP0210K01630	1	630	41.5	48.0	7140
MP0210K03035	3	25	15.0	44.0	2715
MP0210K03050	3	35	16.0	46.5	3115
MP0210K03070	3	50	17.0	49.0	3640
MP0210K03095	3	70	18.5	53.0	4480
MP0210K03120	3	95	20.5	57.0	5460
MP0210K03150	3	120	22.0	61.0	6395
MP0210K03185	3	150	23.0	63.5	7335
MP0210K03240	3	185	24.5	66.5	8590
MP0210K03300	3	240	27.0	72.5	10605
MP0210K03500	3	300	30.0	79.0	12880
MP0210K03630	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
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
MP0215K01025	1	25	17,0	24.4	820
MP0215K01035	1	35	18,0	25.5	930
MP0215K01050	1	50	19,0	26.5	1075
MP0215K01070	1	70	21,0	28.5	1320
MP0215K01095	1	95	22,5	30.5	1595
MP0215K01120	1	120	24,5	32.0	1880
MP0215K01150	1	150	25,5	33.5	2145
MP0215K01185	1	185	26,5	35.0	2535
MP0215K01240	1	240	29,5	37.5	3130
MP0215K01300	1	300	32,0	40.5	3775
MP0215K01400	1	400	35,0	43.5	4720
MP0215K01300	1	500	38.0	47.0	5685
MP0215K01400	1	630	44.0	50.5	7315
MP0215K03025	3	25	17,0	49,0	3125
MP0215K03035	3	35	18,0	51,5	3540
MP0215K03050	3	50	19,0	54,5	4135
MP0215K03070	3	70	21,0	58,0	4965



## 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
MP0215K03095	3	95	22,5	62,0	5950
MP0215K03120	3	120	24,5	66,0	6915
MP0215K03150	3	150	25,5	68,5	7940
MP0215K03185	3	185	26,5	71,5	9160
MP0215K03240	3	240	29,5	78,0	11265
MP0215K03300	3	300	32,0	84,0	13595
MP0215K03400	3	400	35,0	90,5	16825

## 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	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	1143	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
MP2120K01035	1	35	20.0	27.5	1025
MP0220K01050	1	50	21.0	29.0	1170
MP0220K01070	1	70	23.0	31.0	1425
MP0220K01095	1	95	24.5	32.5	1705
MP0220K01120	1	120	26.5	34.5	2000
MP0220K01150	1	150	27.5	35.5	2270
MP0220K01185	1	185	28.5	37.0	2660
MP0220K01240	1	240	31.5	39.5	3250
MP0220K01300	1	300	34.0	42.5	3920
MP0220K01400	1	400	37.0	45.5	4880
MP0220K01500	1	500	40.0	49.0	5855
MP0220K01630	1	630	46.0	52.5	7510
MP0220K03035	3	35	20.0	56.0	3950
MP0220K03050	3	50	21.0	59.0	4525
MP0220K03070	3	70	23.0	63.0	5470
MP0220K03095	3	95	24.5	67.0	6485
MP0220K03120	3	120	26.5	70.5	7480
MP0220K03150	3	150	27.5	73.5	8465
MP0220K03185	3	185	28.5	76.5	9775
MP0220K03240	3	240	31.5	82.5	11930
MP0220K03300	3	300	34.0	88.5	14270
MP0220K03400	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 I=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	5.0	0.5240	0.44	0.17	199	191
1	50	7.5	0.3870	0.42	0.19	239	226
1	70	10.0	0.2680	0.40	0.21	298	277
1	95	13.6	0.1930	0.38	0.23	362	332
1	120	17.2	0.1530	0.36	0.25	419	379
1	150	21.5	0.1240	0.35	0.27	474	424
1	185	26.5	0.0991	0.34	0.28	541	479
1	240	34.3	0.0754	0.33	0.32	643	557
1	300	42.9	0.0601	0.32	0.35	742	631
1	400	57.2	0.0470	0.30	0.39	862	720
1	500	71.5	0.0366	0.29	0.43	997	817
1	630	90.1	0.0283	0.29	0.47	1153	928
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	0.33	0.27	398	390
3	185	26.5	0.0991	0.32	0.28	455	440
3	240	34.3	0.0754	0.31	0.32	531	507
3	300	42.9	0.0601	0.30	0.35	606	571
3	400	57.2	0.0470	0.29	0.39	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
MP0230K01050	1	50	26.0	34.5	1445
MP0230K01070	1	70	28.0	36.0	1695
MP0230K01095	1	95	29.5	38.0	2105
MP0230K01120	1	120	31.5	39.5	2300
MP0230K01150	1	150	32.5	41.0	2600
MP0230K01185	1	185	33.5	42.0	2985
MP0230K01240	1	240	36.5	45.0	3620
MP0230K01300	1	300	39.0	48.0	4315
MP0230K01400	1	400	42.0	51.0	5305
MP0230K01500	1	500	39.0	54.5	6310
MP0230K01630	1	630	42.0	58.0	8010
MP0230K03050	3	50	26.0	70.5	5800
MP0230K03070	3	70	28.0	74.5	6795
MP0230K03095	3	95	29.5	78.5	7985
MP0230K03120	3	120	31.5	82.5	9060
MP0230K03150	3	150	32.5	85.0	10030
MP0230K03185	3	185	33.5	88.0	11475
MP0230K03240	3	240	36.5	94.0	13630
MP0230K03300	3	300	39.0	100.0	16145
MP0230K03400	3	400	42.0	107.0	19650

## ELECTRICAL CHARACTERISTICS 18/30 (36)kV

NO. 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	0.46	0.14	244	225
1	70	10.0	0.2680	0.43	0.16	303	276
1	95	13.6	0.1930	0.41	0.18	368	331
1	120	17.2	0.1530	0.39	0.19	425	377
1	150	21.5	0.1240	0.38	0.20	481	422
1	185	26.5	0.0991	0.37	0.21	547	474
1	240	34.3	0.0754	0.35	0.24	649	556
1	300	42.9	0.0601	0.34	0.26	748	630
1	400	57.2	0.0470	0.33	0.29	868	718
1	500	71.5	0.0366	0.32	0.31	1003	816
1	630	90.1	0.0283	0.31	0.34	1154	923
3	50	7.5	0.3870	0.45	0.14	204	162
3	70	10.0	0.2680	0.41	0.16	253	198
3	95	13.6	0.1930	0.39	0.18	304	235
3	120	17.2	0.1530	0.38	0.19	351	268
3	150	21.5	0.1240	0.36	0.20	398	303
3	185	26.5	0.0991	0.35	0.21	455	343
3	240	34.3	0.0754	0.34	0.24	531	397
3	300	42.9	0.0601	0.32	0.26	606	448
3	400	57.2	0.0470	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.