



Images not to scale. Follow table for dimensions

APPLICATION

POLY CAB 2XWY MC-3, 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 unearthing) 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

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 ²		mm	mm	mm	mm	kg/km
LVIS09CXSWY2003C004SA002S	3 x4	Class 1	0.7	1.4	1.24	15	530
LVIS09CXSWY2003C004SA001S	3 x4	Class 2	0.7	1.4	1.24	16	460
LVIS09CXSWY2003C006SA002S	3 x6	Class 1	0.7	1.4	1.24	16	640
LVIS09CXSWY2003C006SA001S	3 x6	Class 2	0.7	1.4	1.24	17	551
LVIS09CXSWY2003C010SA001S	3 x10	Class 2	0.7	1.4	1.24	19	722
LVIS09CXSWY2003C016SA001S	3 x16	Class 2	0.7	1.6	1.4	18.8	921
LVIS09CXSWY2003C025SA001S	3 x25	Class 2	0.9	1.6	1.4	21.7	1282
LVIS09CXSWY2003C035SA001S	3 x35	Class 2	0.9	1.6	1.4	23.6	1596
LVIS09CXSWY2003C050SA001S	3 x50	Class 2	1	1.6	1.56	26.8	2042
LVIS09CXSWY2003C070SA001S	3 x70	Class 2	1.1	2	1.56	30.9	2888
LVIS09CXSWY2003C095SA001S	3 x95	Class 2	1.1	2	1.56	33.7	3686
LVIS09CXSWY2003C120SA001S	3 x120	Class 2	1.2	2	1.72	37	4455
LVIS09CXSWY2003C150SA001S	3 x150	Class 2	1.4	2	1.88	41.1	5396
LVIS09CXSWY2003C185SA001S	3 x185	Class 2	1.6	2.5	2.04	46	6868
LVIS09CXSWY2003C240SA001S	3 x240	Class 2	1.7	2.5	2.2	50.9	8654
LVIS09CXSWY2003C300SA001S	3 x300	Class 2	1.8	2.5	2.36	55.5	10526
LVIS09CXSWY2003C400SA001S	3 x400	Class 2	2	3.15	2.68	64	13718

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.	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

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.	Amp.	Ω/km
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	
mm ²	Amp.	Amp.	Amp.	Amp.	Ω/km
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