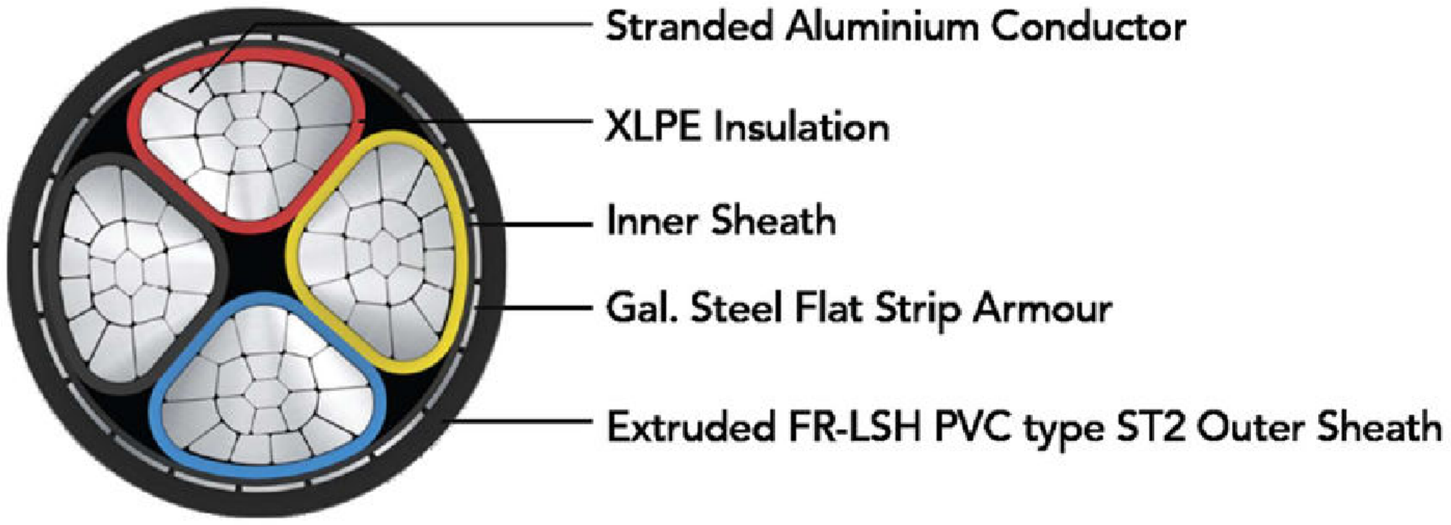
CABLES

POLYCAB





LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/001621

DESIGN CODE : LVIS09AXSFYL004C500SA001S

Particulars		4 Core X 500 Sq.mm
Name of Manufacturer		Polycab India Ltd
Type of cable		A2XFY
Voltage Grade V		1100
No of cores X size in sqmm		4 Core X 500 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)	0.0605
c)	Shape of the conductor	Stranded Compacted Sector
Insulation		
a)	Material	XLPE as per IS 7098(Pt-1)/88, Latest
b)	Nominal thickness (mm)	2.2
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)	2.84 (Min.)
c)	Colour of outer sheath.	Black
Electrical Parameters		
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	0.0809
b)	Calculated Cable reactance (ohm/km)	0.0700

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

c)	Impedance of cable (ohm/km)	0.107
d	Approx. Cable Capacitance (mfd/km)	0.74
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)		47.24
Continuous Current carrying capacities :-		
(a)	In Ground at 30°C (A)	478
(b)	In Air at 40°C (A)	612
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		76.0 ± 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)	60000
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.)		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