



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB LV CU IEC 60502-1 0.6/1 KV MC-3 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 ( $U_m=1.2$  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: +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, 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.

# POLYCAT LV CU IEC 60502-1 0.6/1 KV MC-3 SWA

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

**POLYCAT**  
IDEAS. CONNECTED.

### 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	
LVIE07CXSWY2003C004S	4	0.70	1.00	1.40	0.80	14.5	430	
LVIE07CXSWY2003C006S	6	0.70	1.00	1.50	1.25	17.3	600	
LVIE07CXSWY2003C010S	10	0.70	1.00	1.50	1.25	18.5	820	
LVIE07CXSWY2003C016S	16	0.70	1.00	1.60	1.25	18.0	970	
LVIE07CXSWY2003C025S	25	0.90	1.00	1.70	1.60	22.8	1470	
LVIE07CXSWY2003C035S	35	0.90	1.00	1.80	1.60	24.9	1830	
LVIE07CXSWY2003C050S	50	1.00	1.00	1.90	1.60	28.0	2400	
LVIE07CXSWY2003C070S	70	1.10	1.00	2.10	2.00	32.3	3330	
LVIE07CXSWY2003C095S	95	1.10	1.20	2.20	2.00	35.7	4230	
LVIE07CXSWY2003C120S	120	1.20	1.20	2.30	2.00	38.6	5130	
LVIE07CXSWY2003C150S	150	1.40	1.40	2.50	2.50	43.9	6580	
LVIE07CXSWY2003C185S	185	1.60	1.40	2.60	2.50	47.8	7880	
LVIE07CXSWY2003C240S	240	1.70	1.40	2.80	2.50	52.5	9720	
LVIE07CXSWY2003C300S	300	1.80	1.60	3.00	2.50	57.5	11850	
LVIE07CXSWY2003C400S	400	2.00	1.60	3.30	2.50	63.2	14400	
LVIE07CXSWY2003C500S	500	2.20	1.80	3.50	3.15	72.3	19320	
LVIE07CXSWY2003C630S	630	2.40	1.80	3.80	3.15	79.4	23680	

### 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
			Amp.	Amp.	
mm <sup>2</sup>	Amp.	Amp.	Amp.	Amp.	Ω/km
4	49	45	45	45	4.61
6	60	56	57	57	3.08
10	80	75	77	77	1.83
16	103	96	98	98	1.15
25	132	122	131	131	0.727
35	158	146	162	162	0.524
50	187	173	197	197	0.387
70	229	211	249	249	0.268

**POLY CAB LV CU IEC 60502-1 0.6/1 KV MC-3 SWA  
Power Cable, 0.6/1 (1.2) KV AC**

**POLY CAB**  
IDEAS. CONNECTED.

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.	
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

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