



LT XLPE CABLE

Document ID: TE/QMS/F/02

DESIGN CODE : LVIS09AXSWYL003C006SA001S

Particulars		3 Core X 6 Sq.mm
Name of Manufacturer		Polycab India Ltd
Type of cable		A2XWY
Voltage Grade V		1100
No of cores X size in sqmm		3 Core X 6 Sq.mm
Conductor		
a) Material		H2/H4 Grade Aluminium as per Class 2 of IS: 8130/2013, latest
b) Max. d.c. resistance of conductor at 20° C (ohm/km)		4.6100
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		Red, Yellow, Blue
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 mm
Outer Sheath		
a) Material		Extruded FR-LSH PVC Type 'ST2' as per IS:5831/ 84
b) Thickness (mm)		1.24 (Min.)
c) Colour of sheath		Black
Electrical Parameters		
a) Max. a.c. resistance of conductor at 90° C (ohm/km)		5.9
b) Calculated Cable reactance (ohm/km)		0.0877
c) Impedance of cable (ohm/km)		5.9

d	Approx. Cable Capacitance (mfd/km)	0.30
	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 capacities :-

(a)	In Ground at 30°C (A)	46
(b)	In Air at 40°C (A)	42
	Applicable Standard	IS 7098 Part I/88, IS 8130/2013, IS 5831/84, IS 3975/1999 etc. with latest up to date amendments
	Approx. overall diameter of the cable in mm	16.5 +/- 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)	540
	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 Mtr. ±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