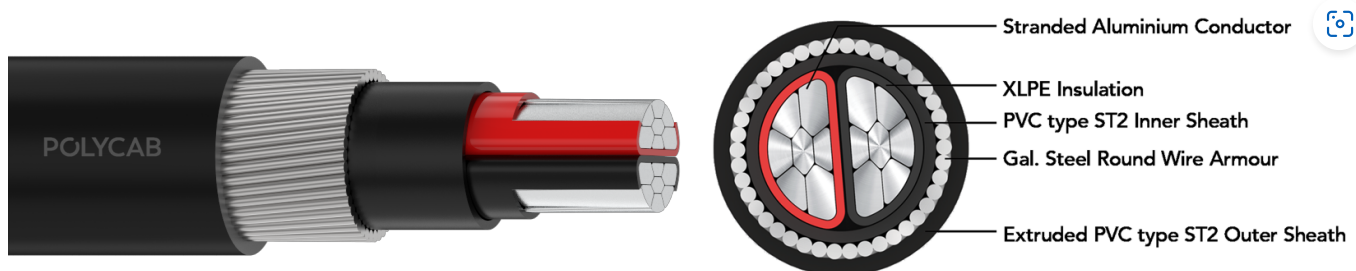


# POLYCAB LV AL IEC 60502-1 0.6/1 KV MC-2 SWA

## 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-2 SWA, stranded compacted aluminium 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) &  $\leq 1.5$  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
- 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 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 Thickness			Nominal Diameter (Approx.)		Weight (Approx.) Kg/Km
		Insulation	Inner covering	Sheath	Armouring wire	Overall	
	mm <sup>2</sup>	mm	mm	mm	mm	mm	
LVIE07AXSWY2002C004S	4	0.70	1.00	1.40	0.80	14.5	320
LVIE07AXSWY2002C006S	6	0.70	1.00	1.50	1.25	16.5	460
LVIE07AXSWY2002C010S	10	0.70	1.00	1.50	1.25	18.5	560
LVIE07AXSWY2002C016S	16	0.70	1.00	1.60	1.25	18.0	570
LVIE07AXSWY2002C025S	25	0.90	1.00	1.70	1.60	21.3	840
LVIE07AXSWY2002C035S	35	0.90	1.00	1.80	1.60	23.1	990
LVIE07AXSWY2002C050S	50	1.00	1.00	1.90	1.60	25.9	1210
LVIE07AXSWY2002C070S	70	1.10	1.00	2.00	2.00	29.7	1660
LVIE07AXSWY2002C095S	95	1.10	1.20	2.10	2.00	32.7	1980
LVIE07AXSWY2002C120S	120	1.20	1.20	2.30	2.00	34.8	2260
LVIE07AXSWY2002C150S	150	1.40	1.20	2.40	2.50	39.0	2910
LVIE07AXSWY2002C185S	185	1.60	1.40	2.60	2.50	43.0	3460
LVIE07AXSWY2002C240S	240	1.70	1.40	2.70	2.50	46.8	4030
LVIE07AXSWY2002C300S	300	1.80	1.60	2.90	2.50	51.3	4750
LVIE07AXSWY2002C400S	400	2.00	1.60	3.10	2.50	56.0	5590
LVIE07AXSWY2002C500S	500	2.20	1.60	3.40	3.15	63.9	7500
LVIE07AXSWY2002C630S	630	2.40	1.80	3.70	3.15	70.5	8950

### 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	45	36	42	7.41
6	59	46	55	4.61
10	73	57	70	3.08
16	96	74	91	1.91
25	123	95	120	1.2
35	147	113	146	0.868
50	174	134	178	0.641
70	213	164	224	0.443
95	254	196	276	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	287	222	316	0.253
150	320	248	361	0.206
185	362	281	417	0.164
240	416	324	493	0.125
300	467	364	564	0.1
400	526	412	652	0.0778
500	592	463	751	0.0605
630	661	518	862	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