

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

I	Technical Data Sheet of LT XLPE Cable	CABLE SIZE
II	CABLE CODE	LVIS09CXS FYL019C1.5SA004S
S.No	Particulars	19 Core X 1.5 Sq.mm
1	Name of Manufacturer	Polycab India Ltd.
2	Type of cable	2XFY
3	Voltage Grade V	1100
4	No of cores X size in sqmm	19 Core X 1.5 Sq.mm
5	<b>Conductor</b>	
a)	Material	Plain annealed Copper as per Class 1 of IS:8130/2013
b)	Max. d.c. resistance of conductor at 20° C (ohm/km)	12.10
c)	Shape of the conductor	Solid Circular
6	<b>Insulation</b>	
a)	Material	XLPE as per IS 7098(Pt-1)/88, Latest
b)	Nominal thickness (mm)	0.7
c)	Core Identification	All cores Grey with number printing
7	<b>Inner Sheath</b>	
a)	Material	Wrapping of Tapes
b)	Minimum thickness (mm)	0.3
8	<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	+/-10%
9	<b>Outer Sheath</b>	
a)	Material	Extruded FR-LSH PVC Type ST2 as per IS:5831/84
b)	Thickness (mm)	1.40 (Min.)
c)	Colour of outer sheath.	Black
10	<b>Electrical Parameters</b>	
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	15.4
b)	Calculated Cable reactance (ohm/km)	0.106
c)	Impedance of cable (ohm/km)	15.4
d)	Approx. Cable Capacitance (mfd/km)	0.16
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)	0.21
14	<b>Continuous Current carrying capacities :-</b>	
(a)	In Ground at 30°C (A)	14
(b)	In Air at 40°C (A)	12
15	Applicable Standard	IS 8130/2013, IS 7098 Part I/88, IS 5831/84, IS 3975/1999 etc. with latest up to date amendments
16	Approx. overall diameter of the cable in mm	19.5 ± 2.0
17	Minimum bending radius	12 times Overall diameter
18	Max. Tensile strength	
(i)	for Cables pulled with stocking (Newtons)	9 x D <sup>2</sup> , D is the cable OD in mm
(ii)	for Cables pulled with pulling eyes (N)	1,425
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	<b>FR-LSH PROPERTIES</b>	
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.