



Images not to scale. Follow table for dimensions

APPLICATION

POLY CAB 2XWY MC-3.5, 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 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
Insulation resistance
Flammability test

- IS 8130:2013
- IS 7098-1:1988
- IEC 60332-1:2015

OUR ACCREDITATIONS



APPROVAL



NOTES

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

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 ²	mm	mm	mm	mm	kg/km
LVIS09CXSWY23.5C025SA001S	3.5 x25	0.9/0.7	1.6	1.4	23.6	1491
LVIS09CXSWY23.5C035SA001S	3.5 x35	0.9/0.7	1.6	1.4	25.8	1824
LVIS09CXSWY23.5C050SA001S	3.5 x50	1/0.9	1.6	1.56	29	2337
LVIS09CXSWY23.5C070SA001S	3.5 x70	1.1/0.9	2	1.56	33.9	3296
LVIS09CXSWY23.5C095SA001S	3.5 x95	1.1/1	2	1.56	37.2	4237
LVIS09CXSWY23.5C120SA001S	3.5 x120	1.2/1.1	2	1.72	41	5225
LVIS09CXSWY23.5C150SA001S	3.5 x150	1.4/1.1	2	1.88	45	6194
LVIS09CXSWY23.5C185SA001S	3.5 x185	1.6/1.1	2.5	2.04	50	7989
LVIS09CXSWY23.5C240SA001S	3.5 x240	1.7/1.2	2.5	2.2	56	10003
LVIS09CXSWY23.5C300SA001S	3.5 x300	1.8/1.4	2.5	2.36	61	12131
LVIS09CXSWY23.5C400SA001S	3.5 x400	2/1.6	3.15	2.68	70	15817

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 ²	Amp.	Amp.	Ω/km
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
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