



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB A2XY MC-4, Stranded compacted aluminum conductor, XLPE insulated, and PVC sheathed confirming to IS 7098-1 is suitable for AC single phase or three phase (earthed or unearthed) 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 ( $\leq 16$  sqmm)/Non compacted aluminium conductor as per IS 8130, class 1 & 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 - IS 8130:2013

Insulation resistance - IS 7098-1:1988

Flammability test - IEC 60332-1:2015

## OUR ACCREDITATIONS



## APPROVAL



# POLY CAB A2XY MC-4 IS 7098-P1

## POWER CABLE 650/1100 V AC

**POLY CAB**  
IDEAS. CONNECTED.

### 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
LVIS09AXUAY2004C004SA001S	4x4	Class 1	0.7	1.8	13.5	160
LVIS09AXUAY2004C006SA003S	4x6	Class 1	0.7	1.8	14.7	200
LVIS09AXUAY2004C010SA001S	4x10	Class 1	0.7	1.8	16.6	250
LVIS09AXUAY2004C004SA002S	4x4	Class 2	0.7	1.8	14.2	180
LVIS09AXUAY2004C006SA002S	4x6	Class 2	0.7	1.8	15.5	215
LVIS09AXUAY2004C010SA002S	4x10	Class 2	0.7	1.8	17.5	260
LVIS09AXUAY2004C016SA001S	4x16	Class 2	0.7	1.8	17.8	350
LVIS09AXUAY2004C025SA001S	4x25	Class 2	0.9	2	21	550
LVIS09AXUAY2004C035SA001S	4x35	Class 2	0.9	2	23.5	680
LVIS09AXUAY2004C050SA001S	4x50	Class 2	1	2	26	875
LVIS09AXUAY2004C070SA001S	4x70	Class 2	1.1	2.2	30.5	1200
LVIS09AXUAY2004C095SA001S	4x95	Class 2	1.1	2.2	33.5	1530
LVIS09AXUAY2004C120SA001S	4x120	Class 2	1.2	2.4	37.5	1850
LVIS09AXUAY2004C150SA001S	4x150	Class 2	1.4	2.6	42	2280
LVIS09AXUAY2004C185SA001S	4x185	Class 2	1.6	2.8	46.5	2800
LVIS09AXUAY2004C240SA001S	4x240	Class 2	1.7	3	52.5	3700
LVIS09AXUAY2004C300SA001S	4x300	Class 2	1.8	3.2	58	4600
LVIS09AXUAY2004C400SA001S	4x400	Class 2	2	3.6	65.5	6000

The above data is approximate & subject to manufacturing tolerance.

### 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.	
4	35	30	32	7.41
6	46	38	42	4.61
10	57	48	54	3.08
16	74	61	69	1.91
25	95	79	93	1.2
35	114	94	114	0.868

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.	
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

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