

## LXHI1RE Cable



Eland Product Group: MP30

### 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, 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 circular 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

Extruded PVC (Polyvinyl Chloride)

#### Armour

AWA - Aluminium wires, helically applied, tightened with plastic tapes

#### Sheath

PE (Polyethylene) type ST7

#### 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 Directive 2011/65/EU. 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	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP3006KV01025	1	25	12.5	25.5	810
MP3006KV01035	1	35	13.5	26.5	870
MP3006KV01050	1	50	15.0	27.5	940
MP3006KV01070	1	70	16.5	29.0	1050
MP3006KV01095	1	95	18.0	31.0	1180
MP3006KV01120	1	120	20.0	32.5	1315
MP3006KV01150	1	150	21.0	34.0	1450
MP3006KV01185	1	185	22.5	35.5	1605
MP3006KV01240	1	240	25.5	38.5	1875
MP3006KV01300	1	300	28.5	42.0	2190
MP3006KV01400	1	400	32.0	45.5	2595
MP3006KV01500	1	500	35.0	49.0	3035
MP3006KV01630	1	630	40.0	54.0	3690

## ELECTRICAL CHARACTERISTICS 3.6/6 (7.2)kV

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 6/10 (12)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP3010KV01025	1	25	14.5	27.5	900
MP3010KV01035	1	35	15.5	28.5	965
MP3010KV01050	1	50	17.0	29.5	1035
MP3010KV01070	1	70	18.5	31.0	1155
MP3010KV01095	1	95	20.0	33.0	1290
MP3010KV01120	1	120	22.0	34.5	1445
MP3010KV01150	1	150	23.0	36.0	1565



## DIMENSIONS 6/10 (12)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP3010KV01185	1	185	24.5	37.5	1745
MP3010KV01240	1	240	27.0	40.0	1980
MP3010KV01300	1	300	30.0	43.0	2275
MP3010KV01400	1	400	32.5	46.0	2655
MP3010KV01500	1	500	35.5	49.0	3065
MP3010KV01630	1	630	40.5	54.5	3725

## ELECTRICAL CHARACTERISTICS 6/10 (12)kV

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 8.7/15 (17.5)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP3015KV01025	1	25	17.0	29.5	1005
MP3015KV01035	1	35	18.0	30.5	1075
MP3015KV01050	1	50	19.0	31.5	1150
MP3015KV01070	1	70	20.5	33.5	1270
MP3015KV01095	1	95	22.5	35.0	1430
MP3015KV01120	1	120	24.0	37.0	1575
MP3015KV01150	1	150	25.5	38.5	1720
MP3015KV01185	1	185	27.0	40.0	1885
MP3015KV01240	1	240	29.0	42.5	2150
MP3015KV01300	1	300	32.0	45.5	2455
MP3015KV01400	1	400	35.0	48.5	2850
MP3015KV01500	1	500	38.0	52.0	3300
MP3015KV01600	1	630	42.5	56.5	3950



## ELECTRICAL CHARACTERISTICS 8.7/15 (17.5)kV

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 12/20 (24)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP3020KV01035	1	35	20.0	32.5	1180
MP3020KV01050	1	50	21.0	34.0	1275
MP3020KV01070	1	70	22.5	35.5	1405
MP3020KV01095	1	95	24.5	37.5	1570
MP3020KV01120	1	120	26.0	39.0	1720
MP3020KV01150	1	150	27.5	40.5	1875
MP3020KV01185	1	185	29.0	42.0	2045
MP3020KV01240	1	240	31.0	44.5	2315
MP3020KV01300	1	300	34.0	47.5	2635
MP3020KV01400	1	400	37.0	51.0	3060
MP3020KV01500	1	500	40.0	54.0	3500
MP3020KV01630	1	630	44.5	59.0	4200

## ELECTRICAL CHARACTERISTICS 12/20 (24)kV

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



## ELECTRICAL CHARACTERISTICS 12/20 (24)kV

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	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 18/30 (36)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP3030KV01050	1	50	26.0	39.0	1595
MP3030KV01070	1	70	27.5	41.0	1760
MP3030KV01095	1	95	29.5	42.5	1920
MP3030KV01120	1	120	31.0	44.5	2105
MP3030KV01150	1	150	32.5	46.0	2250
MP3030KV01185	1	185	34.0	47.5	2460
MP3030KV01240	1	240	36.0	50.0	2780
MP3030KV01300	1	300	39.0	53.5	3125
MP3030KV01400	1	400	42.0	56.5	3585
MP3030KV01500	1	500	45.0	59.5	4020
MP3030KV01630	1	630	49.5	64.5	4765

## ELECTRICAL CHARACTERISTICS 18/30 (36)kV

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.