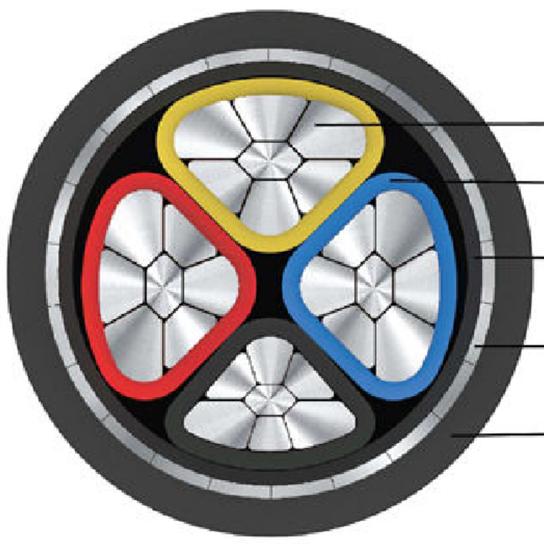
CABLES

POLYCAB





LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/001482

DESIGN CODE : LVIS09AXSFYL3.5C400SA001S

Particulars			3.5 Core X 400 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 400 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	0.0778
		Neutral	0.164
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	2.0
		Neutral	1.6
c)	Core identification		Red,Yellow,Blue,Black
Inner Sheath			
a)	Material		Wrapping of Tapes
b)	Minimum thickness (mm)		0.7
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-LSH PVC Type 'ST2' as per IS:5831
b)	Thickness (mm)		2.52 (Min.)
c)	Colour of outer sheath.		Black
Electrical Parameters			
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)		0.102

Format ID: TE/QMS/F/07, R-00, Date: 16/03/2025

b)	Calculated Cable reactance (ohm/km)	0.0702
c)	Impedance of cable (ohm/km)	0.124
d	Approx. Cable Capacitance (mfd/km)	0.72
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)		37.79
Continuous Current carrying capacities :-		
(a)	In Ground at 30°C (A)	420
(b)	In Air at 40°C (A)	526
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		63.0 +/- 3.0
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)	41,550
Printing		POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR-LSH 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

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