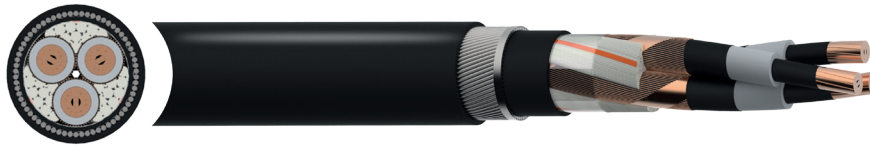


LXHIOAV Cable



Eland Product Group: MP50

APPLICATION

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

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

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 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 wire screen

Tape

Plastic tape is applied over the screen

Filler

Extruded polymeric material

Bedding

PVC (Polyvinyl Chloride)

Armour

STA (Steel Tape Armoured)

Sheath

PVC (Polyvinyl Chloride) type ST2

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™.





DIMENSIONS (3.6/6kV)

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL DIAMETER mm | | NOMINAL WEIGHT kg/km |
|----------------|--------------|---|------------------------|---------|-------------------------|
| | | | Over Insulation | Overall | |
| MP5006KV03025 | 3 | 25 | 12.5 | 44.0 | 2 860 |
| MP5006KV03035 | 3 | 35 | 13.5 | 46.5 | 3 140 |
| MP5006KV03050 | 3 | 50 | 15.0 | 49.5 | 3 460 |
| MP5006KV03070 | 3 | 70 | 16.5 | 53.5 | 3 965 |
| MP5006KV03095 | 3 | 95 | 18.0 | 57.5 | 4 575 |
| MP5006KV03120 | 3 | 120 | 20.0 | 61.0 | 5 095 |
| MP5006KV03150 | 3 | 150 | 21.0 | 64.5 | 5 650 |
| MP5006KV03185 | 3 | 185 | 22.5 | 68.0 | 6 320 |
| MP5006KV03240 | 3 | 240 | 25.5 | 74.5 | 7 545 |
| MP5006KV03300 | 3 | 300 | 28.5 | 82.0 | 8 845 |
| MP5006KV03400 | 3 | 400 | 32.0 | 91.0 | 11 485 |

ELECTRICAL CHARACTERISTICS (3.6/6kV)

| NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | 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 | 111 | 115 | 2.4 | 1.2000 | 0.38 | 0.27 |
| 3 | 35 | 133 | 136 | 3.3 | 0.8680 | 0.36 | 0.30 |
| 3 | 50 | 159 | 162 | 4.7 | 0.6410 | 0.35 | 0.33 |
| 3 | 70 | 196 | 198 | 6.6 | 0.4430 | 0.32 | 0.38 |
| 3 | 95 | 238 | 236 | 9.0 | 0.3200 | 0.30 | 0.42 |
| 3 | 120 | 274 | 268 | 11.3 | 0.2530 | 0.29 | 0.47 |
| 3 | 150 | 309 | 302 | 14.2 | 0.2060 | 0.29 | 0.51 |
| 3 | 185 | 354 | 342 | 17.5 | 0.1640 | 0.28 | 0.55 |
| 3 | 240 | 415 | 395 | 22.7 | 0.1250 | 0.27 | 0.60 |
| 3 | 300 | 472 | 444 | 28.3 | 0.1000 | 0.26 | 0.63 |
| 3 | 400 | 545 | 504 | 37.8 | 0.0778 | 0.26 | 0.66 |

DIMENSIONS (6/10kV)

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL DIAMETER mm | | NOMINAL WEIGHT kg/km |
|----------------|--------------|---|------------------------|---------|-------------------------|
| | | | Over Insulation | Overall | |
| MP5010KV03025 | 3 | 25 | 14.5 | 49.0 | 3 310 |
| MP5010KV03035 | 3 | 35 | 15.5 | 51.5 | 3 620 |
| MP5010KV03050 | 3 | 50 | 17.0 | 54.0 | 3 965 |
| MP5010KV03070 | 3 | 70 | 18.5 | 58.0 | 4 500 |
| MP5010KV03095 | 3 | 95 | 20.0 | 62.0 | 5 075 |
| MP5010KV03120 | 3 | 120 | 22.0 | 66.0 | 5 690 |
| MP5010KV03150 | 3 | 150 | 23.0 | 69.5 | 6 305 |
| MP5010KV03185 | 3 | 185 | 24.5 | 72.5 | 6 975 |
| MP5010KV03240 | 3 | 240 | 27.0 | 78.0 | 8 015 |
| MP5010KV03300 | 3 | 300 | 30.0 | 85.0 | 9 305 |
| MP5010KV03400 | 3 | 400 | 32.5 | 93.0 | 11 775 |



ELECTRICAL CHARACTERISTICS (6/10kV)

| NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | 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 | 111 | 115 | 2.4 | 1.2000 | 0.40 | 0.22 |
| 3 | 35 | 133 | 136 | 3.3 | 0.8680 | 0.39 | 0.24 |
| 3 | 50 | 159 | 162 | 4.7 | 0.6410 | 0.37 | 0.26 |
| 3 | 70 | 196 | 198 | 6.6 | 0.4430 | 0.34 | 0.30 |
| 3 | 95 | 238 | 236 | 9.0 | 0.3200 | 0.32 | 0.33 |
| 3 | 120 | 274 | 268 | 11.3 | 0.2530 | 0.31 | 0.37 |
| 3 | 150 | 309 | 302 | 14.2 | 0.2060 | 0.30 | 0.39 |
| 3 | 185 | 354 | 342 | 17.5 | 0.1640 | 0.29 | 0.43 |
| 3 | 240 | 415 | 395 | 22.7 | 0.1250 | 0.28 | 0.47 |
| 3 | 300 | 472 | 444 | 28.3 | 0.1000 | 0.27 | 0.53 |
| 3 | 400 | 545 | 504 | 37.8 | 0.0778 | 0.26 | 0.59 |

DIMENSIONS (8.7/15kV)

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL DIAMETER mm | | NOMINAL WEIGHT kg/km |
|----------------|--------------|--|---------------------|---------|----------------------|
| | | | Over Insulation | Overall | |
| MP5015KV03025 | 3 | 25 | 17.0 | 54.5 | 3 870 |
| MP5015KV03035 | 3 | 35 | 18.0 | 57.0 | 4 200 |
| MP5015KV03050 | 3 | 50 | 19.0 | 59.0 | 4 530 |
| MP5015KV03070 | 3 | 70 | 20.5 | 63.5 | 5 100 |
| MP5015KV03095 | 3 | 95 | 22.5 | 67.0 | 5 750 |
| MP5015KV03120 | 3 | 120 | 24.0 | 71.5 | 6 405 |
| MP5015KV03150 | 3 | 150 | 25.5 | 74.5 | 7 075 |
| MP5015KV03185 | 3 | 185 | 27.0 | 77.5 | 7 670 |
| MP5015KV03240 | 3 | 240 | 29.0 | 83.5 | 8 845 |
| MP5015KV03300 | 3 | 300 | 32.0 | 91.5 | 11 075 |
| MP5015KV03400 | 3 | 400 | 35.0 | 98.5 | 12 785 |

ELECTRICAL CHARACTERISTICS (8.7/15kV)

| NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | 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 | 111 | 115 | 2.4 | 1.2000 | 0.43 | 0.18 |
| 3 | 35 | 133 | 136 | 3.3 | 0.8680 | 0.41 | 0.19 |
| 3 | 50 | 159 | 162 | 4.7 | 0.6410 | 0.39 | 0.21 |
| 3 | 70 | 196 | 198 | 6.6 | 0.4430 | 0.36 | 0.24 |
| 3 | 95 | 238 | 236 | 9.0 | 0.3200 | 0.34 | 0.27 |
| 3 | 120 | 274 | 268 | 11.3 | 0.2530 | 0.33 | 0.29 |
| 3 | 150 | 309 | 302 | 14.2 | 0.2060 | 0.32 | 0.31 |
| 3 | 185 | 354 | 342 | 17.5 | 0.1640 | 0.31 | 0.34 |
| 3 | 240 | 415 | 395 | 22.7 | 0.1250 | 0.30 | 0.37 |
| 3 | 300 | 472 | 444 | 28.3 | 0.1000 | 0.29 | 0.42 |
| 3 | 400 | 545 | 504 | 37.8 | 0.0778 | 0.27 | 0.46 |



DIMENSIONS (12/20kV)

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL DIAMETER mm | | NOMINAL WEIGHT kg/km |
|----------------|--------------|---|------------------------|---------|-------------------------|
| | | | Over Insulation | Overall | |
| MP5020KV03035 | 3 | 35 | 20,0 | 61,0 | 4 685 |
| MP5020KV03050 | 3 | 50 | 21,0 | 64,0 | 5 110 |
| MP5020KV03070 | 3 | 70 | 22,5 | 68,0 | 5 710 |
| MP5020KV03095 | 3 | 95 | 24,5 | 72,0 | 6 435 |
| MP5020KV03120 | 3 | 120 | 26,0 | 76,0 | 7 080 |
| MP5020KV03150 | 3 | 150 | 27,5 | 79,0 | 7 680 |
| MP5020KV03185 | 3 | 185 | 29,0 | 82,5 | 8 445 |
| MP5020KV03240 | 3 | 240 | 31,0 | 89,5 | 10 535 |
| MP5020KV03300 | 3 | 300 | 34,0 | 96,5 | 11 970 |
| MP5020KV03400 | 3 | 400 | 37,0 | 103,0 | 13 730 |

ELECTRICAL CHARACTERISTICS (12/20kV)

| NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | 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 | 133 | 136 | 3.3 | 0.8680 | 0.43 | 0.17 |
| 3 | 50 | 159 | 162 | 4.7 | 0.6410 | 0.41 | 0.18 |
| 3 | 70 | 196 | 198 | 6.6 | 0.4430 | 0.38 | 0.21 |
| 3 | 95 | 238 | 236 | 9.0 | 0.3200 | 0.36 | 0.23 |
| 3 | 120 | 274 | 268 | 11.3 | 0.2530 | 0.34 | 0.25 |
| 3 | 150 | 309 | 302 | 14.2 | 0.2060 | 0.33 | 0.27 |
| 3 | 185 | 354 | 342 | 17.5 | 0.1640 | 0.32 | 0.29 |
| 3 | 240 | 415 | 395 | 22.7 | 0.1250 | 0.31 | 0.32 |
| 3 | 300 | 472 | 444 | 28.3 | 0.1000 | 0.30 | 0.35 |
| 3 | 400 | 545 | 504 | 37.8 | 0.0778 | 0.29 | 0.39 |

DIMENSIONS (18/30kV)

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL DIAMETER mm | | NOMINAL WEIGHT kg/km |
|----------------|--------------|---|------------------------|---------|-------------------------|
| | | | Over Insulation | Overall | |
| MP5030KV03050 | 3 | 50 | 26.0 | 76.0 | 6 700 |
| MP5030KV03070 | 3 | 70 | 27.5 | 80.0 | 7 445 |
| MP5030KV03095 | 3 | 95 | 29.5 | 85.5 | 9 015 |
| MP5030KV03120 | 3 | 120 | 31.0 | 89.5 | 9 895 |
| MP5030KV03150 | 3 | 150 | 32.5 | 92.5 | 10 515 |
| MP5030KV03185 | 3 | 185 | 34.0 | 96.0 | 11 420 |
| MP5030KV03240 | 3 | 240 | 36.0 | 101.5 | 12 750 |
| MP5030KV03300 | 3 | 300 | 39.0 | 108.0 | 14 320 |
| MP5030KV03400 | 3 | 400 | 42.0 | 115.0 | 16 220 |



ELECTRICAL CHARACTERISTICS (18/30kV)

| NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | 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 | 159 | 162 | 4.7 | 0.6410 | 0.45 | 0.14 |
| 3 | 70 | 196 | 198 | 6.6 | 0.4430 | 0.41 | 0.16 |
| 3 | 95 | 238 | 236 | 9.0 | 0.3200 | 0.39 | 0.17 |
| 3 | 120 | 274 | 268 | 11.3 | 0.2530 | 0.38 | 0.19 |
| 3 | 150 | 309 | 302 | 14.2 | 0.2060 | 0.37 | 0.20 |
| 3 | 185 | 354 | 342 | 17.5 | 0.1640 | 0.35 | 0.21 |
| 3 | 240 | 415 | 395 | 22.7 | 0.1250 | 0.34 | 0.24 |
| 3 | 300 | 472 | 444 | 28.3 | 0.1000 | 0.32 | 0.26 |
| 3 | 400 | 545 | 504 | 37.8 | 0.0778 | 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.