



## XHIOAV Cable



Eland Product Group: MP46

### APPLICATION

Portuguese MV Cable for power distribution and power supply stations used in Utility and Industrial applications, for rated voltages to 3.6/6kV to 18/30kV. Suitable for fixed installations, directly buried. Good mechanical protection.

### CHARACTERISTICS

#### Voltage Rating U<sub>0</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

#### Temperature Rating

Conductor maximum operating temperature: 90°C  
Maximum short-circuit temperature: 250°C

#### Minimum Bending Radius

During installation: 15 x overall diameter  
After installation: 10 x overall diameter

### CONSTRUCTION

#### Conductor

Class 2 Copper, circular, stranded conductor

#### 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

#### Tape

Plastic tape applied over screen

#### Filler

Extruded polymeric material

#### Bedding

PE (Polyethylene)

#### Armour

STA (Steel Tape Armoured)

#### Sheath

PVC (Polyvinyl Chloride)

#### Sheath Colour

● Black

### STANDARDS

IEC 60228, IEC 60502-2

Flame Retardant to 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 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™.



KM 624267





## DIMENSIONS 3.6/6kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP4606KV03025	3	25	13.0	44.5	3320
MP4606KV03035	3	35	14.0	47.0	3775
MP4606KV03050	3	50	15.0	49.5	4340
MP4606KV03070	3	70	16.5	54.0	5280
MP4606KV03095	3	95	18.5	58.0	6325
MP4606KV03120	3	120	20.0	61.5	7290
MP4606KV03150	3	150	21.0	64.5	8300
MP4606KV03185	3	185	22.5	67.5	9640
MP4606KV03240	3	240	25.5	75.0	11985
MP4606KV03300	3	300	28.5	82.0	14475
MP4606KV03400	3	400	32.0	91.5	18920

## ELECTRICAL CHARACTERISTICS 3.6/6kV

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				
3	25	143	148	3.6	0.7270	0.38	0.27
3	35	172	177	5.0	0.5240	0.36	0.30
3	50	205	209	7.5	0.3870	0.34	0.33
3	70	253	255	10.0	0.2680	0.32	0.38
3	95	307	304	13.6	0.1930	0.30	0.43
3	120	352	345	17.2	0.1530	0.29	0.48
3	150	397	388	21.5	0.1240	0.28	0.51
3	185	453	437	26.5	0.0991	0.28	0.54
3	240	529	503	34.3	0.0754	0.27	0.60
3	300	599	563	42.9	0.0601	0.26	0.63
3	400	683	631	57.2	0.0470	0.26	0.66

## DIMENSIONS 6/10kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP4610KV03025	3	25	15.0	49.0	3775
MP4610KV03035	3	35	16.0	51.5	4255
MP4610KV03050	3	50	17.0	54.5	4850
MP4610KV03070	3	70	18.5	58.5	5815
MP4610KV03095	3	95	20.5	62.5	6830
MP4610KV03120	3	120	22.0	66.5	7885
MP4610KV03150	3	150	23.0	69.5	8960
MP4610KV03185	3	185	24.5	72.5	10290
MP4610KV03240	3	240	27.0	78.5	12455
MP4610KV03300	3	300	30.0	85.0	14935
MP4610KV03400	3	400	33.0	93.0	19215



## ELECTRICAL CHARACTERISTICS 6/10kV

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				
3	25	143	148	3.6	0.7270	0.40	0.22
3	35	172	177	5.0	0.5240	0.38	0.24
3	50	205	209	7.5	0.3870	0.37	0.27
3	70	253	255	10.0	0.2680	0.34	0.30
3	95	307	304	13.6	0.1930	0.32	0.34
3	120	352	345	17.2	0.1530	0.31	0.37
3	150	397	388	21.5	0.1240	0.30	0.39
3	185	453	437	26.5	0.0991	0.29	0.42
3	240	529	503	34.3	0.0754	0.28	0.48
3	300	599	563	42.9	0.0601	0.27	0.53
3	400	683	631	57.2	0.0470	0.26	0.59

## DIMENSIONS 8.7/15kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP4615KV03025	3	25	17.0	54.5	4335
MP4615KV03035	3	35	18.0	57.0	4835
MP4615KV03050	3	50	19.0	59.5	5470
MP4615KV03070	3	70	21.0	63.5	6425
MP4615KV03095	3	95	22.5	67.5	7505
MP4615KV03120	3	120	24.5	71.5	8600
MP4615KV03150	3	150	25.5	74.5	9730
MP4615KV03185	3	185	26.5	77.5	10985
MP4615KV03240	3	240	29.5	83.5	13290
MP4615KV03300	3	300	32.0	91.5	16705
MP4615KV03400	3	400	35.0	98.5	20225

## ELECTRICAL CHARACTERISTICS 8.7/15kV

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				
3	25	143	148	3.6	0.7270	0.43	0.18
3	35	172	177	5.0	0.5240	0.41	0.20
3	50	205	209	7.5	0.3870	0.39	0.21
3	70	253	255	10.0	0.2680	0.36	0.24
3	95	307	304	13.6	0.1930	0.34	0.27
3	120	352	345	17.2	0.1530	0.33	0.29
3	150	397	388	21.5	0.1240	0.32	0.31
3	185	453	437	26.5	0.0991	0.31	0.33
3	240	529	503	34.3	0.0754	0.30	0.38
3	300	599	563	42.9	0.0601	0.29	0.42
3	400	683	631	57.2	0.0470	0.27	0.46



## DIMENSIONS 2/20kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP4620KV03035	3	35	20.0	61.5	5325
MP4620KV03050	3	50	21.0	64.5	6000
MP4620KV03070	3	70	23.0	68.5	7045
MP4620KV03095	3	95	24.5	72.5	8190
MP4620KV03120	3	120	26.5	76.5	9280
MP4620KV03150	3	150	27.5	79.0	10330
MP4620KV03185	3	185	28.5	82.0	11760
MP4620KV03240	3	240	31.5	90.0	14985
MP4620KV03300	3	300	34.0	96.5	17595
MP4620KV03400	3	400	37.0	103.0	21170

## ELECTRICAL CHARACTERISTICS 12/20kV

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				
3	35	172	177	5.0	0.5240	0.43	0.17
3	50	205	209	7.5	0.3870	0.41	0.19
3	70	253	255	10.0	0.2680	0.37	0.21
3	95	307	304	13.6	0.1930	0.36	0.23
3	120	352	345	17.2	0.1530	0.34	0.25
3	150	397	388	21.5	0.1240	0.33	0.27
3	185	453	437	26.5	0.0991	0.32	0.28
3	240	529	503	34.3	0.0754	0.31	0.32
3	300	599	563	42.9	0.0601	0.30	0.35
3	400	683	631	57.2	0.0470	0.29	0.39

## DIMENSIONS 18/30kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP4630KV03050	3	50	26.0	76.0	7595
MP4630KV03070	3	70	28.0	80.5	8730
MP4630KV03095	3	95	29.5	86.0	10845
MP4630KV03120	3	120	31.5	90.0	12105
MP4630KV03150	3	150	32.5	92.5	13170
MP4630KV03185	3	185	33.5	95.5	14725
MP4630KV03240	3	240	36.5	102.0	17205
MP4630KV03300	3	300	39.0	108.0	19950
MP4630KV03400	3	400	42.0	115.0	23760



## ELECTRICAL CHARACTERISTICS 18/30kV

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				
3	50	205	209	7.5	0.3870	0.45	0.14
3	70	253	255	10.0	0.2680	0.41	0.16
3	95	307	304	13.6	0.1930	0.39	0.18
3	120	352	345	17.2	0.1530	0.38	0.19
3	150	397	388	21.5	0.1240	0.36	0.20
3	185	453	437	26.5	0.0991	0.35	0.21
3	240	529	503	34.3	0.0754	0.34	0.24
3	300	599	563	42.9	0.0601	0.32	0.26
3	400	683	631	57.2	0.0470	0.31	0.29

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.