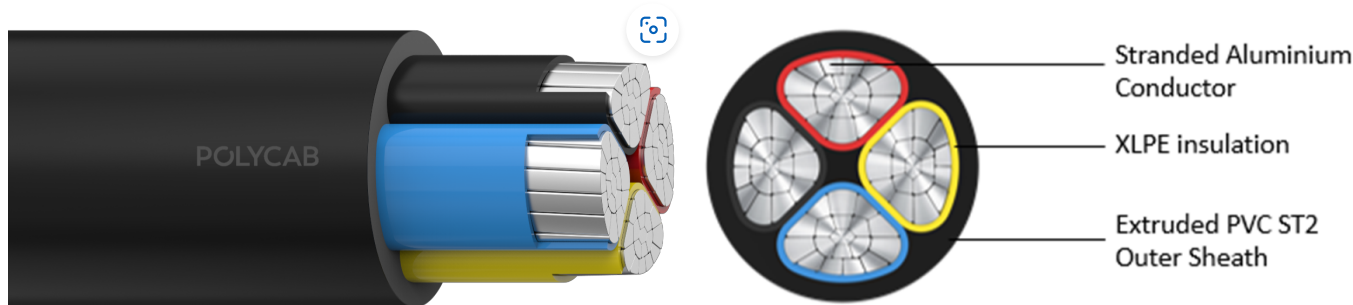


# POLYCAB LV AL IEC 60502-1 0.6/1 KV MC-4 UA

## Power Cable, 0.6/1 (1.2) KV AC



Images not to scale. Follow table for dimensions

### APPLICATION

POLYCAB LV AL IEC 60502-1 0.6/1 KV MC-4 UA, stranded compacted aluminium conductor, XLPE insulated, and PVC sheathed unarmoured 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) &  $\leq 1.5$  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 up to 90°C

Max. Short Circuit Temperature: 250°C

### CONSTRUCTION

- Conductor: Circular Compacted or Stranded Aluminium conductor as per IEC 60228, class 2
- Insulation: XLPE as per IEC 60502-1
- Outer Sheath: Extruded Polyvinylchloride (ST2) or Polyethylene (ST7) or Halogen free (ST8) as per IEC 60502-1

#### Core Identification

Red, Yellow, Blue 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.

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## Power Cable, 0.6/1 (1.2) KV AC

### Weight & Dimension Data

| Product Code         | Nominal Cross-sectional Area | Nominal insulation thickness | Nominal sheath thickness | Overall diameter (Approx.) | Weight (Approx.) |
|----------------------|------------------------------|------------------------------|--------------------------|----------------------------|------------------|
|                      | mm <sup>2</sup>              | mm                           | mm                       | mm                         | Kg/Km            |
| LVIE07AXUAY2004C004S | 4                            | 0.70                         | 1.40                     | 14.5                       | 210              |
| LVIE07AXUAY2004C006S | 6                            | 0.70                         | 1.40                     | 15.8                       | 260              |
| LVIE07AXUAY2004C010S | 10                           | 0.70                         | 1.50                     | 17.3                       | 330              |
| LVIE07AXUAY2004C016S | 16                           | 0.70                         | 1.50                     | 18.7                       | 420              |
| LVIE07AXUAY2004C025S | 25                           | 0.90                         | 1.60                     | 20.5                       | 500              |
| LVIE07AXUAY2004C035S | 35                           | 0.90                         | 1.70                     | 23.0                       | 650              |
| LVIE07AXUAY2004C050S | 50                           | 1.00                         | 1.80                     | 26.8                       | 890              |
| LVIE07AXUAY2004C070S | 70                           | 1.10                         | 1.90                     | 30.9                       | 1190             |
| LVIE07AXUAY2004C095S | 95                           | 1.10                         | 2.10                     | 34.9                       | 1560             |
| LVIE07AXUAY2004C120S | 120                          | 1.20                         | 2.20                     | 37.4                       | 1910             |
| LVIE07AXUAY2004C150S | 150                          | 1.40                         | 2.40                     | 42.0                       | 2380             |
| LVIE07AXUAY2004C185S | 185                          | 1.60                         | 2.50                     | 46.6                       | 2920             |
| LVIE07AXUAY2004C240S | 240                          | 1.70                         | 2.70                     | 52.1                       | 3700             |
| LVIE07AXUAY2004C300S | 300                          | 1.80                         | 2.90                     | 57.6                       | 4570             |
| LVIE07AXUAY2004C400S | 400                          | 2.00                         | 3.20                     | 64.3                       | 5700             |
| LVIE07AXUAY2004C500S | 500                          | 2.20                         | 3.40                     | 73.2                       | 7440             |
| LVIE07AXUAY2004C630S | 630                          | 2.40                         | 3.70                     | 81.6                       | 9290             |

### 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 <sup>2</sup>              | Amp.                                | Amp.                        | Amp.           | Ω/km                                    |
| 4                            | 38                                  | 36                          | 35             | 7.41                                    |
| 6                            | 50                                  | 46                          | 46             | 4.61                                    |
| 10                           | 62                                  | 57                          | 59             | 3.08                                    |
| 16                           | 80                                  | 74                          | 76             | 1.91                                    |
| 25                           | 103                                 | 95                          | 102            | 1.2                                     |
| 35                           | 123                                 | 113                         | 125            | 0.868                                   |
| 50                           | 145                                 | 134                         | 152            | 0.641                                   |
| 70                           | 177                                 | 164                         | 193            | 0.443                                   |
| 95                           | 213                                 | 196                         | 238            | 0.32                                    |

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## Power Cable, 0.6/1 (1.2) KV AC

| 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 <sup>2</sup>              | Amp.                                | Amp.                        | Amp.           | Ω/km                                    |
| 120                          | 241                                 | 222                         | 274            | 0.253                                   |
| 150                          | 269                                 | 248                         | 312            | 0.206                                   |
| 185                          | 305                                 | 281                         | 362            | 0.164                                   |
| 240                          | 353                                 | 324                         | 431            | 0.125                                   |
| 300                          | 399                                 | 364                         | 497            | 0.100                                   |
| 400                          | 454                                 | 412                         | 579            | 0.0778                                  |
| 500                          | 516                                 | 463                         | 673            | 0.0605                                  |
| 630                          | 585                                 | 518                         | 783            | 0.0469                                  |

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 |