



## Cable Description

Circular stranded hard-drawn copper phase conductor, XLPE insulated with concentrically arranged bare earth conductors. Polyethylene sheathed 600/1000 V house service connection cable. Nylon ripcord laid under sheath. Manufactured to SANS 1507-6.

- Small overall diameter - concentric construction
- Lower mass - due to smaller diameter - no steel wire armour
- Increased safety - reliable earthing
- Improved reliability - UV stable sheath and core insulation
- Tamper and vandal proof - unauthorised access to phase conductor inhibited by concentric layer
- Easy strip with nylon ripcord

## Technical Data

### Electrical Properties

| Cable Size (mm <sup>2</sup> )                  | 4     | 10    |
|--|-------|-------|
| Phase Conductor Resistance (Ohm/km) DC @ 20 °C | 4,80  | 1,90  |
| Phase Core Impedance (Z) (Ohm/km)              | 5,88  | 2,34  |
| Current Rating (A)*                            | 30    | 50    |
| Symmetrical Short Circuit Rating for 1s in kA  | 0,572 | 1,431 |

\* Note: - In air, with 30 °C ambient with maximum conductor temperature 90 °C

### Mechanical Properties

| Cable Size (mm <sup>2</sup> )     | 4        | 10        |
|-----------------------------------|----------|-----------|
| Phase Conductor {No. x OD} (mm)   | 7 x 0,92 | 7 x 1,45  |
| Nominal Insulation Thickness (mm) | 1,0      | 1,0       |
| Earth Size (mm <sup>2</sup> )     | 4        | 10        |
| Earth Conductor {No. x OD} (mm)   | 8 x 0,85 | 18 x 0,85 |
| Nominal Sheath Thickness (mm)     | 1,4      | 1,4       |
| Approximate Cable OD (mm)         | 9,0      | 11,0      |
| Approximate Cable Mass (kg/km)    | 121      | 249       |

### Installation Data

| Span (m)  |                    | 10 | 20  | 30  | 40  | 50   | Based on |        |
|-----------|--------------------|----|-----|-----|-----|------|----------|--------|
|           |                    |    |     |     |     |      | UTS**    | MWT*** |
| SAG* (mm) | 4 mm <sup>2</sup>  | 40 | 165 | 370 | 650 | 1020 | 1480     | 370    |
| SAG* (mm) | 10 mm <sup>2</sup> | 35 | 140 | 310 | 550 | 870  | 3600     | 900    |

- Note:**
- \* Assuming worst conditions, i.e. temperature -5,5°C with simultaneous wind speed of 31m/s and measured at midspan.
  - \*\* UTS = Minimum ultimate tensile strength. Safety factor of 2,5.
  - \*\*\* MWT = Minimum working tension.