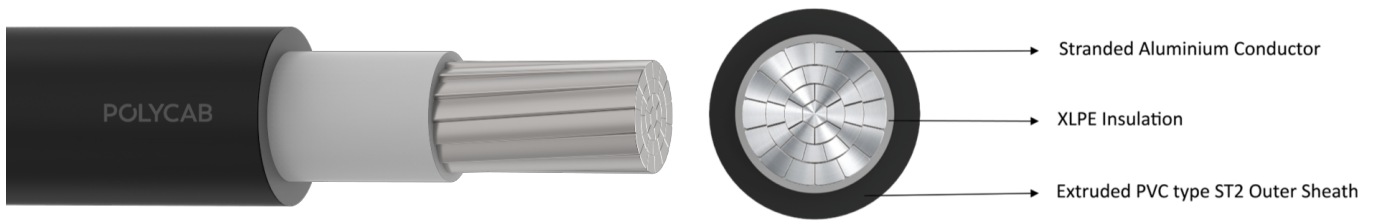


# POLYCAB LV AL IEC 60502-1 0.6/1 KV SC UA

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

#### Core Identification

Red / Yellow / Blue / Black / Grey / 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



### 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
LVIE07AXUAY2001C004S	4	0.70	1.40	7.0	60
LVIE07AXUAY2001C006S	6	0.70	1.40	7.3	70
LVIE07AXUAY2001C010S	10	0.70	1.40	8.3	85
LVIE07AXUAY2001C016S	16	0.70	1.40	9.3	106
LVIE07AXUAY2001C025S	25	0.90	1.40	10.4	140
LVIE07AXUAY2001C035S	35	0.90	1.40	11.4	180
LVIE07AXUAY2001C050S	50	1.00	1.40	13.0	225
LVIE07AXUAY2001C070S	70	1.10	1.40	14.7	300
LVIE07AXUAY2001C095S	95	1.10	1.50	16.4	410
LVIE07AXUAY2001C120S	120	1.20	1.50	18.1	500
LVIE07AXUAY2001C150S	150	1.40	1.60	20.1	600
LVIE07AXUAY2001C185S	185	1.60	1.60	22.1	750
LVIE07AXUAY2001C240S	240	1.70	1.70	24.7	950
LVIE07AXUAY2001C300S	300	1.80	1.80	27.2	1170
LVIE07AXUAY2001C400S	400	2.00	1.90	30.2	1450
LVIE07AXUAY2001C500S	500	2.20	2.00	34.3	1880
LVIE07AXUAY2001C630S	630	2.40	2.20	38.3	2360
LVIE07AXUAY2001C800S	800	2.60	2.30	42.5	2940
LVIE07AXUAY2001C01KS	1000	2.80	2.40	47.0	3620

### 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
	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

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

## 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
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

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

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



**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

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