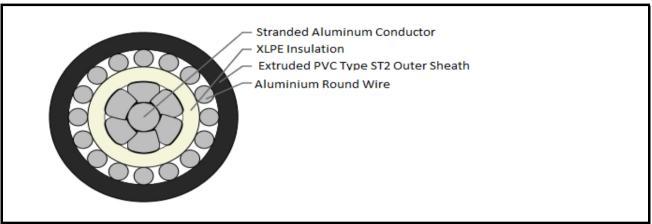


## Polycab Wires Private Limited

Manufacturing Data Sheet: Low Voltage XLPE Cable

Design Code: LVIS09AXAWY2001C050SA002S
Date: Rev No.:



S.No	Particulars	1 X 50 MM <sup>2</sup>
1	Name of Manufacturer	Polycab Wires Pvt. Ltd
2	Type of cable	A2XWaY
3	Voltage Grade V	1100
4	No of cores X size in sqmm	1 X 50
5	Conductor	
a)	Material	H2/H4 Grade Aluminium as per Class 2 of IS: 8130/84,latest
b)	Max. d.c. resistance of conductor at 20° C (ohm/km)	0.641
c)	Shape of the conductor	Stranded Circular
6	Insulation	
a)	Material	XLPE as per IS 7098(Pt-1)/88, Latest
b)	Nominal thickness (mm)	1.3
c)	Core Identification	Natural
7	Inner Sheath	
a)	Material	NA
b)	Minimum thickness (mm)	NA
8	Armouring	
a)	Material	Aluminium
b)	Type of armouring	Round Wire
c)	Nominal size of armour (mm) ± 0.040	1.40
9	Outer Sheath	
a)	Material	Extruded PVC Type 'ST2' as per IS:5831/84
b)	Thickness (mm)	1.24 (Min.)
c)	Colour of outer sheath.	Black
10	Electrical Parameters	
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	0.822
b)	Calculated Cable reactance (ohm/km)	0.109
c)	Impedance of cable (ohm/km)	0.829
d	Approx. Cable Capacitance (mfd/km)	0.49



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S.No	Particulars	1 X 50 MM <sup>2</sup>
11	Maximum conductor temperature under normal operating conditions	90°C
12	Maximum conductor temperature at the termination of short circuit	250°C
13	Short Circuit rating of conductor for the duration of 1 sec (kA)	4.72
14	Continuous Current carrying capacities:	
(a)	In Ground at 30°C (A)	137
(b)	In Air at 40°C (A)	145
15	Applicable Standard	IS 8130/84,IS 7098 Part I/88, IS 5831/84, IS 3975/88 etc. with latest up to date amendments
16	Nominal overall diameter of the cable in mm	16.5 ± 2.0
17	Minimum bending radius	15 times Overall diameter
18	Max. Tensile strength	
(i)	for Cables pulled with stocking (Newtons)	9 x D², D is the cable OD in mm
ii)	for Cables pulled with pulling eyes (N)	1,500
19	Standard Drum Length with ± 5% tolerance (m)	1000 ± 5%
20	Non-Standard Drum Length mtrs	Max. 5% Order Quantity
22	Printing	YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE, CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.

Note:-The values given above are subject to tolerances as per the relevant standards.