



LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/002880

DESIGN CODE: LVIS09CXSWYL006C004SA002S

Particulars		6 Core X 4 Sq.mm
Name of Manufacturer		Polycab India Ltd.
Type of cable		2XWY
Voltage Grade V		1100
No of cores X size in sqmm		6 Core X 4 Sq.mm
Conductor		
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)		4.61
c) Shape of the conductor		Stranded Circular
Insulation		
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
Inner Sheath		
a) Material		Extruded PVC Type ST2 as per IS:5831/84
b) Minimum thickness (mm)		0.3
Armouring		
a) Material		Galvanised Steel
b) Type of armouring		Round Wire
c) Nominal size of armour (mm)		1.4
d) Tolerance on armour dimensions		+/- 0.040
Outer Sheath		
a) Material		Extruded FR-LSH PVC Type ST2 as per IS:5831/84
b) Thickness (mm)		1.24 (Min.)
c) Colour of outer sheath.		Black
Electrical Parameters		
a) Max. a.c. resistance of conductor at 90° C (ohm/km)		5.88
b) Calculated Cable reactance (ohm/km)		0.093
c) Impedance of cable (ohm/km)		5.88

d) Approx. Cable Capacitance (mfd/km)	0.25
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)	0.57

Continuous Current carrying capacity :-

a) In Ground at 30°C (A)	40
b) In Air at 40°C (A)	36
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	19.0 ± 2.0
Minimum bending radius	12 times Overall diameter
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)	1200
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