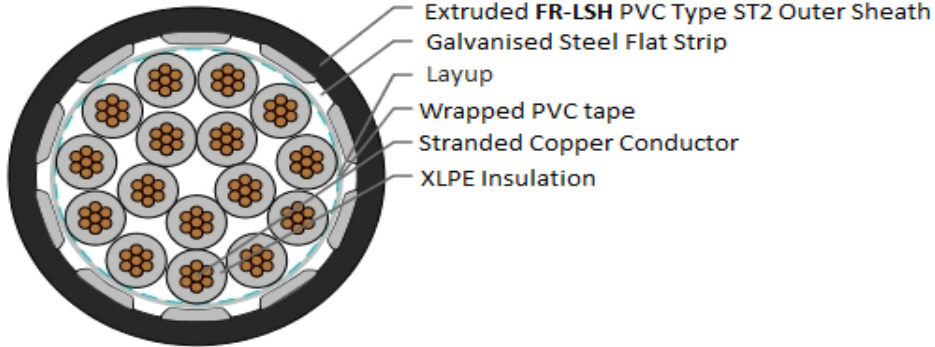


**Manufacturing Data Sheet:**
**Low Voltage XLPE Cable**
**Design Code : LVIS09CXSFYL012C2.5SA001S**
**Date :**
**Rev No. :**


S.No	Particulars	12 X 2.5
1	Name of Manufacturer	Polycab Wires Pvt. Ltd, India
2	Type of cable	2XFY
3	Voltage Grade V	1100
4	No of cores X size in sqmm	12 X 2.5
5	<b>Conductor</b>	
a)	Material	Plain annealed Copper as per Class 2 of IS:8130/2013
b)	Max. d.c. resistance of conductor at 20° C (ohm/km)	7.41
c)	Shape of the conductor	Stranded 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	Wrapped PVC tape
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
9	<b>Outer Sheath</b>	
i)	Material	<b>Extruded FR-LSH PVC</b> Type ST2 as per IS:5831/84
ii)	Thickness (mm)	1.40 (Min.)
iii)	Colour of outer sheath.	Black
	<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

S.No	Particulars	12 X 2.5
10	<b>Electrical Parameters</b>	
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	9.45
b)	Calculated Cable reactance (ohm/km)	0.0990
c)	Impedance of cable (ohm/km)	9.45
d)	Approx. Cable Capacitance (mfd/km)	0.21
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)	0.36
14	<b>Continuous Current carrying capacities :-</b>	
(a)	In Ground at 30°C (A)	20
(b)	In Air at 40°C (A)	18
15	Applicable Standard	IS 8130/2013, IS 7098 Part I/88, IS 5831/84, IS 3975/88 etc. with latest up to date amendments
16	Nominal overall diameter of the cable in mm	20.0 ± 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)	1,500
19	Standard Drum Length (Mtr.)	1000 Mtr. ±5%
20	Non Standard Drum Length (Mtr.)	Maximum 5% of order quantity
21	<b>Embossing</b>	<b>POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR-LSH</b>
22	<b>Printing</b>	<b>YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR-LSH , CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.</b>

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