



**LT XLPE CABLE**

TDS Doc.No:PIL/TE/250425/001358

DESIGN CODE : LVIS09AXSFYF3.5C300SA002S

Particulars		3.5 Core X 300 Sq.mm	
Name of Manufacturer		Polycab India Ltd	
Type of cable		A2XFY	
Voltage Grade V		1100	
No of cores X size in sqmm		3.5 Core X 300 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)	Main	0.1000
		Neutral	0.206
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	1.8
		Neutral	1.4
c)	Core identification	Red, Yellow, Blue, Black	
Inner Sheath			
a)	Material	Extruded PVC Type ST2 as per IS:5831/84	
b)	Minimum thickness (mm)	0.6	
Armouring			
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 PVC Type 'ST2' as per IS:5831	
b)	Thickness (mm)	2.20 (Min.)	
c)	Colour of outer sheath.	Black	
Electrical Parameters			
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	0.13	

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b) Calculated Cable reactance (ohm/km)	0.0703
c) Impedance of cable (ohm/km)	0.1480
d) Approx. Cable Capacitance (mfd/km)	0.71
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)	28.35
<b>Continuous Current carrying capacities :-</b>	
(a) In Ground at 30°C (A)	369
(b) In Air at 40°C (A)	452
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	56.0 +/- 2.0
Minimum bending radius	12 times Overall diameter
Max. Tensile strength	
(i) for Cables pulled with stocking (Newtons)	9 x D <sup>2</sup> , 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
Printing	YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR 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 and Min Individual Non-Standard Drum 200 meters
<b>FR PROPERTIES</b>	
a) Oxygen Index	Min. 29% as per ASTM D- 2863
b) Temperature Index	Min. 250 Deg.C as per ASTM D- 2863
c) Flammability Test	As per IEC:332-I