



LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/000641

DESIGN CODE : LVIS09CXSWY23.5C070SA001S

Particulars		3.5 Core X 70 Sq.mm	
Name of Manufacturer		Polycab India Ltd	
Type of cable		2XWY	
Voltage Grade V		1100	
No of cores X size in sqmm		3.5 Core X 70 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	0.268
		Neutral	0.524
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	1.1
		Neutral	0.9
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	
Armouring			
a)	Material	Galvanised Steel	
b)	Type of armouring	Round Wire	
c)	Nominal size of armour (mm)	2	
d)	Tolerance on armour dimensions	± 0.050 mm	
Outer Sheath			
a)	Material	Extruded PVC Type 'ST2' as per IS:5831	
b)	Thickness (mm)	1.56 (Min.)	
c)	Colour of outer sheath.	Black	
Electrical Parameters			
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	0.342	

b) Calculated Cable reactance (ohm/km)	0.0742
c) Impedance of cable (ohm/km)	0.350
d) Approx. Cable Capacitance (mfd/km)	0.56
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)	10.02

Continuous Current carrying capacities :-

(a) In Ground at 30°C (A)	212
(b) In Air at 40°C (A)	226
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	34.0 ± 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)	12,250
Embossing	POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE
Printing	YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE , 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