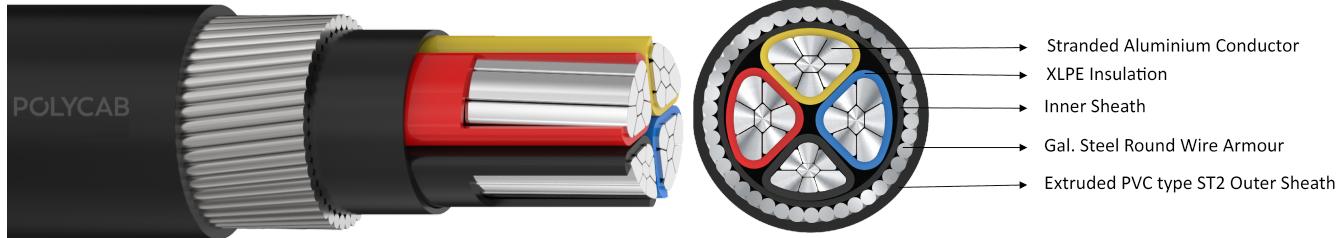


# POLY CAB A2XWY MC-3.5 IS 7098-P1 POWER CABLE 650/1100 V AC

**POLY CAB**  
IDEAS. CONNECTED.



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB A2XWY MC-3.5, Stranded compacted aluminium conductor, XLPE insulated, PVC inner sheathed Galvanised Steel round wire armour 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 sector shaped 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
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2/FRLS/FR/LSZ

### 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 3975:1979  
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



## NOTES

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

# POLY CAB A2XWY MC-3.5 IS 7098-P1 POWER CABLE 650/1100 V AC

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## Weight & Dimension Data

Product code	Nominal cross-sectional area	Nominal Thickness of Insulation Main/Neutral	Nominal dimension of Armour round wire	Minimum thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm <sup>2</sup>	mm	mm	mm	mm	kg/km
LVIS09AXSWY23.5C025SA001S	3.5 x25	0.9/0.7	1.6	1.4	23.6	969
LVIS09AXSWY23.5C035SA001S	3.5 x35	0.9/0.7	1.6	1.4	25.8	1139
LVIS09AXSWY23.5C050SA001S	3.5 x50	1/0.9	1.6	1.56	29.5	1387
LVIS09AXSWY23.5C070SA001S	3.5 x70	1.1/0.9	2	1.56	34	1938
LVIS09AXSWY23.5C095SA001S	3.5 x95	1.1/1	2	1.56	37.2	2356
LVIS09AXSWY23.5C120SA001S	3.5 x120	1.2/1.1	2	1.72	41	2800
LVIS09AXSWY23.5C150SA001S	3.5 x150	1.4/1.1	2	1.88	45	3296
LVIS09AXSWY23.5C185SA001S	3.5 x185	1.6/1.1	2.5	2.04	50	4313
LVIS09AXSWY23.5C240SA001S	3.5 x240	1.7/1.2	2.5	2.2	56	5156
LVIS09AXSWY23.5C300SA001S	3.5 x300	1.8/1.4	2.5	2.36	61	6108
LVIS09AXSWY23.5C400SA001S	3.5 x400	2/1.6	3.15	2.68	70	8151
LVIS09AXSWY23.5C500SA001S	3.5 x500	2.2/1.7	3.15	2.84	77	9880

The above data is approximate & subject to manufacturing tolerance.

## Electrical characteristics

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.	Ω/km
16	74	61	69	1.91
25	95	79	93	1.20
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

Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C	
	mm <sup>2</sup>	Amp.	Amp.	Amp.	Ω/km
240	327	276	392	0.125	
300	369	312	452	0.100	
400	420	356	526	0.0778	
500	478	412	612	0.0605	

Air Ambient temperature: 40°C, Ground ambient temperature: 30°C, Conductor operating temperature: 90°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