



Eland Product Group: MP03

APPLICATION

Portuguese referenced 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 U₀/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

Stranded copper conductor

Conductor Screen

Semi-conductive XLPE (Cross-Linked Polyethylene)

Insulation

XLPE (Cross-Linked Polyethylene)

Insulation Screen

Semi-conductive XLPE (Cross-Linked Polyethylene) and tape

Metallic Screen

Copper wires

Outer Sheath

PVC (Polyvinyl Chloride)

Sheath Colour

● Black

STANDARDS

IEC 60228, IEC 60502-2

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

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 3.6/6 (7.2)kV

ELAND PART NO.	NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
MP0306K01025	1	25	13.0	20.0	655
MP0306K01035	1	35	14.0	21.0	770
MP0306K01050	1	50	15.0	22.5	905
MP0306K01070	1	70	16.5	24.0	1120
MP0306K01095	1	95	18.5	26.0	1400
MP0306K01120	1	120	20.0	28.0	1675
MP0306K01150	1	150	21.0	29.0	1930
MP0306K01185	1	185	22.5	30.5	2305
MP0306K01240	1	240	25.5	33.5	2885
MP0306K01300	1	300	28.5	37.0	3555
MP0306K01400	1	400	32.0	40.5	4505
MP0306K01500	1	500	35.5	44.0	5480
MP0306K01600	1	630	41.0	47.5	7110
MP0306K03025	3	25	13.0	39.5	2395
MP0306K03035	3	35	14.0	42.0	2770
MP0306K03050	3	50	15.0	44.5	3270
MP0306K03070	3	70	16.5	48.5	4085
MP0306K03095	3	95	18.5	52.5	5005
MP0306K03120	3	120	20.0	56.5	5910
MP0306K03150	3	150	21.0	59.0	6825
MP0306K03185	3	185	22.5	62.0	8055
MP0306K03240	3	240	25.5	69.0	10180
MP0306K03300	3	300	28.5	76.0	12490
MP0306K03400	3	400	32.0	84.0	15820

ELECTRICAL CHARACTERISTICS 3.6/6 (7.2)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm ²	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	1 135	921
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



ELECTRICAL CHARACTERISTICS 3.6/6 (7.2)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm ²	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	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 ²	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
MP0310K01025	1	25	15.0	22.0	730
MP0310K01035	1	35	16.0	23.0	835
MP0310K01050	1	50	17.0	24.5	985
MP0310K01070	1	70	18.5	26.0	1210
MP0310K01095	1	95	20.5	28.0	1500
MP0310K01120	1	120	22.0	30.0	1760
MP0310K01150	1	150	23.0	31.0	2040
MP0310K01185	1	185	24.5	32.5	2405
MP0310K01240	1	240	27.0	35.5	2990
MP0310K01300	1	300	30.0	38.0	3640
MP0310K01400	1	400	33.0	41.5	4580
MP0310K01500	1	500	36.0	44.5	5530
MP0310K01600	1	630	41.5	48.0	7140
MP0310K03025	3	25	15.0	44.0	2715
MP0310K03035	3	35	16.0	46.5	3115
MP0310K03050	3	50	17.0	49.0	3640
MP0310K03070	3	70	18.5	53.0	4480
MP0310K03095	3	95	20.5	57.0	5460
MP0310K03120	3	120	22.0	61.0	6395
MP0310K03150	3	150	23.0	63.5	7335
MP0310K03185	3	185	24.5	66.5	8590
MP0310K03240	3	240	27.0	72.5	10605
MP0310K03300	3	300	30.0	79.0	12880
MP0310K03400	3	400	33.0	85.5	16050



ELECTRICAL CHARACTERISTICS 6/10 (12)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm ²	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	1 136	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 ²	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
MP0315K01025	1	25	17.0	24.5	820
MP0315K01035	1	35	18.0	25.5	930
MP0315K01050	1	50	19.0	26.5	1075
MP0315K01070	1	70	21.0	28.5	1320
MP0315K01095	1	95	22.5	30.5	1595
MP0315K01120	1	120	24.5	32.0	1880
MP0315K01150	1	150	25.5	33.5	2145
MP0315K01185	1	185	26.5	35.0	2535
MP0315K01240	1	240	29.5	37.5	3130
MP0315K01300	1	300	32.0	40.5	3775
MP0315K01400	1	400	35.0	43.5	4720
MP0315K01500	1	500	38.0	47.0	5685
MP0315K01600	1	630	44.0	50.5	7315
MP0315K03025	3	25	17.0	49.0	3125
MP0315K03035	3	35	18.0	51.5	3540
MP0315K03050	3	50	19.0	54.5	4135
MP0315K03070	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 ²	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
MP0315K03095	3	95	22.5	62.0	5 950
MP0315K03120	3	120	24.5	66.0	6 915
MP0315K03150	3	150	25.5	68.5	7 940
MP0315K03185	3	185	26.5	71.5	9 160
MP0315K03240	3	240	29.5	78.0	11 265
MP0315K03300	3	300	32.0	84.0	13 595
MP0315K03400	3	400	35.0	90.5	16 825

ELECTRICAL CHARACTERISTICS 8.7/15 (17.5)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm ²	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	0.45	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 ²	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
MP0320K01035	1	35	20.0	27.5	1025
MP0320K01050	1	50	21.0	29.0	1170
MP0320K01070	1	70	23.0	31.0	1425
MP0320K01095	1	95	24.5	32.5	1705
MP0320K01120	1	120	26.5	34.5	2000
MP0320K01150	1	150	27.5	35.5	2270
MP0320K01185	1	185	28.5	37.0	2660
MP0320K01240	1	240	31.5	39.5	3250
MP0320K01300	1	300	34.0	42.5	3920
MP0320K01400	1	400	37.0	45.5	4880
MP0320K01500	1	500	40.0	49.0	5855
MP0320K01630	1	630	46.0	52.5	7510
MP0320K03035	3	35	20.0	56.0	3950
MP0320K03050	3	50	21.0	59.0	4525
MP0320K03070	3	70	23.0	63.0	5470
MP0320K03095	3	95	24.5	67.0	6485
MP0320K03120	3	120	26.5	70.5	7480
MP0320K03150	3	150	27.5	73.5	8465
MP0320K03185	3	185	28.5	76.5	9775
MP0320K03240	3	240	31.5	82.5	11930
MP0320K03300	3	300	34.0	88.5	14270
MP0320K03400	3	400	37.0	95.5	17600

ELECTRICAL CHARACTERISTICS 12/20 (24)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm ²	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	35	5.0	0.5240	0.44	0.20	197	191
1	50	7.5	0.3870	0.42	0.21	236	226
1	70	10.0	0.2680	0.40	0.24	295	277
1	95	13.6	0.1930	0.38	0.27	359	333
1	120	17.2	0.1530	0.36	0.29	416	379
1	150	21.5	0.1240	0.35	0.31	471	425
1	185	26.5	0.0991	0.34	0.33	537	479
1	240	34.3	0.0754	0.33	0.38	639	558
1	300	42.9	0.0601	0.32	0.42	738	632
1	400	57.2	0.0470	0.30	0.46	858	720
1	500	71.5	0.0366	0.29	0.51	993	817
1	630	90.1	0.0283	0.29	0.56	1 143	922
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



ELECTRICAL CHARACTERISTICS 12/20 (24)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm ²	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
3	150	21.5	0.1240	0.27	0.31	398	390
3	185	26.5	0.0991	0.28	0.33	455	440
3	240	34.3	0.0754	0.32	0.38	531	507
3	300	42.9	0.0601	0.35	0.42	606	571
3	400	57.2	0.0470	0.39	0.46	696	645

DIMENSIONS 18/30 (36)kV

ELAND PART NO.	NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
MP0330K01050	1	50	26.0	34.5	1445
MP0330K01070	1	70	28.0	36.0	1695
MP0330K01095	1	95	29.5	38.0	2015
MP0330K01120	1	120	31.5	39.5	2300
MP0330K01150	1	150	32.5	41.0	2600
MP0330K01185	1	185	33.5	42.0	2985
MP0330K01240	1	240	36.5	45.0	3620
MP0330K01300	1	300	39.0	48.0	4315
MP0330K01400	1	400	42.0	51.0	5305
MP0330K01500	1	500	45.0	54.5	6310
MP0330K01630	1	630	51.0	58.0	8010
MP0330K03050	3	50	26.0	70.5	5800
MP0330K03070	3	70	28.0	74.5	6795
MP0330K03095	3	95	29.5	78.5	7985
MP0330K03120	3	120	31.5	82.5	9060
MP0330K03150	3	150	32.5	85.0	10030
MP0330K03185	3	185	33.5	88.0	11475
MP0330K03240	3	240	36.5	94.0	13630
MP0330K03300	3	300	39.0	100.0	16145
MP0330K03400	3	400	42.0	107.0	19650

ELECTRICAL CHARACTERISTICS 18/30 (36)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm ²	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	50	7.5	0.3870	0.42	0.21	236	226
1	70	10.0	0.2680	0.40	0.24	295	277
1	95	13.6	0.1930	0.38	0.27	359	333
1	120	17.2	0.1530	0.36	0.29	416	379
1	150	21.5	0.1240	0.35	0.31	471	425
1	185	26.5	0.0991	0.34	0.33	537	479
1	240	34.3	0.0754	0.33	0.38	639	558
1	300	42.9	0.0601	0.32	0.42	738	632
1	400	57.2	0.0470	0.30	0.46	858	720
1	500	71.5	0.0366	0.29	0.51	993	817
1	630	90.1	0.0283	0.29	0.56	1 143	922



ELECTRICAL CHARACTERISTICS 18/30 (36)kV

NO. OF CORES	CONDUCTOR NOMINAL CROSS SECTIONAL AREA mm ²	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	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	0.27	0.31	398	390
3	185	26.5	0.0991	0.28	0.33	455	440
3	240	34.3	0.0754	0.32	0.38	531	507
3	300	42.9	0.0601	0.35	0.42	606	571
3	400	57.2	0.0470	0.39	0.46	696	645

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.