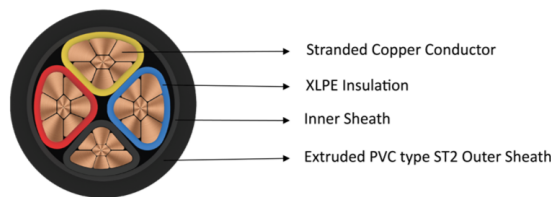


# POLYCAB 2XY MC-3.5 IS 7098-P1 POWER CABLE 650/1100 V AC



Images not to scale. Follow table for dimensions

## APPLICATION

POLYCAB 2XY MC-3.5, Stranded compacted copper 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 plain compacted copper 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 & 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 60332-1-2:2015

## 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
LVIS09CXUAY23.5C025SA001S	3.5 x 25	Class 2	0.9/0.7	2	21.3	1035
LVIS09CXUAY23.5C035SA001S	3.5 x 35	Class 2	0.9/0.7	2	23.6	1311
LVIS09CXUAY23.5C050SA001S	3.5 x 50	Class 2	1/0.9	2	26.8	1748
LVIS09CXUAY23.5C070SA001S	3.5 x 70	Class 2	1.1/0.9	2.2	31	2460
LVIS09CXUAY23.5C095SA001S	3.5 x 95	Class 2	1.1/1	2.2	34.3	3287
LVIS09CXUAY23.5C120SA001S	3.5 x 120	Class 2	1.2/1.1	2.2	37.6	4142
LVIS09CXUAY23.5C150SA001S	3.5 x 150	Class 2	1.4/1.1	2.4	42.3	4987
LVIS09CXUAY23.5C185SA001S	3.5 x 185	Class 2	1.6/1.1	2.6	46.8	6279
LVIS09CXUAY23.5C240SA001S	3.5 x 240	Class 2	1.7/1.2	2.8	52.4	8122
LVIS09CXUAY23.5C300SA001S	3.5 x 300	Class 2	1.8/1.4	3	57	10079
LVIS09CXUAY23.5C400SA001S	3.5 x 400	Class 2	2/1.6	3.4	65	12834.5

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 Amp.	In single way Ducts Amp.	In air Amp.	Max. DC conductor resistance at 20°C Ω/km
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268
95	254	212	279	0.193
120	287	240	320	0.153
150	321	269	365	0.124
185	362	304	422	0.0991
240	418	352	500	0.0754
300	469	396	574	0.0601
400	528	447	662	0.047

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

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