

# Low Voltage 4 Core Zerotox Bells Cables

## 1kV Armoured ECC

**Description:** 4 Core Cu XLPE NHL SFR SWA ECC NHL SFR (Zerotox), 1000 V  
**Specification:** SANS 1507

**F2CC 4nnn ZZ 323 0K0S (White Stripe)**

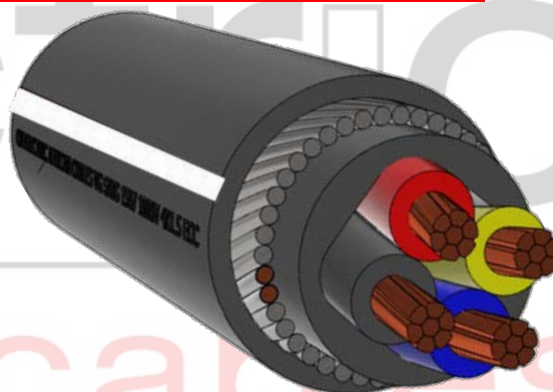
*Last updated: January 2026*

| PHYSICAL                  | ... naaa ...        | 4915   | 4925   | 4004   | 4006   | 4010  | 4016# |
|---------------------------|---------------------|--------|--------|--------|--------|-------|-------|
| Conductor size            | mm <sup>2</sup> nom | 1,5    | 2,5    | 4      | 6      | 10    | 16    |
| Conductor diameter        | mm app              | 1,6    | 2,0    | 2,6    | 3,1    | 3,9   | 4,5   |
| Insulation diameter       | mm app              | 3,0    | 3,4    | 4,0    | 4,5    | 5,3   | 5,9   |
| Bedding diameter          | mm app              | 9,0    | 10,0   | 11,4   | 12,7   | 14,6  | 15,4  |
| Armour diameter           | mm app              | 10,8   | 11,8   | 13,2   | 14,5   | 16,4  | 17,2  |
| Cable diameter            | mm app              | 14,0   | 15,1   | 16,4   | 17,7   | 19,9  | 20,6  |
| Length of cable on a drum | m                   | 500    | 500    | 500    | 500    | 500   | 500   |
| Cable mass (approximate)  | kg/m app            | 0,4    | 0,5    | 0,6    | 0,7    | 0,9   | 1,1   |
| Gross mass on drum        | kg app              | 216    | 251    | 308    | 384    | 497   | 600   |
| Bending radius            | mm min              | 140    | 151    | 164    | 177    | 199   | 206   |
| ELECTRICAL                |                     |        |        |        |        |       |       |
| DC Resistance @ 20 °C     | Ω/km                | 12,100 | 7,410  | 4,610  | 3,080  | 1,830 | 1,150 |
| AC Resistance @ 90 °C     | Ω/km                | 15,429 | 9,449  | 5,878  | 3,927  | 2,334 | 1,467 |
| Reactance X+              | Ω/km                | 0,069  | 0,065  | 0,065  | 0,065  | 0,065 | 0,057 |
| Impedance Z+              | Ω/km                | 15,429 | 9,449  | 5,879  | 3,928  | 2,334 | 1,468 |
| Capacitance C+            | µF/km               | 0,144  | 0,159  | 0,177  | 0,193  | 0,215 | 0,318 |
| Resistance Ro             | Ω/km                | 33,683 | 24,352 | 18,316 | 12,858 | 9,161 | 6,329 |
| Reactance Xo              | Ω/km                | 0,419  | 0,382  | 0,361  | 0,342  | 0,327 | 0,309 |
| CURRENT RATINGS           |                     |        |        |        |        |       |       |
| Ground                    | Amps                | 30     | 39     | 51     | 64     | 85    | 112   |
| Ducts in ground           | Amps                | 24     | 32     | 41     | 51     | 68    | 90    |
| Air in Shade              | Amps                | 26     | 34     | 45     | 57     | 77    | 104   |
| Air in sunlight           | Amps                | 23     | 30     | 40     | 50     | 68    | 91    |
| SHORT CIRCUIT RATING      |                     |        |        |        |        |       |       |
| Symmetrical (250 °C)      | kA (1 sec)          | 0,2    | 0,4    | 0,6    | 0,9    | 1,4   | 2,289 |
| Earth fault (150 °C)      | kA (1 sec)          | 0,4*   | 0,5*   | 0,6    | 0,8    | 1,0   | 1,4   |
| Three Phase Volt drop     | mV/A/m              | 26,7   | 16,4   | 10,2   | 6,8    | 4,0   | 2,5   |

\* In practice the earth fault rating must be limited to symmetrical fault rating.  
# Shaped

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

- Conductor temperature = 90 °C
- Soil thermal resistivity = 1,2 K·m/W
- Soil temperature = 25 °C
- Air temperature = 30 °C
- Depth of burial = 500 mm
- 5% tolerance on dimensions



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