



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB LV CU IEC 60502-1 0.6/1 KV MC-3.5 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 (Um=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, Yellow, Blue, 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.)			
					Armouring wire	Overall		
	mm <sup>2</sup>	mm	mm	mm	mm	mm	Kg/Km	
LVIE07CXSWY23.5C025S	25	0.90	1.00	1.80	1.60	24.8	1730	
LVIE07CXSWY23.5C035S	35	0.90	1.00	1.80	1.60	26.8	2100	
LVIE07CXSWY23.5C050S	50	1.00	1.00	2.00	1.60	30.6	2400	
LVIE07CXSWY23.5C070S	70	1.10	1.20	2.10	2.00	35.5	3870	
LVIE07CXSWY23.5C095S	95	1.10	1.20	2.30	2.00	39.1	4930	
LVIE07CXSWY23.5C120S	120	1.20	1.20	2.40	2.50	43.7	6380	
LVIE07CXSWY23.5C150S	150	1.40	1.40	2.60	2.50	48.5	7620	
LVIE07CXSWY23.5C185S	185	1.60	1.40	2.70	2.50	52.8	9160	
LVIE07CXSWY23.5C240S	240	1.70	1.60	2.90	2.50	58.5	11410	
LVIE07CXSWY23.5C300S	300	1.80	1.60	3.10	2.50	63.8	13780	
LVIE07CXSWY23.5C400S	400	2.00	1.60	3.40	3.15	71.5	18190	
LVIE07CXSWY23.5C500S	500	2.20	1.80	3.70	3.15	80.6	22410	
LVIE07CXSWY23.5C630S	630	2.40	1.80	3.90	3.15	88.4	27400	

**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
25	132	122	131	0.727	
35	158	146	162	0.524	
50	187	173	197	0.387	
70	229	211	249	0.268	
95	274	252	307	0.193	
120	310	284	352	0.153	
150	347	317	402	0.124	
185	391	357	464	0.0991	
240	451	409	550	0.0754	
300	507	456	631	0.0601	
400	570	508	728	0.047	
500	640	562	836	0.0366	
630	714	616	957	0.0283	

Document No.: 00148.Rev No.: 00 30-12-2023 / We reserve the rights to make technical changes.

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