



LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/000083

DESIGN CODE: LVIS09CXSWYL002C010SA001S

Particulars	2 Core X 10 Sq.mm
Name of Manufacturer	Polycab India Ltd
Type of cable	2XWY
Voltage Grade V	1100
No of cores X size in sqmm	2 Core X 10 Sq.mm
Conductor	
Material	Plain annealed Copper as per Class 2 of IS:8130/2013
Max. D.C. resistance of conductor at 20° C (ohm/km)	1.83
Shape of the conductor	Stranded Circular
Insulation	
Material	XLPE as per IS 7098(Pt-1)/88, Latest
Nominal thickness (mm)	0.7
Core identification	Red, Black
Inner Sheath	
Material	Extruded PVC Type ST2 as per IS:5831/84
Minimum thickness (mm)	0.3
Armouring	
Material	Galvanised Steel
Type of armouring	Round Wire
Nominal size of armour (mm)	1.4
Tolerance on armour dimensions	± 0.040 mm
Outer Sheath	
Material	Extruded FR-LSH PVC Type 'ST2' as per IS:5831
Thickness (mm)	1.24 (Min.)
Colour of outer sheath.	Black
Electrical Parameters	
Max. a.c. resistance of conductor at 90° C (ohm/km)	2.33
Calculated Cable reactance (ohm/km)	0.084
Impedance of cable (ohm/km)	2.33

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Approx. Cable Capacitance (mfd/km)	0.36
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)	1.43

Continuous Current carrying capacities :-

In Ground at 30°C (A)	89
In Air at 40°C (A)	83
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	17.5 ± 2.0
Minimum bending radius	12 times Overall diameter
Max. Tensile strength for Cables pulled with stocking (Newtons)	9 x D ² , D is the cable OD in mm
for Cables pulled with pulling eyes (N)	1,000
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.)	1000 ± 5%
Non- Standard Drum Length (Mtr.)	Maximum 5% of order quantity

FR-LSH PROPERTIES

Oxygen Index	Min. 29% as per ASTM D- 2863
Temperature Index	Min. 250 Deg.C as per ASTM D- 2863
Smoke Density Rating	Max. 60% as per ASTM D- 2843
Acid Gas Generation	Max. 20% as per IEC- 754- 1
Flammability Test	As per IEC:332-I