



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB LV CU IEC 60502-1 0.6/1 KV SC SFA, 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: Aluminium Flat Strip armoured (FSA)
- 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



**Weight & Dimension Data**

Product Code	Nominal Cross-sectional Area	Nominal Thickness			Armouring dimension	Overall Diameter (Approx.)	Weight (Approx.)
		Insulation	Inner covering	Sheath			
	mm <sup>2</sup>	mm	mm	mm	n x mm	mm	Kg/Km
LVIE07CXAFY2001C095S	95	1.10	1.00	1.60	4 x 0.5	19.6	1175
LVIE07CXAFY2001C120S	120	1.20	1.00	1.60	4 x 0.5	21.3	1425
LVIE07CXAFY2001C150S	150	1.40	1.00	1.70	4 x 0.5	23.3	1750
LVIE07CXAFY2001C185S	185	1.60	1.00	1.80	4 x 0.5	25.5	2150
LVIE07CXAFY2001C240S	240	1.70	1.00	1.80	4 x 0.5	27.9	2700
LVIE07CXAFY2001C300S	300	1.80	1.00	1.90	4 x 0.5	30.4	3325
LVIE07CXAFY2001C400S	400	2.00	1.20	2.10	4 x 0.5	34.0	4150
LVIE07CXAFY2001C500S	500	2.20	1.20	2.20	4 x 0.5	38.1	5425
LVIE07CXAFY2001C630S	630	2.40	1.20	2.30	4 x 0.5	41.9	6725
LVIE07CXAFY2001C800S	800	2.60	1.40	2.40	4 x 0.5	46.5	8450
LVIE07CXAFY2001C01KS	1000	2.80	1.40	2.60	4 x 0.5	51.2	10475

**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
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