ELAND® CABLES

XHIAE Cable

Eland Product Group: MP45

APPLICATION

Portuguese reference 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 Uo/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: 15 x overall diameter
After installation: 10 x overall diameter

CONSTRUCTION

Conductor
Class 2 stranded Copper

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

Filler
Extruded polymeric material

Bedding
PE (Polyethylene)

Armour
STA (Steel Tape Armoured)

Sheath
PE (Polyethylene) type ST7

Sheath Colour
● Black

STANDARDS

IEC 60228, IEC 60502-2

THE CABLE LAB®

AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.

SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability

REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab®.

DIMENSIONS 3.6/6kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP4506KV03025	3	25	13.0	44.5	3320
MP4506KV03035	3	35	14.0	47.0	3775
MP4506KV03050	3	50	15.0	49.5	4340
MP4506KV03070	3	70	16.5	54.0	5280
MP4506KV03095	3	95	18.5	58.0	6325
MP4506KV03120	3	120	20.0	61.5	7290
MP4506KV03150	3	150	21.0	64.5	8300
MP4506KV03185	3	185	22.5	67.5	9640
MP4506KV03240	3	240	25.5	75.0	11985
MP4506KV03300	3	300	28.5	82.0	14475
MP4506KV03400	3	400	32.0	91.5	18920

ELECTRICAL CHARACTERISTICS 3.6/6kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	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 6/10 (12)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP4510KV03025	3	25	15.0	49.0	3775
MP4510KV03035	3	35	16.0	51.5	4255
MP4510KV03050	3	50	17.0	54.5	4850
MP4510KV03070	3	70	18.5	58.5	5815
MP4510KV03095	3	95	20.5	62.5	6830
MP4510KV03120	3	120	22.0	66.5	7885
MP4510KV03150	3	150	23.0	69.5	8960
MP4510KV03185	3	185	24.5	72.5	10290
MP4510KV03240	3	240	27.0	78.5	12455
MP4510KV03300	3	300	30.0	85.0	14935
MP4510KV03400	3	400	33.0	93.0	19215

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ELECTRICAL CHARACTERISTICS 6/10 (12)kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	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 8.7/15 (17.5)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP4515KV03025	3	25	17.0	54.5	4335
MP4515KV03035	3	35	18.0	57.0	4835
MP4515KV03050	3	50	19.0	59.5	5470
MP4515KV03070	3	70	21.0	63.5	6425
MP4515KV03095	3	95	22.5	67.5	7505
MP4515KV03120	3	120	24.5	71.5	8600
MP4515KV03150	3	150	25.5	74.5	9730
MP4515KV03185	3	185	26.5	77.5	10985
MP4515KV03240	3	240	29.5	83.5	13290
MP4515KV03300	3	300	32.0	91.5	16705
MP4515KV03400	3	400	35.0	98.5	20225

ELECTRICAL CHARACTERISTICS 8.7/15 (17.5)kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	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

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DIMENSIONS 12/20 (24)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP4520KV03035	3	35	20.0	61.5	5325
MP4520KV03050	3	50	21.0	64.5	6000
MP4520KV03070	3	70	23.0	68.5	7045
MP4520KV03095	3	95	24.5	72.5	8190
MP4520KV03120	3	120	26.5	76.5	9280
MP4520KV03150	3	150	27.5	79.0	10330
MP4520KV03185	3	185	28.5	82.0	11760
MP4520KV03240	3	240	31.5	90.0	14985
MP4520KV03300	3	300	34.0	96.5	17595
MP4520KV03400	3	400	37.0	103.0	21170

ELECTRICAL CHARACTERISTICS 12/20 (24)kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	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 18/30 (36)kV

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL DIAMETER mm		NOMINAL WEIGHT kg/km
			Over Insulation	Overall	
MP4530KV03050	3	50	26.0	76.0	7595
MP4530KV03070	3	70	28.0	80.5	8730
MP4530KV03095	3	95	29.5	86.0	10845
MP4530KV03120	3	120	31.5	90.0	12105
MP4530KV03150	3	150	32.5	92.5	13170
MP4530KV03185	3	185	33.5	95.5	14725
MP4530KV03240	3	240	36.5	102.0	17205
MP4530KV03300	3	300	39.0	108.0	19950
MP4530KV03400	3	400	42.0	115.0	23760

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ELECTRICAL CHARACTERISTICS 18/30 (36)kV

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	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.

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