



LT XLPE CABLE

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Particulars		3.5 Core X 120 Sq.mm
Name of Manufacturer		Polycab India Ltd
Type of cable		2XFY
Voltage Grade V		1100
No of cores X size in sqmm		3.5 Core X 120 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)	Main	0.153
	Neutral	0.268
c) Shape of the conductor		Stranded Compacted Sector
Insulation		
a) Material		XLPE as per IS 7098(Pt-1)/88, Latest
b) Nominal thickness (mm)	Main	1.2
	Neutral	1.1
c) Core identification		Red, Yellow, Blue, Black
Inner Sheath		
a) Material		Extruded PVC Type ST2 as per IS:5831/84
b) Minimum thickness (mm)		0.4
a) Material		Galvanised Steel
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 sheath		Black
Electrical Parameters		
a) Max. a.c. resistance of conductor at 90° C (ohm/km)		0.196
b) Calculated Cable reactance (ohm/km)		0.0713
c) Impedance of cable (ohm/km)		0.209

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

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d) Approx. Cable Capacitance (mfd/km)	0.67
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)	17.17

Continuous Current carrying capacities :-

(a) In Ground at 30°C (A)	287
(b) In Air at 40°C (A)	320
Applicable Standard	IS 7098 Part I/88, IS 8130, IS 5831, IS 3975 etc. with latest up to date amendments
Approx. overall diameter of the cable in mm	38.0 +/- 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)	21500
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