



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB LV CU IEC 60502-1 0.6/1 KV MC-2 SWA, stranded compacted copper 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 Copper 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.

**Weight & Dimension Data**

Product Code	Nominal Cross-sectional Area	Nominal Thickness			Nominal Diameter		Weight (Approx.)	
		Insulation	Inner covering	Sheath	(Approx.)			
					mm	mm		
	mm <sup>2</sup>	mm	mm	mm	mm	mm	Kg/Km	
LVIE07CXSWY2002C004S	4	0.70	1.00	1.40	0.80	14.5	370	
LVIE07CXSWY2002C006S	6	0.70	1.00	1.50	1.25	16.5	500	
LVIE07CXSWY2002C010S	10	0.70	1.00	1.50	1.25	18.5	690	
LVIE07CXSWY2002C016S	16	0.70	1.00	1.60	1.25	18.0	770	
LVIE07CXSWY2002C025S	25	0.90	1.00	1.70	1.60	21.3	1150	
LVIE07CXSWY2002C035S	35	0.90	1.00	1.80	1.60	23.1	1430	
LVIE07CXSWY2002C050S	50	1.00	1.00	1.90	1.60	25.9	1800	
LVIE07CXSWY2002C070S	70	1.10	1.00	2.00	2.00	29.7	2500	
LVIE07CXSWY2002C095S	95	1.10	1.20	2.10	2.00	32.7	3170	
LVIE07CXSWY2002C120S	120	1.20	1.20	2.30	2.00	34.8	3770	
LVIE07CXSWY2002C150S	150	1.40	1.20	2.40	2.50	39.0	4800	
LVIE07CXSWY2002C185S	185	1.60	1.40	2.60	2.50	43.0	5790	
LVIE07CXSWY2002C240S	240	1.70	1.40	2.70	2.50	46.8	7050	
LVIE07CXSWY2002C300S	300	1.80	1.60	2.90	2.50	51.3	8540	
LVIE07CXSWY2002C400S	400	2.00	1.60	3.10	2.50	56.0	10320	
LVIE07CXSWY2002C500S	500	2.20	1.60	3.40	3.15	63.9	13810	
LVIE07CXSWY2002C630S	630	2.40	1.80	3.70	3.15	70.5	16900	

**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.	Ω/km
1.5		33	27	30	12.1
2.5		44	35	40	7.41
4		58	45	53	4.61
6		72	56	67	3.08
10		96	75	91	1.83
16		124	96	119	1.15
25		159	122	154	0.727
35		190	146	189	0.524

Nominal Cross-sectional area mm <sup>2</sup>	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
	Amp.	Amp.	Amp.	Ω/km
50	225	173	229	0.387
70	273	211	288	0.268
95	326	252	354	0.193
120	367	284	405	0.153
150	409	317	461	0.124
185	459	357	530	0.0991
240	525	409	623	0.0754
300	584	456	708	0.0601
400	650	508	807	0.047
500	718	562	914	0.0366
630	786	616	1030	0.0283

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