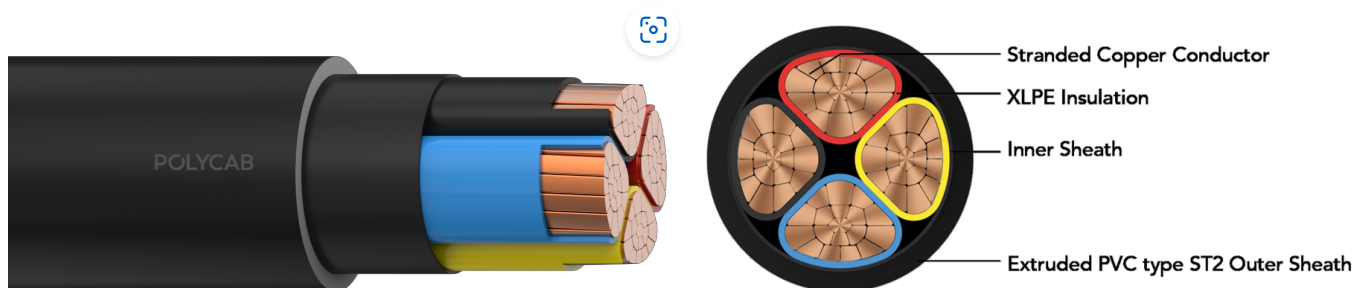


# POLYCAB 2XY MC-4 IS 7098-P1 POWER CABLE 650/1100 V AC



Images not to scale. Follow table for dimensions

## APPLICATION

POLYCAB 2XY MC-4, Stranded compacted copper conductor, XLPE insulated, and PVC sheathed conforming 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/Non-Compacted copper 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 & 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

# POLYCAB 2XY MC-4 IS 7098-P1

## POWER CABLE 650/1100 V AC

### Weight & Dimension Data

Product code	Nominal cross sectional area	Class of conductor	Nominal Thickness of Insulation	Nominal thickness of outer sheath	Overall Diameter	Weight (Approx.)
	n x mm <sup>2</sup>		mm	mm		
LVIS09CXUAY2004C004SA001S	4 x 4	Class 1	0.7	1.8	13.5	260
LVIS09CXUAY2004C006SA001S	4 x 6	Class 1	0.7	1.8	14.7	350
LVIS09CXUAY2004C004SA002S	4 x 4	Class 2	0.7	1.8	14.2	280
LVIS09CXUAY2004C006SA004S	4 x 6	Class 2	0.7	1.8	15.5	365
LVIS09CXUAY2004C010SA001S	4 x 10	Class 2	0.7	1.8	17.8	510
LVIS09CXUAY2004C016SA001S	4 x 16	Class 2	0.7	1.8	17.5	741
LVIS09CXUAY2004C025SA001S	4 x 25	Class 2	0.9	2	21	1140
LVIS09CXUAY2004C035SA001S	4 x 35	Class 2	0.9	2	23.5	1491
LVIS09CXUAY2004C050SA001S	4 x 50	Class 2	1	2	26	1957
LVIS09CXUAY2004C070SA001S	4 x 70	Class 2	1.1	2.2	30.5	2774
LVIS09CXUAY2004C095SA001S	4 x 95	Class 2	1.1	2.2	33.5	3714
LVIS09CXUAY2004C120SA001S	4 x 120	Class 2	1.2	2.4	37.5	4645
LVIS09CXUAY2004C150SA001S	4 x 150	Class 2	1.4	2.6	42	5719
LVIS09CXUAY2004C185SA001S	4 x 185	Class 2	1.6	2.8	46.5	7125
LVIS09CXUAY2004C240SA001S	4 x 240	Class 2	1.7	3	52.5	9253
LVIS09CXUAY2004C300SA001S	4 x 300	Class 2	1.8	3.2	58	11524

The above data is approximate & subject to manufacturing tolerance.

### Electrical characteristics

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
4	45	38	41	4.61
6	56	47	52	3.08
10	74	62	70	1.83
16	95	79	89	1.15
25	122	102	119	0.727
35	146	122	147	0.524
50	173	144	179	0.387
70	212	177	226	0.268

# POLYCAB 2XY MC-4 IS 7098-P1

## POWER CABLE 650/1100 V AC

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
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