



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB LV AL IEC 60502-1 0.6/1 KV MC-2 SFA, stranded compacted aluminium 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 Aluminium 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 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
LVIE07AXSFY2002C025S	25	0.90	1.00	1.60	4 x 0.2	18.3	500
LVIE07AXSFY2002C035S	35	0.90	1.00	1.70	4 x 0.2	20.1	600
LVIE07AXSFY2002C050S	50	1.00	1.00	1.80	4 x 0.2	22.9	700
LVIE07AXSFY2002C070S	70	1.10	1.00	1.90	4 x 0.2	25.9	900
LVIE07AXSFY2002C095S	95	1.10	1.20	2.00	4 x 0.5	28.9	1200
LVIE07AXSFY2002C120S	120	1.20	1.20	2.20	4 x 0.5	31.6	1500
LVIE07AXSFY2002C150S	150	1.40	1.20	2.30	4 x 0.5	34.8	1800
LVIE07AXSFY2002C185S	185	1.60	1.40	2.40	4 x 0.5	38.6	2200
LVIE07AXSFY2002C240S	240	1.70	1.40	2.60	4 x 0.5	42.6	2700
LVIE07AXSFY2002C300S	300	1.80	1.60	2.80	4 x 0.5	47.1	3300
LVIE07AXSFY2002C400S	400	2.00	1.60	3.00	4 x 0.5	51.8	4000
LVIE07AXSFY2002C500S	500	2.20	1.60	3.20	4 x 0.5	58.2	5000
LVIE07AXSFY2002C630S	630	2.40	1.80	3.50	4 x 0.5	64.8	6200

**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.	
25	123	95	120	120	1.2
35	147	113	146	146	0.868
50	174	134	178	178	0.641
70	213	164	224	224	0.443
95	254	196	276	276	0.32
120	287	222	316	316	0.253
150	320	248	361	361	0.206
185	362	281	417	417	0.164
240	416	324	493	493	0.125

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.	
300	467	364	564	0.1
400	526	412	652	0.0778
500	592	463	751	0.0605
630	661	518	862	0.0469

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