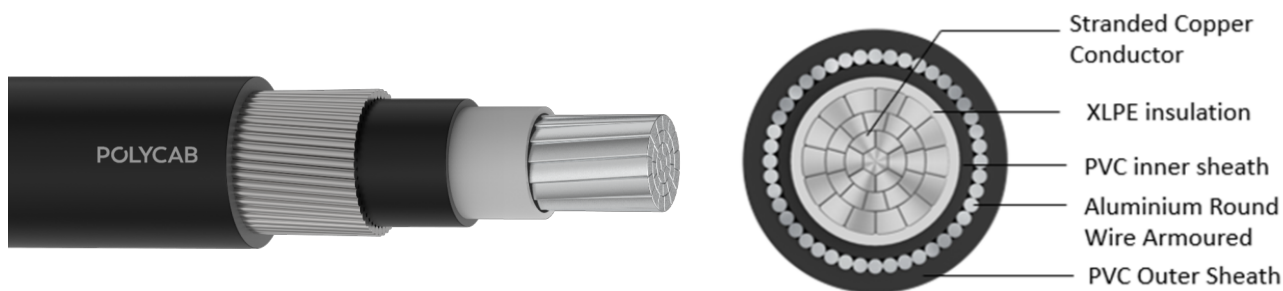


# POLYCAB LV AL IEC 60502-1 0.6/1 KV SC AWA

## 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 SC AWA, 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: Aluminium wire armoured (AWA)
- Outer Sheath: Extruded Polyvinylchloride (ST2) or Polyethylene (ST7) or Halogen free (ST8) as per IEC 60502-1

#### Core Identification

Red / Yellow / Blue / Black / Natural

#### 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



# POLYCAB LV AL IEC 60502-1 0.6/1 KV SC AWA

## 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.)
		Insulation	Inner covering	Sheath	Armouring wire	Overall	
LVIE07AXAWY2001C004S	4	0.70	1.00	1.40	0.80	10.4	135
LVIE07AXAWY2001C006S	6	0.70	1.00	1.40	0.80	10.9	150
LVIE07AXAWY2001C010S	10	0.70	1.00	1.40	0.80	11.9	175
LVIE07AXAWY2001C016S	16	0.70	1.00	1.40	0.80	12.4	205
LVIE07AXAWY2001C025S	25	0.90	1.00	1.40	0.80	14.0	275
LVIE07AXAWY2001C035S	35	0.90	1.00	1.50	1.25	16.1	350
LVIE07AXAWY2001C050S	50	1.00	1.00	1.50	1.25	17.7	425
LVIE07AXAWY2001C070S	70	1.10	1.00	1.60	1.25	19.6	550
LVIE07AXAWY2001C095S	95	1.10	1.00	1.60	1.60	21.8	700
LVIE07AXAWY2001C120S	120	1.20	1.00	1.70	1.60	23.7	825
LVIE07AXAWY2001C150S	150	1.40	1.00	1.80	1.60	25.7	975
LVIE07AXAWY2001C185S	185	1.60	1.00	1.80	1.60	27.7	1150
LVIE07AXAWY2001C240S	240	1.70	1.00	1.90	1.60	30.3	1375
LVIE07AXAWY2001C300S	300	1.80	1.00	2.00	2.00	33.6	1700
LVIE07AXAWY2001C400S	400	2.00	1.20	2.20	2.00	37.2	2100
LVIE07AXAWY2001C500S	500	2.20	1.20	2.30	2.00	41.3	2625
LVIE07AXAWY2001C630S	630	2.40	1.20	2.40	2.50	46.1	3275
LVIE07AXAWY2001C800S	800	2.60	1.40	2.60	2.50	50.9	4025
LVIE07AXAWY2001C01KS	1000	2.80	1.40	2.70	2.50	55.4	4825

### Electrical Characteristics:

**Current rating and maximum DC conductor resistance.**

# POLYCAB LV AL IEC 60502-1 0.6/1 KV SC AWA

## 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
	Flat touching	Trefoil	Flat touching	Trefoil	Flat touching	Trefoil	
mm <sup>2</sup>	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
4	46	40	36	34	42	36	7.41
6	59	51	47	43	55	47	4.61
10	75	64	58	54	70	61	3.08
16	96	82	75	69	92	79	1.91
25	124	106	96	89	123	108	1.2
35	148	125	115	106	151	131	0.868
50	174	148	135	124	182	160	0.641
70	214	181	165	151	230	204	0.443
95	262	218	199	181	290	259	0.32
120	298	248	226	206	339	304	0.253
150	333	276	252	229	385	345	0.206
185	377	313	285	258	447	403	0.164
240	436	362	329	298	528	477	0.125
300	490	406	369	333	606	550	0.1
400	559	463	421	378	712	648	0.0778
500	635	524	476	426	826	754	0.0605
630	716	590	536	477	955	872	0.0469
800	799	657	596	528	1091	998	0.0367
1000	877	718	652	575	1229	1124	0.0291

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

**POLYCAB LV AL IEC 60502-1 0.6/1 KV SC AWA**  
**Power Cable, 0.6/1 (1.2) KV AC**



**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

POLYCAB