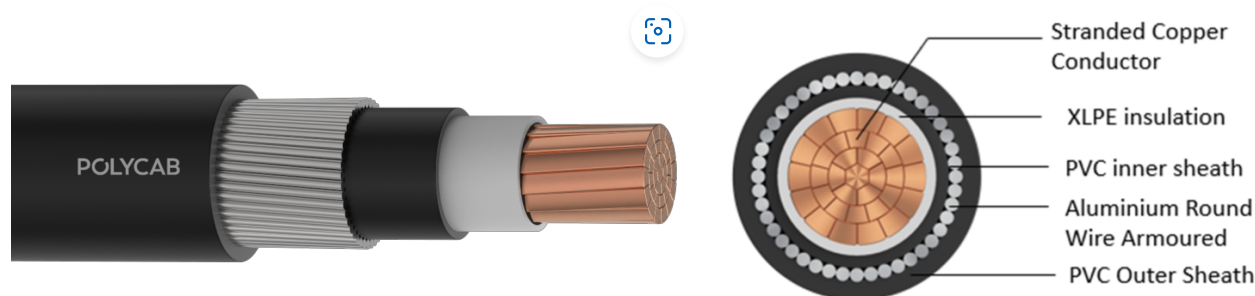


POLYCAB LV CU IEC 60502-1 0.6/1 KV SC AWA

Power Cable, 0.6/1 (1.2) KV AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB LV CU IEC 60502-1 0.6/1 KV SC AWA, stranded compacted copper conductor, XLPE insulated, and PVC sheathed armoured cable conforming 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) & ≤ 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 Copper 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 CU 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		Weight
		Insulation	Inner covering	Sheath	(Approx.)		(Approx.)
					Armouring wire	Overall	
	mm ²	mm	mm	mm	mm	mm	Kg/Km
LVIE07CXAWY2001C004S	4	0.70	1.00	1.40	0.80	10.4	160
LVIE07CXAWY2001C006S	6	0.70	1.00	1.40	0.80	10.9	190
LVIE07CXAWY2001C010S	10	0.70	1.00	1.40	0.80	11.9	250
LVIE07CXAWY2001C016S	16	0.70	1.00	1.40	0.80	12.4	305
LVIE07CXAWY2001C025S	25	0.90	1.00	1.40	0.80	14.0	425
LVIE07CXAWY2001C035S	35	0.90	1.00	1.50	1.25	16.1	575
LVIE07CXAWY2001C050S	50	1.00	1.00	1.50	1.25	17.7	750
LVIE07CXAWY2001C070S	70	1.10	1.00	1.60	1.25	19.6	980
LVIE07CXAWY2001C095S	95	1.10	1.00	1.60	1.60	21.8	1275
LVIE07CXAWY2001C120S	120	1.20	1.00	1.70	1.60	23.7	1575
LVIE07CXAWY2001C150S	150	1.40	1.00	1.80	1.60	25.7	1925
LVIE07CXAWY2001C185S	185	1.60	1.00	1.80	1.60	27.7	2300
LVIE07CXAWY2001C240S	240	1.70	1.00	1.90	1.60	30.3	2875
LVIE07CXAWY2001C300S	300	1.80	1.00	2.00	2.00	33.6	3600
LVIE07CXAWY2001C400S	400	2.00	1.20	2.20	2.00	37.2	4450
LVIE07CXAWY2001C500S	500	2.20	1.20	2.30	2.00	41.3	5775
LVIE07CXAWY2001C630S	630	2.40	1.20	2.40	2.50	46.1	7250
LVIE07CXAWY2001C800S	800	2.60	1.40	2.60	2.50	50.9	9075
LVIE07CXAWY2001C01KS	1000	2.80	1.40	2.70	2.50	55.4	11125

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 ²	Amp.	Amp.	Amp.	Amp.	Amp.	
4	58	51	46	43	53	45	4.61
6	72	63	57	53	67	57	3.08
10	97	83	76	70	91	78	1.83
16	124	106	97	89	119	103	1.15

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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
	Flat touching	Trefoil	Flat touching	Trefoil	Flat touching	Trefoil	
mm ²	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Ω/km
25	160	136	124	114	158	139	0.727
35	191	162	148	136	194	169	0.524
50	225	191	174	160	233	206	0.387
70	275	233	213	195	296	262	0.268
95	337	281	256	233	374	333	0.193
120	383	319	291	264	436	389	0.153
150	428	355	324	294	495	443	0.124
185	483	401	365	330	571	515	0.0991
240	556	461	420	379	674	608	0.0754
300	622	515	469	422	770	697	0.0601
400	703	580	528	473	894	811	0.047
500	785	646	589	525	1023	928	0.0366
630	870	714	651	578	1162	1057	0.0283
800	947	779	707	626	1297	1185	0.0221
1000	1010	834	751	668	1417	1307	0.0176

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