



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB A2XY MC-3.5, Stranded compacted aluminium conductor, XLPE insulated, and PVC sheathed confirming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthing) systems with rated voltage up to and including 1100 V. This cable is also suitable for DC systems with rated voltage up to and including 1500 V to earth.

## CHARACTERISTICS

### Voltage Rating

650/1100 V

### Operation Temperature

Max.: 90°C

Short circuit temperature 250°C

### CONSTRUCTION

- Stranded compacted aluminium conductor as per IS 8130, class 2
- Insulated with Cross Linked Polyethylene (XLPE) to IS 7098-1
- Extruded inner sheath with PVC Type ST2/FRLS/FR/LSZH
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZH

### Core Identification

Red, Yellow, Blue and Black

### Bending Radius

Fixed installation 12 x Overall diameter

## OUTSTANDING FEATURES

- High life
- High Insulation resistance
- Flame retardant
- Low Halogen
- Low smoke
- UV resistant

## STANDARD FOLLOWS

IS 8130:2013

IS 5831:1984

IS 7098-1:1988

## COMPLIANCE

Conductor resistance  
Insulation resistance  
Flammability test

- IS 8130:2013
- IS 7098-1:1988
- IEC 60332-1:2015

## OUR ACCREDITATIONS



## APPROVAL



## NOTES

- Other color also available on request.
- Cable available with anti-rodent & termite

**Weight & Dimension Data**

Product code	Nominal cross-sectional area n x mm <sup>2</sup>	Class of conductor	Nominal Thickness of Insulation mm	Nominal thickness of outer sheath mm	Overall Diameter mm	Weight (Approx.)
						kg/km
LVIS09AXUAY23.5C025SA001S	3.5 x 25	Class 2	0.9/0.7	2	21.3	525
LVIS09AXUAY23.5C035SA001S	3.5 x 35	Class 2	0.9/0.7	2	23.6	625
LVIS09AXUAY23.5C050SA001S	3.5 x 50	Class 2	1/0.9	2	26.8	800
LVIS09AXUAY23.5C070SA001S	3.5 x 70	Class 2	1.1/0.9	2.2	31	1100
LVIS09AXUAY23.5C095SA001S	3.5 x 95	Class 2	1.1/1	2.2	34.3	1400
LVIS09AXUAY23.5C120SA001S	3.5 x 120	Class 2	1.2/1.1	2.2	37.5	1650
LVIS09AXUAY23.5C150SA001S	3.5 x 150	Class 2	1.4/1.1	2.4	41	2000
LVIS09AXUAY23.5C185SA001S	3.5 x 185	Class 2	1.6/1.1	2.6	46.5	2550
LVIS09AXUAY23.5C240SA001S	3.5 x 240	Class 2	1.7/1.2	2.8	52.5	3200
LVIS09AXUAY23.5C300SA001S	3.5 x 300	Class 2	1.8/1.4	3	56	4000
LVIS09AXUAY23.5C400SA001S	3.5 x 400	Class 2	2/1.6	3.4	64	5177
LVIS09AXUAY23.5C500SA001S	3.5 x 500	Class 2	2.2/1.70	3.6	72.5	6500

**Electrical characteristics**

Current carrying capacity and Maximum DC conductor resistance.

Nominal area of conductor mm <sup>2</sup>	Buried direct in the ground		In single way Ducts	In air	Max. DC conductor resistance at 20°C Ω/km
	Amp.	Amp.	Amp.	Amp.	
16	74	61	69	1.91	
25	95	79	93	1.2	
35	114	94	114	0.868	
50	134	112	138	0.641	
70	164	137	175	0.443	
95	197	164	216	0.32	
120	223	187	249	0.253	
150	249	209	284	0.206	
185	282	238	329	0.164	
240	327	276	392	0.125	
300	369	312	452	0.1	
400	420	356	526	0.0778	
500	478	412	612	0.0605	

Air Ambient temperature: 40°C

Ground ambient temperature: 30°C,

The above table is in accordance with IS 3961(part 6):2016

**De-Rating Factor**

Rating factor for variation in ambient air temperature for cable in free air

Ambient air Temperature	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

Maximum conductor temperature 90°C

Rating factor for variation in ground temperature for direct buried cables.

Ground Temperature	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90°C

Rating factor for variation in ground temperature for cable in duct.

Ground Temperature	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
De-Rating Factor	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82

Maximum conductor temperature 90°C