

6/10 (12) KV Single Core AWA Cables

Single Core Cables, with stranded Circular copper or Aluminum conductors, XLPE insulated, copper tape or wire as metallic insulation screen, covered with a layer of PVC compound as bedding, aluminum wire armored and PVC Sheath.



- Cables are produced according to IEC 60502.

| Nominal Cross-sectional area | Max. Conductor Resistance | | Capacitance | reactance | Current Rating | | | | Approx. Overall Diameter | Approx. Weight |
|------------------------------|---------------------------|-------------|-------------|-----------|----------------|---------|---------------------------|-----------------|--------------------------|----------------|
| | DC at 20 °C | AC at 90 °C | | | Laid in ground | | Laid in free air (Shaded) | | | |
| | | | | Trefoil | Flat | Trefoil | Flat Touched | Trefoil Touched | | |
| mm ² | Ω/Km | Ω/Km | μf/km | Ω/km | A | A | A | A | mm | Kg/Km |

1 Core - Cu/XLPE/PVC

| | | | | | | | | | | |
|-----|--------|--------|------|------|------|-----|------|------|----|-------|
| 150 | 0.124 | 0.16 | 0.39 | 0.12 | 420 | 370 | 490 | 420 | 35 | 2520 |
| 185 | 0.0991 | 0.128 | 0.43 | 0.11 | 440 | 420 | 570 | 440 | 37 | 2925 |
| 240 | 0.0754 | 0.0805 | 0.48 | 0.11 | 580 | 475 | 670 | 520 | 43 | 3570 |
| 300 | 0.0601 | 0.0805 | 0.53 | 0.1 | 660 | 555 | 760 | 610 | 48 | 4855 |
| 400 | 0.047 | 0.064 | 0.59 | 0.1 | 755 | 620 | 900 | 695 | 53 | 6000 |
| 500 | 0.0366 | 0.052 | 0.67 | 0.1 | 845 | 680 | 1005 | 770 | 56 | 7355 |
| 630 | 0.0283 | 0.043 | 0.74 | 0.1 | 1000 | 755 | 1230 | 910 | 61 | 9455 |
| 800 | 0.0221 | 0.0348 | 0.80 | 0.09 | 1150 | 845 | 1375 | 1035 | 67 | 11210 |

1 Core – AL/ XLPE/PVC

| | | | | | | | | | | |
|-----|--------|--------|------|------|-----|-----|------|------|----|------|
| 150 | 0.206 | 0.265 | 0.39 | 0.12 | 300 | 285 | 380 | 305 | 35 | 1720 |
| 185 | 0.164 | 0.212 | 0.43 | 0.11 | 340 | 325 | 430 | 350 | 37 | 1845 |
| 240 | 0.125 | 0.163 | 0.48 | 0.11 | 395 | 375 | 520 | 415 | 43 | 2970 |
| 300 | 0.1 | 0.131 | 0.53 | 0.1 | 445 | 430 | 590 | 470 | 48 | 3005 |
| 400 | 0.0778 | 0.1 | 0.59 | 0.1 | 515 | 480 | 690 | 540 | 53 | 3600 |
| 500 | 0.0605 | 0.087 | 0.66 | 0.1 | 585 | 545 | 820 | 635 | 56 | 4255 |
| 630 | 0.0469 | 0.061 | 0.74 | 0.1 | 675 | 610 | 970 | 735 | 61 | 4555 |
| 800 | 0.0367 | 0.0517 | 0.84 | 0.09 | 760 | 680 | 1100 | 1080 | 67 | 6210 |

the above data is approximate and subjected to manufacturing tolerance.

Cable constructed are based on:

| | |
|-----------------------------|-------------|
| Insulation thickness | 3.4mm |
| PVC ST2 90 °C | Sheath |
| Ambient temperature | 45 °C |
| Ground temperature | 30 °C |
| Thermal resistivity of soil | 120 °C cm/w |
| Depth of laying | 80 cm |
| Trefoil Formation | |