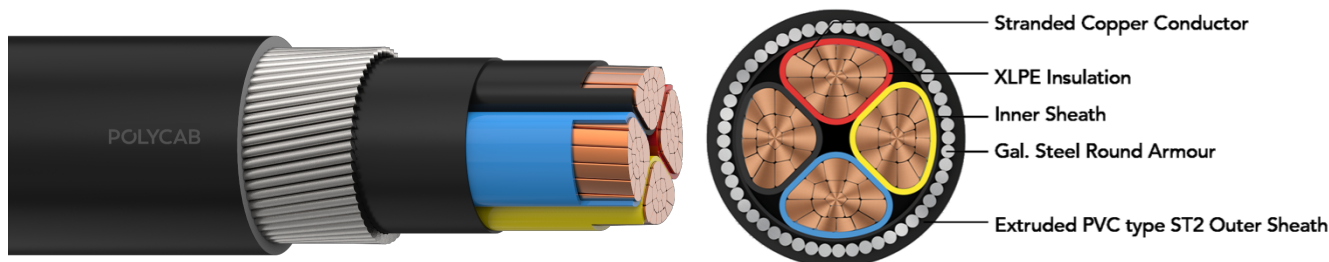


# POLYCAB 2XWY MC-4 IS 7098-P1 POWER CABLE 650/1100 V AC



Images not to scale. Follow table for dimensions

## APPLICATION

POLYCAB 2XWY MC-4, Stranded compacted copper conductor, XLPE insulated, PVC inner sheathed, Galvanised Steel round wire armour 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 sector shaped 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
- Armoured with Galvanised Steel round wire to IS 3975
- 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 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



**Weight & Dimension Data**

Product code	Nominal cross-sectional area	Class of Conductor	Nominal Thickness of Insulation	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
LVIS09CXSWY2004C004SA002P	4x4	Class 1	0.7	1.4	1.24	15.3	503
LVIS09CXSWY2004C004SA001P	4x4	Class 2	0.7	1.4	1.24	16	533
LVIS09CXSWY2004C006SA002P	4x6	Class 1	0.7	1.4	1.24	16.5	618
LVIS09CXSWY2004C006SA001P	4x6	Class 2	0.7	1.4	1.24	17.3	646
LVIS09CXSWY2004C010SA001S	4x10	Class 2	0.7	1.4	1.4	19.8	870
LVIS09CXSWY2004C016SA001S	4x16	Class 2	0.7	1.6	1.4	21	1159
LVIS09CXSWY2004C025SA001S	4x25	Class 2	0.9	1.6	1.4	25	1615
LVIS09CXSWY2004C035SA001S	4x35	Class 2	0.9	1.6	1.4	26.5	2033
LVIS09CXSWY2004C050SA001S	4x50	Class 2	1	1.6	1.56	29.5	2593
LVIS09CXSWY2004C070SA001S	4x70	Class 2	1.1	2	1.56	34	3686
LVIS09CXSWY2004C095SA001S	4x95	Class 2	1.1	2	1.72	38	4769
LVIS09CXSWY2004C120SA001S	4x120	Class 2	1.2	2	1.88	42	5795
LVIS09CXSWY2004C150SA001S	4x150	Class 2	1.4	2.5	2.04	47	7324
LVIS09CXSWY2004C185SA001S	4x185	Class 2	1.6	2.5	2.2	52	8901
LVIS09CXSWY2004C240SA001S	4x240	Class 2	1.7	2.5	2.36	57.5	11210
LVIS09CXSWY2004C300SA001S	4x300	Class 2	1.8	3.15	2.52	64.5	14279

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

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
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, 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