

38/66 (72.5) KV (Cu/XLPE/Lead/HDPE)

Single core Copper conductor, (Stranded circular or segmental compacted) copper conductor, semi-conducting layer as conductor screen, XLPE insulated, semi-conducting layer as non-metallic insulation screen, semi conductive water blocking tape to protect the screen area from longitudinal water penetration, lead sheathed with suitable thickness to withstand the required earth fault current and HDPE sheathed with graphite coating or extruded semi-conducting layer.



- Cables are designed and tested to comply with IEC 60228, 60840 and 60811.

| Conductor | | continuous current ratings (load factor = 100%) for one circuit in operation (Amperes) | | | | Approx. outer diameter of cable | Approx. weight of cable | Max. DC conductor resistance at 20 °C | Capacitance |
|------------------------------|----------------|--|-----------------|-----------------------------------|-----------------|---------------------------------|-------------------------|---------------------------------------|-------------|
| | | Laying conditions: Trefoil formation | | Laying conditions: Flat formation | | | | | |
| Nominal Cross-sectional area | Shape | Direct burial | In air (Shaded) | Direct burial | In air (Shaded) | mm | Kg/Km | Ω/Km | µf/km |
| mm ² | | A | A | A | A | | | | |
| 400 R | Compact | 528 | 670 | 660 | 790 | 76 | 12400 | 0.0470 | 0.16 |
| 500 R | round | 638 | 760 | 750 | 910 | 80 | 13800 | 0.0366 | 0.169 |
| 630 R | standard | 721 | 920 | 895 | 1060 | 86 | 15600 | 0.0283 | 0.198 |
| 800 R | (R) | 814 | 1050 | 1005 | 1230 | 88 | 17500 | 0.0221 | 0.219 |
| 1000 S | | 920 | 1260 | 1150 | 1450 | 95 | 21450 | 0.0176 | 0.251 |
| 1200 S | Segment | 1150 | 1350 | 1260 | 1600 | 99 | 23500 | 0.0151 | 0.259 |
| 1600 S | standard | 1200 | 1650 | 1450 | 1850 | 105 | 27800 | 0.0113 | 0.284 |
| 2000 S | (Milliken) (S) | 1300 | 1740 | 1580 | 2010 | 113 | 32800 | 0.0090 | 0.309 |

The above data is approximate and subjected to manufacturing tolerance.

Cable constructed are based on:

| | |
|-----------------------------|-------------------------------|
| Insulation thickness | 17.0mm |
| HDPE | Sheath |
| Ambient temperature | 45 °C |
| Ground temperature | 30 °C |
| Thermal resistivity of soil | 120 °C cm/w |
| Depth of laying | 120 cm |
| Type of Earthing | Cross or Single point bonding |