

74/132 (145) kV HV POWER CABLE

Aluminum Sheath



Construction

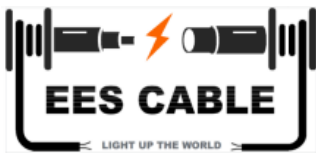
- Copper Conductor ■ XLPE Insulation
- Aluminum Sheath ■ PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

| Cross-Sectional Area (mm ²) | Direct Buried | Pipe Duct | In Air | |
|---|---------------|-----------|---------|-------------|
| | | | Trefoil | Flat (S=2D) |
| 240 | 519 | 486 | 589 | 649 |
| 300 | 585 | 547 | 671 | 742 |
| 400 | 665 | 635 | 770 | 858 |
| 500 | 755 | 716 | 883 | 992 |
| 630 | 856 | 814 | 1011 | 1151 |
| 800 | 956 | 942 | 1137 | 1313 |
| 1000 | 1103 | 1093 | 1333 | 1555 |
| 1200 | 1185 | 1170 | 1439 | 1695 |
| 1600 | 1333 | 1324 | 1627 | 1972 |
| 2000 | 1452 | 1435 | 1777 | 2211 |
| 2500 | 1530 | 1512 | 1872 | 2330 |

Constructional Data (Nominal Values)

| Cross-Sectional Area | Conductor | | Thickness of Conductor Screen Approx. | Thickness of Insulation | Thickness of Insulation Screen Approx. | Thickness of Aluminum Sheath | Thickness of Outer Sheath | Outer Diameter of Cable | Weight of Cable | Max. DC Conductor Resistance at 20 °C | Capacitance |
|----------------------|----------------------------|----------|---------------------------------------|-------------------------|--|------------------------------|---------------------------|-------------------------|-----------------|---------------------------------------|-------------|
| | Shape | Diameter | | | | | | | | | |
| mm ² | | mm | mm | mm | mm | mm | mm | mm | kg / m | Ω / km | μF / km |
| 240 | Compact Round Stranded | 18.1 | 1.5 | 16.0 | 1.3 | 1.8 | 4.5 | 83 | 7.1 | 0.0754 | 0.16 |
| 300 | | 20.4 | 1.5 | 16.0 | 1.3 | 1.8 | 4.5 | 86 | 7.9 | 0.0601 | 0.17 |
| 400 | | 23.2 | 1.5 | 16.0 | 1.3 | 1.9 | 4.5 | 89 | 8.9 | 0.0470 | 0.18 |
| 500 | | 26.3 | 1.5 | 16.0 | 1.3 | 2.0 | 4.5 | 92 | 10.2 | 0.0366 | 0.20 |
| 630 | | 30.2 | 1.5 | 16.0 | 1.3 | 2.1 | 4.5 | 97 | 11.9 | 0.0283 | 0.21 |
| 800 | | 34.0 | 1.5 | 16.0 | 1.3 | 2.2 | 4.5 | 101 | 14.0 | 0.0221 | 0.23 |
| 1000 | Segment Stranded (Miliken) | 38.7 | 1.5 | 16.0 | 1.3 | 2.2 | 4.5 | 106 | 16.6 | 0.0176 | 0.25 |
| 1200 | | 41.8 | 1.5 | 16.0 | 1.3 | 2.3 | 4.5 | 110 | 18.6 | 0.0151 | 0.27 |
| 1600 | | 48.1 | 1.5 | 16.0 | 1.3 | 2.4 | 4.5 | 116 | 22.9 | 0.0113 | 0.30 |
| 2000 | | 54.3 | 1.5 | 16.0 | 1.3 | 2.6 | 4.5 | 124 | 27.4 | 0.0090 | 0.32 |
| 2500 | | 63.0 | 1.5 | 16.0 | 1.3 | 2.8 | 4.5 | 131 | 34.3 | 0.0072 | 0.36 |



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Lead Sheath



Construction

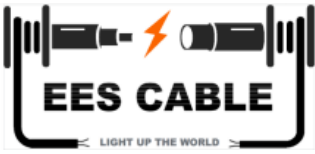
- Copper Conductor
- XLPE Insulation
- Lead Sheath
- PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

| Cross-Sectional Area (mm ²) | Direct Buried | Pipe Duct | In Air | |
|---|---------------|-----------|---------|-------------|
| | | | Trefoil | Flat (S=2D) |
| 240 | 530 | 495 | 612 | 679 |
| 300 | 600 | 559 | 702 | 781 |
| 400 | 684 | 636 | 808 | 904 |
| 500 | 780 | 727 | 934 | 1050 |
| 630 | 889 | 840 | 1077 | 1222 |
| 800 | 997 | 941 | 1222 | 1400 |
| 1000 | 1170 | 1100 | 1469 | 1681 |
| 1200 | 1264 | 1226 | 1599 | 1842 |
| 1600 | 1449 | 1404 | 1853 | 2168 |
| 2000 | 1600 | 1548 | 2064 | 2460 |
| 2500 | 1686 | 1631 | 2175 | 2592 |


Constructional Data (Nominal Values)

| Cross-Sectional Area | Conductor | | Thickness of Conductor Screen Approx. | Thickness of Insulation | Thickness of Insulation Screen Approx. | Thickness of Lead Sheath | Thickness of Outer Sheath | Outer Diameter of Cable | Weight of Cable | Max. DC Conductor Resistance at 20°C | Capacitance |
|----------------------|----------------------------|----------|---------------------------------------|-------------------------|--|--------------------------|---------------------------|-------------------------|-----------------|--------------------------------------|-------------|
| | Shape | Diameter | | | | | | | | | |
| mm ² | | mm | mm | mm | mm | mm | mm | mm | kg / m | Ω / km | µF / km |
| 240 | Compact Round Stranded | 18.1 | 1.5 | 16.0 | 1.3 | 2.4 | 4.5 | 76 | 11.2 | 0.0754 | 0.16 |
| 300 | | 20.4 | 1.5 | 16.0 | 1.3 | 2.5 | 4.5 | 78 | 12.3 | 0.0601 | 0.17 |
| 400 | | 23.2 | 1.5 | 16.0 | 1.3 | 2.6 | 4.5 | 81 | 13.8 | 0.0470 | 0.18 |
| 500 | | 26.3 | 1.5 | 16.0 | 1.3 | 2.7 | 4.5 | 85 | 15.6 | 0.0366 | 0.20 |
| 630 | | 30.2 | 1.5 | 16.0 | 1.3 | 2.7 | 4.5 | 88 | 17.5 | 0.0283 | 0.21 |
| 800 | | 34.0 | 1.5 | 16.0 | 1.3 | 2.9 | 4.5 | 93 | 20.4 | 0.0221 | 0.23 |
| 1000 | | 38.7 | 1.5 | 16.0 | 1.3 | 3.0 | 4.5 | 98 | 23.6 | 0.0176 | 0.25 |
| 1200 | Segment Stranded (Milkien) | 41.8 | 1.5 | 16.0 | 1.3 | 3.1 | 4.5 | 102 | 26.5 | 0.0151 | 0.27 |
| 1600 | | 48.1 | 1.5 | 16.0 | 1.3 | 3.3 | 4.5 | 108 | 31.7 | 0.0113 | 0.30 |
| 2000 | | 54.3 | 1.5 | 16.0 | 1.3 | 3.5 | 4.5 | 115 | 37.7 | 0.0090 | 0.32 |
| 2500 | | 63.0 | 1.5 | 16.0 | 1.3 | 3.7 | 4.5 | 123 | 44.3 | 0.0072 | 0.36 |



74/132 (145) kV HV POWER CABLE

Copper Wire Shield



Construction

- Copper Conductor ■ XLPE Insulation
- Copper Wire Shield ■ PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

| Cross-Sectional Area (mm ²) | Direct Buried | Pipe Duct | In Air | |
|---|---------------|-----------|---------|-------------|
| | | | Trefoil | Flat (S=2D) |
| 240 | 525 | 492 | 601 | 673 |
| 300 | 593 | 555 | 688 | 774 |
| 400 | 675 | 632 | 792 | 896 |
| 500 | 767 | 716 | 908 | 1033 |
| 630 | 872 | 811 | 1045 | 1200 |
| 800 | 979 | 932 | 1182 | 1374 |
| 1000 | 1145 | 1087 | 1420 | 1649 |
| 1200 | 1233 | 1212 | 1539 | 1801 |
| 1600 | 1414 | 1388 | 1784 | 2125 |
| 2000 | 1569 | 1532 | 2003 | 2418 |
| 2500 | 1653 | 1614 | 2111 | 2548 |

Constructional Data (Nominal Values)

| Conductor | | Diameter | Thickness of Conductor Screen Approx. | Thickness of Insulation | Thickness of Insulation Screen Approx. | Diameter & Number of Copper Wires | Thickness of Outer Sheath | Outer Diameter of Cable | Weight of Cable | Max. DC Conductor Resistance at 20°C | Capacitance |
|----------------------|----------------------------|----------|---------------------------------------|-------------------------|--|-----------------------------------|---------------------------|-------------------------|-----------------|--------------------------------------|-------------|
| Cross-Sectional Area | Shape | | | | | | | | | | |
| mm ² | | mm | mm | mm | mm | mm x No. | mm | mm | kg / m | Ω / km | µF / km |
| 240 | Compact Round Stranded | 18.1 | 1.5 | 16.0 | 1.3 | 1.5 x 80 | 4.5 | 70 | 6.5 | 0.0754 | 0.16 |
| 300 | | 20.4 | 1.5 | 16.0 | 1.3 | 1.5 x 80 | 4.5 | 72 | 7.1 | 0.0601 | 0.17 |
| 400 | | 23.2 | 1.5 | 16.0 | 1.3 | 1.5 x 80 | 4.5 | 75 | 8.1 | 0.0470 | 0.18 |
| 500 | | 26.3 | 1.5 | 16.0 | 1.3 | 1.5 x 80 | 4.5 | 80 | 9.5 | 0.0366 | 0.20 |
| 630 | | 30.2 | 1.5 | 16.0 | 1.3 | 1.5 x 80 | 4.5 | 84 | 11.0 | 0.0283 | 0.21 |
| 800 | | 34.0 | 1.5 | 16.0 | 1.3 | 1.5 x 80 | 4.5 | 88 | 12.9 | 0.0221 | 0.23 |
| 1000 | | 38.7 | 1.5 | 16.0 | 1.3 | 1.5 x 80 | 4.5 | 93 | 15.3 | 0.0176 | 0.25 |
| 1200 | Segment Stranded (Miliken) | 41.8 | 1.5 | 16.0 | 1.3 | 1.5 x 80 | 4.5 | 96 | 17.1 | 0.0151 | 0.27 |
| 1600 | | 48.1 | 1.5 | 16.0 | 1.3 | 1.5 x 80 | 4.5 | 102 | 21.2 | 0.0113 | 0.30 |
| 2000 | | 54.3 | 1.5 | 16.0 | 1.3 | 1.5 x 80 | 4.5 | 110 | 25.8 | 0.0090 | 0.32 |
| 2500 | | 63.0 | 1.5 | 16.0 | 1.3 | 1.5 x 80 | 4.5 | 118 | 31.4 | 0.0072 | 0.36 |