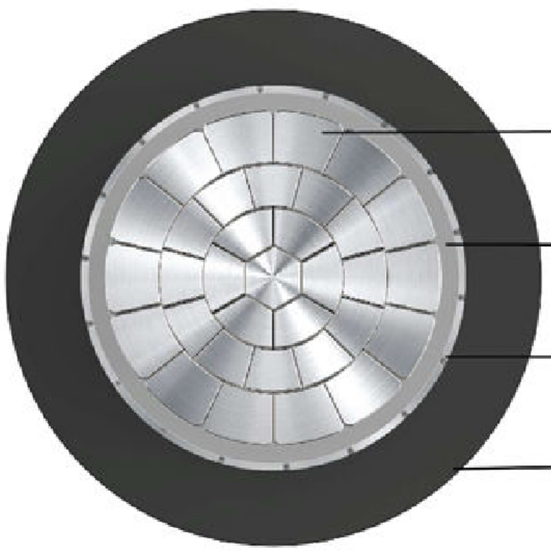
POLYCAB

CABLES

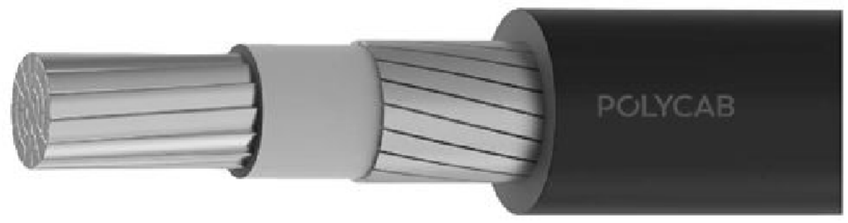


Stranded Aluminium Conductor

XLPE Insulation

Aluminium Flat Strip Armour

Extruded FR-LSH PVC type ST2 Outer Sheath



LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/001542

DESIGN CODE : LVIS09AXAFYL001C500SA002S

Particulars		1 Core X 500 Sq.mm
Name of Manufacturer		Polycab India Ltd
Type of cable		A2XFaY
Voltage Grade V		1100
No of cores X size in sqmm		1 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 Circular
Insulation		
a)	Material	XLPE as per IS 7098(Pt-1)/88, Latest
b)	Nominal thickness (mm)	2.6
c)	Core identification	Natural
Armouring		
a)	Material	Aluminium
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/ 84
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)	0.0809
b)	Calculated Cable reactance (ohm/km)	0.0806
c)	Impedance of cable (ohm/km)	0.114
Maximum conductor temperature under normal operating conditions		90°C

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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)	485
(b) In Air at 40°C (A)	685
Applicable Standard	IS 7098 Part I/88, IS 8130/2013, IS 5831/84 etc. with latest up to date amendments
Approx. overall diameter of the cable in mm	37.0 +/- 3.0
Minimum bending radius	15 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)	15,000
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.)	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