

64/110 (123) kV HV POWER CABLE

Aluminum Sheath



Construction

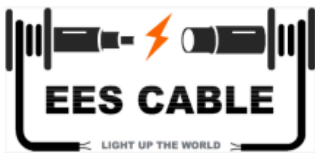
- Copper Conductor ■ XLPE Insulation
- Aluminum Sheath ■ PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

| Cross-Sectional Area (mm ²) | Direct Buried | Pipe Duct | In Air | |
|---|---------------|-----------|---------|-------------|
| | | | Trefoil | Flat (S=2D) |
| 240 | 520 | 491 | 592 | 657 |
| 300 | 587 | 550 | 677 | 755 |
| 400 | 667 | 639 | 775 | 873 |
| 500 | 758 | 725 | 889 | 1006 |
| 630 | 860 | 821 | 1020 | 1169 |
| 800 | 961 | 915 | 1147 | 1333 |
| 1000 | 1109 | 1057 | 1346 | 1581 |
| 1200 | 1187 | 1180 | 1451 | 1717 |
| 1600 | 1338 | 1332 | 1635 | 1995 |
| 2000 | 1458 | 1447 | 1787 | 2236 |
| 2500 | 1538 | 1526 | 1885 | 2358 |

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 | 1.2 | 14.0 | 1.0 | 1.7 | 3.5 | 76 | 6.3 | 0.0754 | 0.17 |
| 300 | | 20.4 | 1.2 | 14.0 | 1.0 | 1.8 | 3.5 | 78 | 7.0 | 0.0601 | 0.18 |
| 400 | | 23.2 | 1.2 | 14.0 | 1.0 | 1.8 | 3.5 | 81 | 8.0 | 0.0470 | 0.20 |
| 500 | | 26.3 | 1.2 | 14.0 | 1.0 | 1.9 | 4.0 | 86 | 9.3 | 0.0366 | 0.21 |
| 630 | | 30.2 | 1.2 | 14.0 | 1.0 | 2.0 | 4.0 | 90 | 11.0 | 0.0283 | 0.23 |
| 800 | | 34.0 | 1.2 | 14.0 | 1.0 | 2.0 | 4.0 | 94 | 12.9 | 0.0221 | 0.25 |
| 1000 | | 38.7 | 1.2 | 14.0 | 1.0 | 2.1 | 4.0 | 99 | 15.4 | 0.0176 | 0.28 |
| 1200 | Segment Stranded (Miliken) | 41.8 | 1.2 | 14.0 | 1.0 | 2.2 | 4.5 | 104 | 17.7 | 0.0151 | 0.30 |
| 1600 | | 48.1 | 1.2 | 14.0 | 1.0 | 2.4 | 4.5 | 111 | 22.1 | 0.0113 | 0.33 |
| 2000 | | 54.3 | 1.2 | 14.0 | 1.0 | 2.5 | 4.5 | 118 | 26.5 | 0.0090 | 0.36 |
| 2500 | | 63.0 | 1.2 | 14.0 | 1.0 | 2.6 | 4.5 | 128 | 33.0 | 0.0072 | 0.40 |



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Lead Sheath



Construction

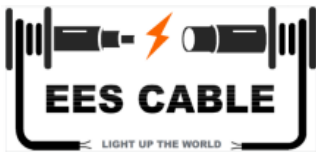
- Copper Conductor
- XLPE Insulation
- Lead Sheath
- PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

| Cross-Sectional Area (mm ²) | Direct Buried | Pipe Duct | In Air | |
|---|---------------|-----------|---------|-------------|
| | | | Trefoil | Flat (S=2D) |
| 240 | 533 | 498 | 617 | 692 |
| 300 | 602 | 563 | 705 | 794 |
| 400 | 687 | 654 | 816 | 923 |
| 500 | 782 | 744 | 939 | 1068 |
| 630 | 891 | 846 | 1083 | 1243 |
| 800 | 1001 | 949 | 1229 | 1425 |
| 1000 | 1176 | 1108 | 1486 | 1718 |
| 1200 | 1269 | 1235 | 1612 | 1871 |
| 1600 | 1455 | 1415 | 1870 | 2206 |
| 2000 | 1609 | 1562 | 2087 | 2505 |
| 2500 | 1695 | 1647 | 2201 | 2642 |


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 | 1.2 | 14.0 | 1.0 | 2.3 | 3.5 | 68 | 9.6 | 0.0754 | 0.17 |
| 300 | | 20.4 | 1.2 | 14.0 | 1.0 | 2.4 | 3.5 | 71 | 10.9 | 0.0601 | 0.18 |
| 400 | | 23.2 | 1.2 | 14.0 | 1.0 | 2.5 | 3.5 | 74 | 12.3 | 0.0470 | 0.20 |
| 500 | | 26.3 | 1.2 | 14.0 | 1.0 | 2.5 | 4.0 | 78 | 13.8 | 0.0366 | 0.21 |
| 630 | | 30.2 | 1.2 | 14.0 | 1.0 | 2.6 | 4.0 | 82 | 16.0 | 0.0283 | 0.23 |
| 800 | | 34.0 | 1.2 | 14.0 | 1.0 | 2.7 | 4.0 | 86 | 18.5 | 0.0221 | 0.25 |
| 1000 | | 38.7 | 1.2 | 14.0 | 1.0 | 2.9 | 4.0 | 92 | 21.9 | 0.0176 | 0.28 |
| 1200 | Segment Stranded (Miliken) | 41.8 | 1.2 | 14.0 | 1.0 | 3.0 | 4.5 | 97 | 24.7 | 0.0151 | 0.30 |
| 1600 | | 48.1 | 1.2 | 14.0 | 1.0 | 3.2 | 4.5 | 103 | 30.1 | 0.0113 | 0.33 |
| 2000 | | 54.3 | 1.2 | 14.0 | 1.0 | 3.4 | 4.5 | 110 | 35.7 | 0.0090 | 0.36 |
| 2500 | | 63.0 | 1.2 | 14.0 | 1.0 | 3.6 | 4.5 | 118 | 42.0 | 0.0072 | 0.40 |



64/110 (123) 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 | 528 | 495 | 605 | 682 |
| 300 | 597 | 559 | 692 | 783 |
| 400 | 681 | 650 | 800 | 909 |
| 500 | 775 | 739 | 922 | 1053 |
| 630 | 884 | 841 | 1065 | 1226 |
| 800 | 994 | 945 | 1208 | 1406 |
| 1000 | 1169 | 1106 | 1465 | 1695 |
| 1200 | 1264 | 1231 | 1595 | 1849 |
| 1600 | 1456 | 1415 | 1860 | 2185 |
| 2000 | 1618 | 1570 | 2089 | 2487 |
| 2500 | 1706 | 1656 | 2203 | 2623 |

Constructional Data (Nominal Values)

| Cross-Sectional Area | Conductor | | 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 |
|----------------------|----------------------------|----------|---------------------------------------|-------------------------|--|-----------------------------------|---------------------------|-------------------------|-----------------|--------------------------------------|-------------|
| | Shape | Diameter | | | | | | | | | |
| mm ² | | mm | mm | mm | mm | mm x No. | mm | mm | kg / m | Ω / km | µF / km |
| 240 | Compact Round Stranded | 18.1 | 1.2 | 14.0 | 1.0 | 1.2 x 40 | 3.5 | 64 | 5.0 | 0.0754 | 0.17 |
| 300 | | 20.4 | 1.2 | 14.0 | 1.0 | 1.2 x 40 | 3.5 | 66 | 5.7 | 0.0601 | 0.18 |
| 400 | | 23.2 | 1.2 | 14.0 | 1.0 | 1.2 x 40 | 3.5 | 69 | 6.6 | 0.0470 | 0.20 |
| 500 | | 26.3 | 1.2 | 14.0 | 1.0 | 1.2 x 40 | 4.0 | 73 | 7.9 | 0.0366 | 0.21 |
| 630 | | 30.2 | 1.2 | 14.0 | 1.0 | 1.2 x 40 | 4.0 | 77 | 9.4 | 0.0283 | 0.23 |
| 800 | | 34.0 | 1.2 | 14.0 | 1.0 | 1.2 x 40 | 4.0 | 81 | 11.2 | 0.0221 | 0.25 |
| 1000 | | 38.7 | 1.2 | 14.0 | 1.0 | 1.2 x 40 | 4.0 | 86 | 13.6 | 0.0176 | 0.28 |
| 1200 | Segment Stranded (Miliken) | 41.8 | 1.2 | 14.0 | 1.0 | 1.2 x 40 | 4.5 | 91 | 15.6 | 0.0151 | 0.30 |
| 1600 | | 48.1 | 1.2 | 14.0 | 1.0 | 1.2 x 40 | 4.5 | 97 | 19.6 | 0.0113 | 0.33 |
| 2000 | | 54.3 | 1.2 | 14.0 | 1.0 | 1.2 x 40 | 4.5 | 103 | 23.7 | 0.0090 | 0.36 |
| 2500 | | 63.0 | 1.2 | 14.0 | 1.0 | 1.2 x 40 | 4.5 | 111 | 29.0 | 0.0072 | 0.40 |