



## LXHIOV Cable



Eland Product Group: MP05

### APPLICATION

Portuguese 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>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

#### 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

PVC (Polyvinyl Chloride)

#### Sheath Colour

● Black

### STANDARDS

IEC 60228, IEC 60502-2

Flame Retardant according to BS EN/IEC 60332-1-2

### 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.



8578



FS 672069



EMS 672067



OHS 672066

### 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™.



KM 634267





## 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
MP0506K01025	1	25	12.5	20.0	505
MP0506K01035	1	35	13.5	21.0	560
MP0506K01050	1	50	15.0	22.0	615
MP0506K01070	1	70	16.5	24.0	705
MP0506K01095	1	95	18.0	25.5	830
MP0506K01120	1	120	20.0	27.5	950
MP0506K01150	1	150	21.0	29.0	1055
MP0506K01185	1	185	22.5	30.5	1205
MP0506K01240	1	240	25.5	33.5	1425
MP0506K01300	1	300	28.5	37.0	1695
MP0506K01400	1	400	32.0	40.0	2055
MP0506K01500	1	500	35.0	43.5	2450
MP0506K01600	1	630	40.0	49.0	3040
MP0506K03025	3	25	12.5	39.0	1935
MP0506K03035	3	35	13.5	41.5	2140
MP0506K03050	3	50	15.0	44.0	2395
MP0506K03070	3	70	16.5	48.0	2785
MP0506K03095	3	95	18.0	52.0	3270
MP0506K03120	3	120	20.0	56.0	3725
MP0506K03150	3	150	21.0	59.0	4170
MP0506K03185	3	185	22.5	62.5	4725
MP0506K03240	3	240	25.5	68.5	5750
MP0506K03300	3	300	28.5	76.0	6860
MP0506K03400	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
MP0510K01025	1	25	14.5	22.0	505
MP0510K01035	1	35	15.5	23.0	560
MP0510K01050	1	50	17.0	24.5	615
MP0510K01070	1	70	18.5	26.0	705
MP0510K01095	1	95	20.0	28.0	830
MP0510K01120	1	120	22.0	29.5	950
MP0510K01150	1	150	23.0	31.0	1055
MP0510K01185	1	185	24.5	32.5	1205
MP0510K01240	1	240	27.0	35.0	1425
MP0510K01300	1	300	30.0	38.0	1695
MP0510K01400	1	400	32.5	41.0	2055
MP0510K01500	1	500	35.5	44.5	2450
MP0510K01600	1	630	40.5	49.0	3040
MP0510K03025	3	25	14.5	43.5	1935
MP0510K03035	3	35	15.5	46.0	2140
MP0510K03050	3	50	17.0	49.0	2395
MP0510K03070	3	70	18.5	52.5	2785
MP0510K03095	3	95	20.0	56.5	3270
MP0510K03120	3	120	22.0	60.5	3725
MP0510K03150	3	150	23.0	63.5	4170
MP0510K03185	3	185	24.5	67.0	4725
MP0510K03240	3	240	27.0	72.0	5750
MP0510K03300	3	300	30.0	79.0	6860
MP0510K03400	3	400	32.5	85.5	8390

## 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



## 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	120	11.3	0.2530	0.33	0.37	319	295
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
MP0515K01025	1	25	17.0	24.5	665
MP0515K01035	1	35	18.0	25.5	720
MP0515K01050	1	50	19.0	26.5	785
MP0515K01070	1	70	20.5	28.5	900
MP0515K01095	1	95	22.5	30.0	1020
MP0515K01120	1	120	24.0	32.0	1160
MP0515K01150	1	150	25.5	33.5	1270
MP0515K01185	1	185	27.0	35.0	1435
MP0515K01240	1	240	29.0	37.5	1665
MP0515K01300	1	300	32.0	40.5	1915
MP0515K01400	1	400	35.0	43.5	2270
MP0515K01500	1	500	38.0	46.5	2655
MP0515K01600	1	630	42.5	51.5	3240
MP0515K03025	3	25	17.0	49.0	2665
MP0515K03035	3	35	18.0	51.5	2905
MP0515K03050	3	50	19.0	54.0	3210
MP0515K03070	3	70	20.5	58.0	3650
MP0515K03095	3	95	22.5	61.5	4210
MP0515K03120	3	120	24.0	65.5	4725
MP0515K03150	3	150	25.5	68.5	5285
MP0515K03185	3	185	27.0	72.0	5835
MP0515K03240	3	240	29.0	77.5	6830
MP0515K03300	3	300	32.0	84.0	7965
MP0515K03400	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
MP0520K01035	1	35	20.0	27.5	815
MP0520K01050	1	50	21.0	28.5	880
MP0520K01070	1	70	22.5	30.5	1005
MP0520K01095	1	95	24.5	32.5	1130
MP0520K01120	1	120	26.0	34.0	1275
MP0520K01150	1	150	27.5	35.5	1395
MP0520K01185	1	185	29.0	37.0	1565
MP0520K01240	1	240	31.0	39.5	1785
MP0520K01300	1	300	34.0	42.5	2065
MP0520K01400	1	400	37.0	45.5	2425
MP0520K01500	1	500	40.0	48.5	2825
MP0520K01630	1	630	44.5	53.5	3425
MP0520K03035	3	35	20.0	56.0	3315
MP0520K03050	3	50	21.0	58.5	3645
MP0520K03070	3	70	22.5	62.5	4145
MP0520K03095	3	95	24.5	66.5	4740
MP0520K03120	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
MP0520K03150	3	150	27.5	73.5	5810
MP0520K03185	3	185	29.0	76.5	6450
MP0520K03240	3	240	31.0	82.0	7495
MP0520K03300	3	300	34.0	88.5	8640
MP0520K03400	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
MP0530K01050	1	50	26.0	34.0	1155
MP0530K01070	1	70	27.5	36.0	1275
MP0530K01095	1	95	29.5	37.5	1435
MP0530K01120	1	120	31.0	39.5	1575
MP0530K01150	1	150	32.5	41.0	1725
MP0530K01185	1	185	34.0	42.5	1890
MP0530K01240	1	240	36.0	45.0	2150



## 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
MP0530K01300	1	300	39.0	48.0	2460
MP0530K01400	1	400	42.0	51.0	2850
MP0530K01500	1	500	45.0	54.0	3275
MP0530K01630	1	630	49.5	59.0	3920
MP0530K03050	3	50	26.0	70.0	4915
MP0530K03070	3	70	27.5	74.0	5520
MP0530K03095	3	95	29.5	78.0	(#)"
MP0530K03120	3	120	31.0	82.0	(*('
MP0530K03150	3	150	32.5	85.0	)%)'
MP0530K03185	3	185	34.0	88.5	*#("
MP0530K03240	3	240	36.0	93.5	+#+"
MP0530K03300	3	300	39.0	100.0	#"'#'
MP0530K03400	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.