



LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/001631

DESIGN CODE : LVIS09CXAFYL001C630SA001S

Particulars		1 Core X 630 Sq.mm
Name of Manufacturer	Polycab India Ltd	
Type of cable	2XFaY	
Voltage Grade V	1100	
No of cores X size in sqmm	1 Core X 630 Sq.mm	
Conductor		
a) Material	Plain annealed Copper as per Class 2 of IS:8130/2013, latest	
b) Max. d.c. resistance of conductor at 20° C (ohm/km)	0.0283	
c) Shape of the conductor	Stranded Compacted Circular	
Insulation		
a) Material	XLPE as per IS 7098(Pt-1)/88, Latest	
b) Nominal thickness (mm)	2.8	
c) Core identification	Natural	
Armouring		
a) Material	Aluminium	
b) Type of armouring	Flat Strip	
c) Nominal size of armour (mm)	4.0 x 0.8	
d) Tolerance on armour dimensions	± 10%	
Outer Sheath		
a) Material	Extruded FR-LSH 'PVC Type 'ST2' as per IS:5831	
b) Thickness (mm)	1.72 (Min.)	
c) Colour of outer sheath.	Black	
Electrical Parameters		
a) Max. a.c. resistance of conductor at 90° C (ohm/km)	0.0426	
b) Calculated Cable reactance (ohm/km)	0.0796	
c) Impedance of cable (ohm/km)	0.0903	
Maximum conductor temperature under normal operating conditions	90°C	

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Maximum conductor temperature at the termination of short circuit	250°C
Short Circuit rating of conductor for the duration of 1 sec (kA)	90.14
Continuous Current carrying capacities :-	
(a) In Ground at 30°C (A)	661
(b) In Air at 40°C (A)	961
Applicable Standard	IS 7098 Part I/88, IS 8130/2013, IS 5831/84 etc. with latest up to date amendments
Approx. overall diameter of the cable in mm	40.5 ± 2.0
Minimum bending radius	15 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)	31,500
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
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