



LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/000537

DESIGN CODE : LVIS09AXSWYL003C050SA001S

Particulars	3 Core X 50 Sq.mm
Name of Manufacturer	Polycab India Ltd
Type of cable	A2XWY
Voltage Grade V	1100
No of cores X size in sqmm	3 Core X 50 Sq.mm
Conductor	
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
Insulation	
a) Material	XLPE as per IS 7098(Pt-1)/88, Latest
b) Nominal thickness (mm)	1.0
c) Core identification	Red, Yellow, Blue
Inner Sheath	
a) Material	Extruded PVC Type ST2 as per IS:5831/84
b) Minimum thickness (mm)	0.3
Armouring	
a) Material	Galvanised Steel
b) Type of armouring	Round Wire
c) Nominal size of armour (mm)	1.6
d) Tolerance on armour dimensions	± 0.045 mm
Outer Sheath	
a) Material	Extruded FR-LSH PVC Type 'ST2' as per IS:5831/ 84
b) Thickness (mm)	1.56 (Min.)
c) Colour of sheath	Black
Electrical Parameters	
a) Max. a.c. resistance of conductor at 90° C (ohm/km)	0.822
b) Calculated Cable reactance (ohm/km)	0.0780

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	26.5 +/- 2.0
Minimum bending radius	12 times Overall diameter
Max. Tensile strength	
(i) for Cables pulled with stocking (Newtons)	$9 \times D^2$, D is the cable OD in mm
(ii) for Cables pulled with pulling eyes (N)	4,500
Embossing	POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR-LSH
Printing	YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR-LSH CABLE SIZE CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.
Standard Drum Length (Mtr.)	1000 Mtr. ±5%
Non- Standard Drum Length (Mtr.)	Maximum 5% of order quantity

FR-LSH PROPERTIES

a) Oxygen Index	Min. 29% as per ASTM D- 2863
b) Temperature Index	Min. 250 Deg.C as per ASTM D- 2863
c) Smoke Density Rating	Max. 60% as per ASTM D- 2843
d) Acid Gas Generation	Max. 20% as per IEC- 754- 1
e) Flammability Test	As per IEC:332-I