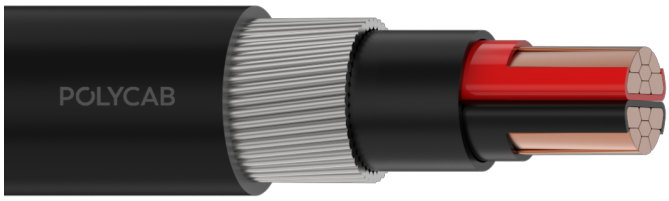
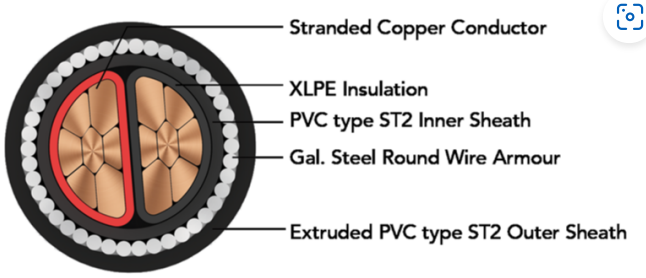
POLYCAB 2XWY MC-2 IS 7098-P1
POWER CABLE 650/1100 V AC





Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB 2XWY MC-2, stranded compacted copper 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 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 to IS 5831
- Armoured with Galvanised Steel round wire to IS 3975
- Sheathed with Extruded PVC Type ST2 to IS 5831

Core Identification
Red 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
Insulation resistance - IS 7098-1:1988
Flammability test - IEC 60332-1

OUR ACCREDITATIONS

APPROVAL

POLYCAB 2XWY MC-2 IS 7098-P1
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POLYCAB
IDEAS. CONNECTED.

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 mm²		mm	mm	mm	mm	kg/km
LVIS09CXSWY2002C004SA002S	2 x4	Class 1	0.7	1.4	1.24	14	408
LVIS09CXSWY2002C004SA002P	2 x4	Class 2	0.7	1.4	1.24	14.5	427
LVIS09CXSWY2002C006SA002S	2 x6	Class 1	0.7	1.4	1.24	15	484
LVIS09CXSWY2002C006SA001S	2 x6	Class 2	0.7	1.4	1.24	16	522
LVIS09CXSWY2002C010SA001S	2 x10	Class 2	0.7	1.4	1.24	17.5	665
LVIS09CXSWY2002C016SA001S	2 x16	Class 2	0.7	1.4	1.4	17	696.5
LVIS09CXSWY2002C025SA001S	2 x25	Class 2	0.9	1.6	1.4	20	1001.7
LVIS09CXSWY2002C035SA001S	2 x35	Class 2	0.9	1.6	1.4	22	1224.2
LVIS09CXSWY2002C050SA001S	2 x50	Class 2	1	1.6	1.4	24	1520
LVIS09CXSWY2002C070SA001S	2 x70	Class 2	1.1	1.6	1.56	27	2004
LVIS09CXSWY2002C095SA001S	2 x95	Class 2	1.1	2	1.56	30.5	2736
LVIS09CXSWY2002C120SA001S	2 x120	Class 2	1.2	2	1.56	33	3230
LVIS09CXSWY2002C150SA001S	2 x150	Class 2	1.4	2	1.72	36	3876
LVIS09CXSWY2002C185SA001S	2 x185	Class 2	1.6	2	1.88	40	4731
LVIS09CXSWY2002C240SA001S	2 x240	Class 2	1.7	2.5	2.04	42.4	6203
LVIS09CXSWY2002C300SA001S	2 x300	Class 2	1.8	2.5	2.2	46.2	7514
LVIS09CXSWY2002C400SA001S	2 x400	Class 2	2	2.5	2.36	51.6	9262

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
mm²	Amp.	Amp.	Amp.	Ω/km
4	54	45	48	4.61
6	67	56	61	3.08
10	89	75	83	1.83
16	115	96	108	1.15
25	147	122	140	0.727
35	176	146	172	0.524
50	208	173	208	0.387

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Nominal area of conductor	Buried direct in the ground	In single way Ducts	In air	Max. DC conductor resistance at 20°C
mm²	Amp.	Amp.	Amp.	Ω/km
70	253	211	262	0.268
95	302	252	322	0.193
120	340	284	368	0.153
150	379	317	419	0.124
185	425	357	482	0.0991
240	486	409	566	0.0754
300	541	456	644	0.0601
400	602	508	734	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