



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB LV AL IEC 60502-1 0.6/1 KV MC-2 UA, stranded compacted aluminium conductor, XLPE insulated, and PVC sheathed unarmoured 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 Aluminium conductor as per IEC 60228, class 2
- Insulation: XLPE as per IEC 60502-1
- 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.

# POLY CAB LV AL IEC 60502-1 0.6/1 KV MC-2 UA

## Power Cable, 0.6/1 (1.2) KV AC

**POLY CAB**  
IDEAS. CONNECTED.

### Weight & Dimension Data

Product Code	Nominal Cross-sectional Area	Nominal insulation thickness	Nominal sheath thickness	Overall diameter (Approx.)	Weight (Approx.)
					mm Kg/Km
LVIE07AXUAY2002C004S	4	0.70	1.30	12.6	155
LVIE07AXUAY2002C006S	6	0.70	1.40	13.8	185
LVIE07AXUAY2002C010S	10	0.70	1.40	15.7	230
LVIE07AXUAY2002C016S	16	0.70	1.50	18.0	300
LVIE07AXUAY2002C025S	25	0.90	1.50	15.7	280
LVIE07AXUAY2002C035S	35	0.90	1.60	17.5	350
LVIE07AXUAY2002C050S	50	1.00	1.70	20.3	480
LVIE07AXUAY2002C070S	70	1.10	1.80	23.3	640
LVIE07AXUAY2002C095S	95	1.10	1.90	25.9	820
LVIE07AXUAY2002C120S	120	1.20	2.00	27.8	1000
LVIE07AXUAY2002C150S	150	1.40	2.20	31.2	1250
LVIE07AXUAY2002C185S	185	1.60	2.30	34.6	1530
LVIE07AXUAY2002C240S	240	1.70	2.50	38.6	1940
LVIE07AXUAY2002C300S	300	1.80	2.60	42.5	2370
LVIE07AXUAY2002C400S	400	2.00	2.90	47.4	2960
LVIE07AXUAY2002C500S	500	2.20	3.10	53.8	3850
LVIE07AXUAY2002C630S	630	2.40	3.30	59.8	4780

### 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
4	45	36	42	7.41
6	59	46	55	4.61
10	73	57	70	3.08
16	96	74	91	1.91
25	123	95	120	1.2
35	147	113	146	0.868

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