



Images not to scale. Follow table for dimensions

APPLICATION

POLY CAB LV CU IEC 60502-1 0.6/1 KV MC-3 SWA, stranded compacted copper conductor, XLPE insulated, and PVC sheathed armoured cable confirming to IEC 60502-1 is suitable for fixed installation such as distribution network or industrial installation. These cable cables are designed for systems with rated AC voltage 1KV ($U_m=1.2$ KV) & ≤ 1.5 KV (with a maximum 1.8 KV DC) between two live conductor.

CHARACTERISTICS

Voltage Rating

Nominal Voltage: 0.6/1 (1.2) kV

Operation Temperature

Max. operating temperature: +90°C

Max. Short Circuit Temperature: 250°C

CONSTRUCTION

- Conductor: Circular Compacted or Stranded Copper conductor as per IEC 60228, class 2
- Insulation: XLPE as per IEC 60502-1
- Inner covering: Extruded or Lapped PVC
- Armouring: Galvanised steel wire armoured (SWA)
- Outer Sheath: Extruded Polyvinylchloride (ST2) or Polyethylene (ST7) or Halogen free (ST8) as per IEC 60502-1

Core Identification

Red, Yellow, and Black

Bending Radius:

Fixed Installation: 12 x Overall diameter

Test Voltage

3.5kV AC

OUTSTANDING FEATURES

- High life
- High Insulation resistance
- Flame retardant
- Low Halogen
- Low smoke
- UV resistant

STANDARD FOLLOWS

IEC 60228

IEC 60502-1

IEC 60332-1-2

COMPLIANCE

Conductor resistance IEC 60228

Insulation resistance IEC 60502-1

Shrinkage test IEC 60811-503

Flame Retardant test IEC 60332-1-2

OUR ACCREDITATIONS



APPROVAL



NOTES

The above cable is also available with EPR/HEPR insulation type.

Weight & Dimension Data

| Product Code | Nominal Cross-sectional Area | Nominal Thickness | | Nominal Diameter | | Weight (Approx.) | |
|----------------------|------------------------------|-------------------|----------------|------------------|----------------|---------------------|-------|
| | | Insulation | Inner covering | Sheath | Armouring wire | | |
| | | mm ² | mm | mm | mm | mm | |
| LVIE07CXSWY2003C004S | 4 | 0.70 | 1.00 | 1.40 | 0.80 | 14.5 | 430 |
| LVIE07CXSWY2003C006S | 6 | 0.70 | 1.00 | 1.50 | 1.25 | 17.3 | 600 |
| LVIE07CXSWY2003C010S | 10 | 0.70 | 1.00 | 1.50 | 1.25 | 18.5 | 820 |
| LVIE07CXSWY2003C016S | 16 | 0.70 | 1.00 | 1.60 | 1.25 | 18.0 | 970 |
| LVIE07CXSWY2003C025S | 25 | 0.90 | 1.00 | 1.70 | 1.60 | 22.8 | 1470 |
| LVIE07CXSWY2003C035S | 35 | 0.90 | 1.00 | 1.80 | 1.60 | 24.9 | 1830 |
| LVIE07CXSWY2003C050S | 50 | 1.00 | 1.00 | 1.90 | 1.60 | 28.0 | 2400 |
| LVIE07CXSWY2003C070S | 70 | 1.10 | 1.00 | 2.10 | 2.00 | 32.3 | 3330 |
| LVIE07CXSWY2003C095S | 95 | 1.10 | 1.20 | 2.20 | 2.00 | 35.7 | 4230 |
| LVIE07CXSWY2003C120S | 120 | 1.20 | 1.20 | 2.30 | 2.00 | 38.6 | 5130 |
| LVIE07CXSWY2003C150S | 150 | 1.40 | 1.40 | 2.50 | 2.50 | 43.9 | 6580 |
| LVIE07CXSWY2003C185S | 185 | 1.60 | 1.40 | 2.60 | 2.50 | 47.8 | 7880 |
| LVIE07CXSWY2003C240S | 240 | 1.70 | 1.40 | 2.80 | 2.50 | 52.5 | 9720 |
| LVIE07CXSWY2003C300S | 300 | 1.80 | 1.60 | 3.00 | 2.50 | 57.5 | 11850 |
| LVIE07CXSWY2003C400S | 400 | 2.00 | 1.60 | 3.30 | 2.50 | 63.2 | 14400 |
| LVIE07CXSWY2003C500S | 500 | 2.20 | 1.80 | 3.50 | 3.15 | 72.3 | 19320 |
| LVIE07CXSWY2003C630S | 630 | 2.40 | 1.80 | 3.80 | 3.15 | 79.4 | 23680 |

Electrical Characteristics:

Current rating and maximum DC conductor resistance.

| Nominal Cross-sectional area | Buried direct in the ground at 20°C | In single way Ducts at 30°C | In air at 30°C | Maximum DC conductor Resistance at 20°C | |
|------------------------------|-------------------------------------|-----------------------------|----------------|-----------------------------------------|-------|
| | mm ² | Amp. | Amp. | Amp. | Ω/km |
| 4 | 49 | 45 | 45 | 45 | 4.61 |
| 6 | 60 | 56 | 57 | 57 | 3.08 |
| 10 | 80 | 75 | 77 | 77 | 1.83 |
| 16 | 103 | 96 | 98 | 98 | 1.15 |
| 25 | 132 | 122 | 131 | 131 | 0.727 |
| 35 | 158 | 146 | 162 | 162 | 0.524 |
| 50 | 187 | 173 | 197 | 197 | 0.387 |
| 70 | 229 | 211 | 249 | 249 | 0.268 |

| Nominal Cross-sectional area mm ² | Buried direct in the ground at 20°C | In single way Ducts at 30°C | In air at 30°C | Maximum DC conductor Resistance at 20°C Ω/km |
|-------------------------------------------------|-------------------------------------|-----------------------------|----------------|-------------------------------------------------|
| | Amp. | Amp. | Amp. | |
| 95 | 274 | 252 | 307 | 0.193 |
| 120 | 310 | 284 | 352 | 0.153 |
| 150 | 347 | 317 | 402 | 0.124 |
| 185 | 391 | 357 | 464 | 0.0991 |
| 240 | 451 | 409 | 550 | 0.0754 |
| 300 | 507 | 456 | 631 | 0.0601 |
| 400 | 570 | 508 | 728 | 0.047 |
| 500 | 640 | 562 | 836 | 0.0366 |
| 630 | 714 | 616 | 957 | 0.0283 |

Maximum conductor temperature 90°C
 Ambient air temperature 30°C
 Ground temperature 20°C
 Depth of laying 750 mm
 Thermal resistivity of soil 1.5 K.m/W

De-Rating Factor

Current rating de-rating factors for other than 30°C ambient air temperature.

| | | | | | | | | |
|------------------|------|------|------|------|------|------|------|------|
| Air Temperature | 20 | 25 | 35 | 40 | 45 | 50 | 55 | 60 |
| De-rating factor | 1.08 | 1.04 | 0.96 | 0.91 | 0.87 | 0.82 | 0.76 | 0.71 |

Current rating de-rating factors for other than 20°C ground temperature.

| | | | | | | | | |
|--------------------|------|------|------|------|------|------|-----|------|
| Ground Temperature | 10 | 15 | 25 | 30 | 35 | 40 | 45 | 50 |
| De-rating factor | 1.07 | 1.04 | 0.96 | 0.93 | 0.89 | 0.85 | 0.8 | 0.76 |

Current rating de-rating factors for other than 30°C ground temperature for cables in Ducts.

| | | | | | | |
|--------------------|------|------|------|------|------|------|
| Ground Temperature | 15 | 25 | 35 | 40 | 45 | 50 |
| De-rating factor | 1.12 | 1.04 | 0.96 | 0.91 | 0.87 | 0.82 |