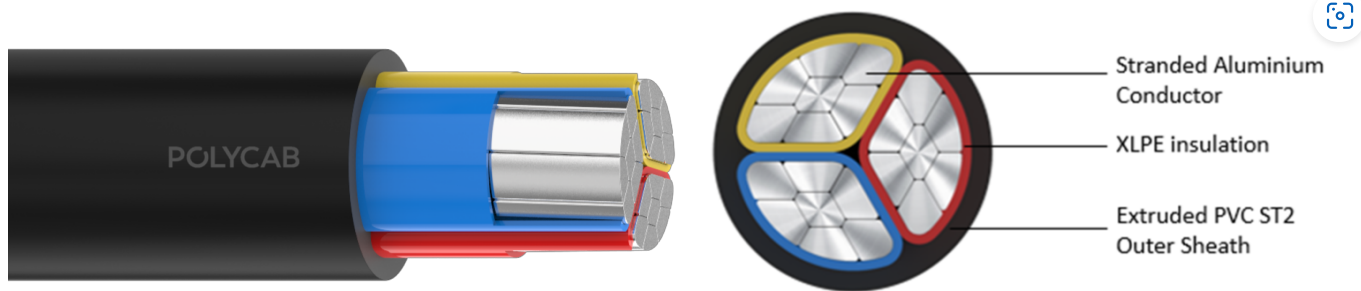


# POLYCAB LV AL IEC 60502-1 0.6/1 KV MC-3 UA

## 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-3 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
- Inner covering: Extruded or Lapped PVC
- 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.

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### 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
LVIE07AXUAY2003C004S	4	0.70	1.30	13.2	180
LVIE07AXUAY2003C006S	6	0.70	1.40	14.6	220
LVIE07AXUAY2003C010S	10	0.70	1.40	16.6	280
LVIE07AXUAY2003C016S	16	0.70	1.50	18.7	370
LVIE07AXUAY2003C025S	25	0.90	1.50	17.2	380
LVIE07AXUAY2003C035S	35	0.90	1.60	19.3	480
LVIE07AXUAY2003C050S	50	1.00	1.70	22.4	670
LVIE07AXUAY2003C070S	70	1.10	1.90	25.9	910
LVIE07AXUAY2003C095S	95	1.10	2.00	28.9	1160
LVIE07AXUAY2003C120S	120	1.20	2.10	31.8	1440
LVIE07AXUAY2003C150S	150	1.40	2.20	35.5	1780
LVIE07AXUAY2003C185S	185	1.60	2.40	39.6	2200
LVIE07AXUAY2003C240S	240	1.70	2.50	44.1	2770
LVIE07AXUAY2003C300S	300	1.80	2.70	48.7	3420
LVIE07AXUAY2003C400S	400	2.00	3.00	54.4	4270
LVIE07AXUAY2003C500S	500	2.20	3.20	61.8	5580
LVIE07AXUAY2003C630S	630	2.40	3.40	68.7	6940

### 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	0.1
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