



**LT XLPE CABLE**

TDS Doc.No:PIL/TE/250425/000818

DESIGN CODE : LVIS09CXSWYL004C095SA001S

Particulars	4 Core X 95 Sq.mm
Name of Manufacturer	Polycab India Ltd.
Type of cable	2XWY
Voltage Grade V	1100
No of cores X size in sqmm	4 Core X 95 Sq.mm
<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)	0.193
c) Shape of the conductor	Stranded Compacted Sector
<b>Insulation</b>	
a) Material	XLPE as per IS 7098(Pt-1)/88, Latest
b) Nominal thickness (mm)	1.1
c) Core Identification	Red, Yellow, Blue & Black
<b>Inner Sheath</b>	
a) Material	Extruded PVC Type ST2 as per IS:5831/84
b) Minimum thickness (mm)	0.4
<b>Armouring</b>	
a) Material	Galvanised Steel
b) Type of armouring	Round Wire
c) Nominal size of armour (mm)	2
d) Tolerance	+/- 0.050
<b>Outer Sheath</b>	
a) Material	Extruded FR-LSH PVC Type ST2 as per IS:5831/84
b) Thickness (mm)	1.72 (Min.)
c) Colour of outer sheath.	Black
<b>Electrical Parameters</b>	
a) Max. a.c. resistance of conductor at 90° C (ohm/km)	0.247
b) Calculated Cable reactance (ohm/km)	0.0725

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

c) Impedance of cable (ohm/km)	0.257
d) Approx. Cable Capacitance (mfd/km)	0.65
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)	13.59
<b>Continuous Current carrying capacities :-</b>	
(a) In Ground at 30°C (A)	254
(b) In Air at 40°C (A)	279
Applicable Standard	IS 8130/2013,IS 7098 Part I/88, IS 5831/84, IS 3975/1999 etc. with latest up to date amendments
Approx. overall diameter of the cable in mm	39.5 ± 2.0
Minimum bending radius	12 times Overall diameter
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)	19,000
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.)	500 ± 5%
Non- Standard Drum Length (Mtr.)	Maximum 5% of order quantity
<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