



**LT XLPE CABLE**

TDS Doc.No:PIL/TE/250425/000549

DESIGN CODE : LVIS09AXSFY2003C050SA002S

<b>Particulars</b>		<b>3 Core X 50 sq.mm</b>
Name of Manufacturer		Polycab India Ltd
Type of cable		A2XFY
Voltage Grade V		1100
No of cores X size in sqmm		3 Core X 50 sq.mm
<b>Conductor</b>		
a)	Material	H2/H4 Grade Aluminium as per Class 2 of IS: 8130/2013, latest
b)	Max. d.c. resistance of conductor at 20° C (ohm/km)	0.641
c)	Shape of the conductor	Stranded Compacted Sector
<b>Insulation</b>		
a)	Material	XLPE as per IS 7098(Pt-1)/88, Latest
b)	Nominal thickness (mm)	1.0
c)	Core identification	Red, Yellow, Blue
<b>Inner Sheath</b>		
a)	Material	Wrapping of Tapes
b)	Minimum thickness (mm)	0.3
<b>Armouring</b>		
a)	Material	Galvanised Steel
b)	Type of armouring	Flat Strip
c)	Nominal size of armour (mm)	4.0 x 0.8
d)	Tolerance on armour dimensions	± 10%
<b>Outer Sheath</b>		
a)	Material	Extruded PVC Type 'ST2' as per IS:5831 /84
b)	Thickness (mm)	1.40 (Min.)
c)	Colour of sheath	Black
<b>Electrical Parameters</b>		
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	0.822
b)	Calculated Cable reactance (ohm/km)	0.0780

Format ID: TE/QMS/F/07, R-00, Date: 16/03/2025

c)	Impedance of cable (ohm/km)	0.826
d)	Approx. Cable Capacitance (mfd/km)	0.53
	Maximum conductor temperature under normal operating conditions	90°C
	Maximum conductor temperature at the termination of short circuit	250°C
	Short Circuit rating of conductor for the duration of 1 sec (kA)	4.72

### Continuous Current carrying capacities :-

(a)	In Ground at 30°C (A)	134
(b)	In Air at 40°C (A)	138
	Applicable Standard	IS 7098 Part I/88, IS 8130/2013, IS 5831/84, IS 3975/1999 etc. with latest up to date amendments
	Approx. overall diameter of the cable in mm	25.5 +/- 2.0
	Minimum bending radius	12 times Overall diameter
	Max. Tensile strength	
(i)	for Cables pulled with stocking (Newtons)	9 x D <sup>2</sup> , D is the cable OD in mm
(ii)	for Cables pulled with pulling eyes (N)	4,500
	Embossing	POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE
	Printing	YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE CABLE SIZE CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.
	Standard Drum Length (Mtr.)	1000 ± 5%
	Non- Standard Drum Length (Mtr.)	Maximum 5% of order quantity