



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB LV CU IEC 60502-1 0.6/1 KV MC-4 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: Galvanised 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, 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			Armouring dimension	Overall Diameter (Approx.)	Weight (Approx.)
		Insulation	Inner covering	Sheath			
	mm <sup>2</sup>	mm	mm	mm	mm	mm	Kg/Km
LVIE07CXSFY2004C016S	16	0.70	1.00	1.60	4 x 0.2	19.3	880
LVIE07CXSFY2004C025S	25	0.90	1.00	1.70	4 x 0.2	23.1	1310
LVIE07CXSFY2004C035S	35	0.90	1.00	1.80	4 x 0.2	25.6	1700
LVIE07CXSFY2004C050S	50	1.00	1.00	1.90	4 x 0.2	33.0	2360
LVIE07CXSFY2004C070S	70	1.10	1.20	2.00	4 x 0.2	33.9	3220
LVIE07CXSFY2004C095S	95	1.10	1.20	2.20	4 x 0.5	38.5	4470
LVIE07CXSFY2004C120S	120	1.20	1.20	2.30	4 x 0.5	41.0	5490
LVIE07CXSFY2004C150S	150	1.40	1.40	2.50	4 x 0.5	46.0	6810
LVIE07CXSFY2004C185S	185	1.60	1.40	2.60	4 x 0.5	50.6	8290
LVIE07CXSFY2004C240S	240	1.70	1.60	2.80	4 x 0.5	56.5	10560
LVIE07CXSFY2004C300S	300	1.80	1.60	3.00	4 x 0.5	62.0	13020
LVIE07CXSFY2004C400S	400	2.00	1.80	3.30	4 x 0.5	69.1	16160
LVIE07CXSFY2004C500S	500	2.20	1.80	3.60	4 x 0.5	78.8	21700
LVIE07CXSFY2004C630S	630	2.40	1.80	3.90	4 x 0.5	87.2	26980

**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
16	103	96	98	1.15
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

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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 Ω/km
	Amp.	Amp.	Amp.	
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

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