

 POLYCAB <i>Connection Zindagi Ka</i>	Document ID: TE/QMS/F/02 Rev. No. : 00 Issued Date : 02/04/2018
	Cable Description: 1100V, Stranded Class 2 Aluminium Conductor, XLPE insulated, Wrapping of Tape inner sheath, Galvanised Steel Flat strip armour, Extruded FR-LSH PVC Type ST2 Outer sheath, as per IS 7098 Part 1/1988

I	Technical Data of LT XLPE Cables	CABLE SIZE
II	CABLE CODE	LVIS09AXSFYL3.5C025SA001S
S.No	Particulars	3.5 Core X 25 Sq.mm
1	Name of Manufacturer	Polycab India Ltd
2	Type of cable	A2XFY
3	Voltage Grade V	1100
4	No of cores X size in sqmm	3.5 Core X 25 Sq.mm
5	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)	1.20
	Main	
	Neutral	1.91
c)	Shape of the conductor	Stranded Compacted Sector
6	Insulation	
a)	Material	XLPE as per IS 7098(Pt-1)/88, Latest
b)	Nominal thickness (mm)	0.9
	Main	
	Neutral	0.7
c)	Core identification	Red, Yellow, Blue, Black
7	Inner Sheath	
a)	Material	Wrapping of Tapes
b)	Minimum thickness (mm)	0.3
8	Armouring	
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%
9	Outer Sheath	
a)	Material	Extruded FR-LSH PVC Type 'ST2' as per IS:5831
b)	Thickness (mm)	1.40 (Min.)
c)	Colour of outer sheath.	Black
10	Electrical Parameters	
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	1.54
b)	Calculated Cable reactance (ohm/km)	0.0808
c)	Impedance of cable (ohm/km)	1.54
d)	Approx. Cable Capacitance (mfd/km)	0.43
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)	2.36
14	Continuous Current carrying capacities :-	
(a)	In Ground at 30°C (A)	95
(b)	In Air at 40°C (A)	93
15	Applicable Standard	IS 7098 Part I/88, IS 8130/2013, IS 5831/84, IS 3975/1999 etc. with latest up to date amendments
16	Approx. overall diameter of the cable in mm	22.5 +/- 2.0
17	Minimum bending radius	12 times Overall diameter
18	Max. Tensile strength	
(i)	for Cables pulled with stocking (Newtons)	9 x D ² , D is the cable OD in mm
(ii)	for Cables pulled with pulling eyes (N)	2,730
19	Embossing	POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR-LSH
20	Printing	YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR-LSH CABLE SIZE CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.
21	Standard Drum Length (Mtr.)	1000 ± 5%
22	Non-Standard Drum Length (Mtr.)	Maximum 5% of order quantity
23	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.