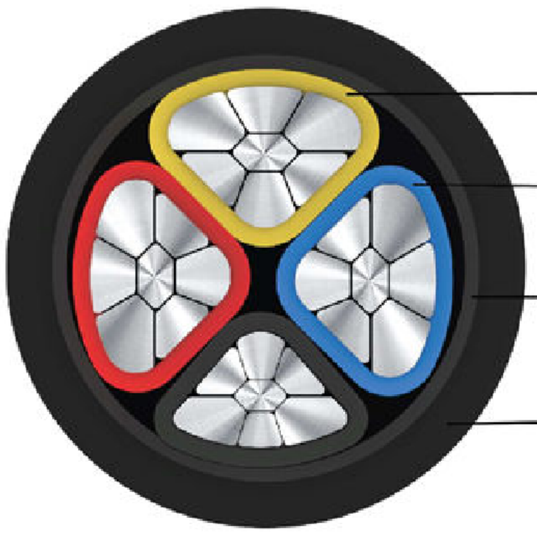
POLYCAB

CABLES



Stranded Aluminium Conductor

XLPE Insulation

Inner Sheath

Extruded FR-LSH PVC type ST2 Outer Sheath



LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/000510 **DESIGN CODE : LVIS09AXUAYL3.5C050SA001S**

Particulars		3.5 Core X 50 Sq.mm
Name of Manufacturer		Polycab India Ltd
Type of cable		A2XY
Voltage Grade V		1100
No of cores X size in sqmm		3.5 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)	Main	0.641
	Neutral	1.20
c) Shape of the conductor		Stranded Compacted Sector
Insulation		
a) Material		XLPE as per IS 7098(Pt-1)/88, Latest
b) Nominal thickness (mm)	Main	1.0
	Neutral	0.9
c) Core identifcation		Red,Yellow,Blue,Black
Inner Sheath		
a) Material		Extruded PVC Type ST2 as per IS:5831/84
b) Minimum thickness (mm)		0.3
Outer Sheath		
a) Material		Extruded FR-LSH PVC Type 'ST2' as per IS:5831
b) Thickness (mm)		2.0 (Nom.)
c) Colour of outer 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)		0.00
Maximum conductor temperature under normal operating conditions		90°C

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

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 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)	5 x D^2, D is the cable OD in mm
ii) for Cables pulled with pulling eyes (N)	5,250
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 ± 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

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