

**Description:** 132 kV Aluminium, XLPE, Corrugated Seamless Aluminium (CSA), #LLDPE Graphite

**Specification:** SANS/IEC 60840/ NRS 077, Fully Water Blocked

*Last updated: December 2025*

| PHYSICAL                                 |                 |        |        |        |        |       |       |       |       |
|--|-----------------|--------|--------|--------|--------|-------|-------|-------|-------|
| Conductor size                           | mm <sup>2</sup> | 1200   | 1600   | 2000   | 2500   |       |       |       |       |
| Conductor diameter                       | mm              | 43,4   | 51,0   | 56,1   | 62,9   |       |       |       |       |
| Diameter over s/c conductor screen       | mm              | 47,6   | 55,6   | 61,1   | 67,1   |       |       |       |       |
| Diameter over XLPE insulation            | mm              | 82,0   | 90,1   | 96,0   | 102,4  |       |       |       |       |
| Diameter over s/c core screen            | mm              | 84,9   | 93,0   | 98,9   | 105,3  |       |       |       |       |
| Diameter over CSA sheath                 | mm              | 108,4  | 117,6  | 125,0  | 130,0  |       |       |       |       |
| Final diameter of cable (D)              | mm              | 121,6  | 130,8  | 138,2  | 143,2  |       |       |       |       |
| Cable mass (approximate)                 | kg/m            | 13,2   | 15,4   | 17,3   | 19,6   |       |       |       |       |
| Gross mass (500 m) (approximate)         | kg              | 7970   | 9070   | 10000  | 11200  |       |       |       |       |
| Minimum installation bending radius      | m               | 3,65   | 3,92   | 4,15   | 4,30   |       |       |       |       |
| ELECTRICAL RATINGS                       |                 |        |        |        |        |       |       |       |       |
| DC Resistance @ 20°C                     | Ω/km            | 0,0247 | 0,0186 | 0,0149 | 0,0119 |       |       |       |       |
| Max Electric stress at conductor screen  | kV/mm           | 5,90   | 5,67   | 5,53   | 5,37   |       |       |       |       |
| Min Electric stress at insulation screen | kV/mm           | 3,42   | 3,50   | 3,52   | 3,52   |       |       |       |       |
| Capacitance                              | μF/km           | 0,256  | 0,288  | 0,308  | 0,328  |       |       |       |       |
| Zero Sequence Resistance @ 90 °C         | Ω/km            | 0,0821 | 0,0703 | 0,0640 | 0,0578 |       |       |       |       |
| Zero Sequence Reactance @ 90 °C          | Ω/km            | 0,0690 | 0,0641 | 0,0617 | 0,0575 |       |       |       |       |
| ELECTRICAL RATINGS (FORMATION BASED)     |                 |        |        |        |        |       |       |       |       |
|  |                 | Tref   | *Flat  | Tref   | *Flat  | Tref  | *Flat | Tref  | *Flat |
| Current rating in ground                 | Amps            | 851    | 962    | 963    | 1119   | 1053  | 1253  | 1140  | 1399  |
| Current rating in air in shade           | Amps            | 1299   | 1554   | 1517   | 1857   | 1692  | 2113  | 1885  | 2423  |
| AC Resistance @ 90 °C                    | Ω/km            | 0,032  | 0,032  | 0,024  | 0,024  | 0,019 | 0,019 | 0,016 | 0,016 |
| Reactance                                | Ω/km            | 0,124  | 0,183  | 0,119  | 0,177  | 0,116 | 0,174 | 0,111 | 0,169 |
| Impedance                                | Ω/km            | 0,128  | 0,185  | 0,121  | 0,179  | 0,118 | 0,175 | 0,113 | 0,170 |
| Sheath standing voltage outer phases     | V/km            | 47,2   | 122,0  | 52,8   | 141,0  | 57,5  | 157,0 | 61,4  | 175,0 |
| SHORT CIRCUIT RATINGS                    |                 |        |        |        |        |       |       |       |       |
| Symmetrical fault rating (250 °C)        | kA (1 s)        | 113,0  |        | 151,0  |        | 189,0 |       | 236,0 |       |
| Earth fault rating (150 °C)              | kA (1 s)        | 53,6   |        | 57,9   |        | 61,3  |       | 63,9  |       |

#Note LLDPE default, datasheet applicable for MDPE and HDPE where required.

The current ratings above are based on standard laying conditions for a single circuit in isolation as follows:

- Conductor temperature = 90 °C
- Soil thermal resistance = 1,2 K·m/W
- Soil temperature = 25 °C
- Air temperature = 30 °C
- Depth of burial = 1200 mm
- \* Flat spacing 2D
- ±5% tolerance on dimensions



DISCLAIMER: CBI reserves the right to change product specifications from time to time to effect improvements and /or enhancements and accepts no liability arising from any difference between the published parameters of this data sheet and the finished product, unless by prior written agreement.

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