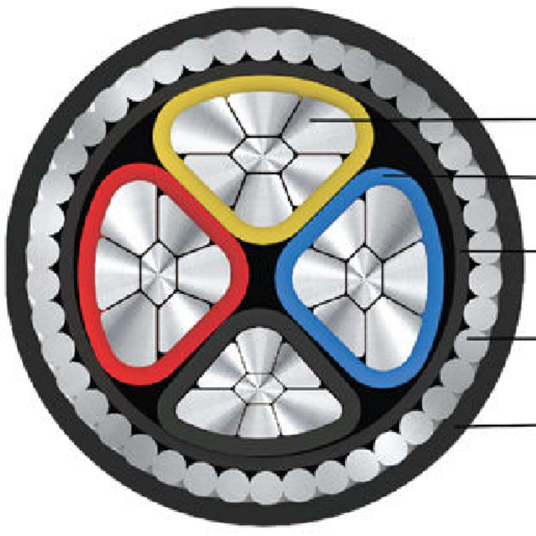
POLYCAB

CABLES



Stranded Aluminium Conductor
XLPE Insulation
Inner Sheath
Gal. Steel Round Wire Armour
Extruded FR-LSH PVC type ST2 Outer Sheath



LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/000991 **DESIGN CODE : LVIS09AXSWYL3.5C150SA001S**

Particulars			3.5 Core X 150 Sq.mm
Name of Manufacturer			Polycab India Ltd
Type of cable			A2XWY
Voltage Grade V			1100
No of cores X size in sqmm			3.5 Core X 150 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	0.206
		Neutral	0.443
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	1.4
		Neutral	1.1
c)	Core identification		Red,Yellow.Blue,Black
Inner Sheath			
a)	Material		Extruded PVC Type ST2 as per IS:5831/84
b)	Minimum thickness (mm)		0.5
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 FR-LSH PVC Type 'ST2' as per IS:5831
b)	Thickness (mm)		1.88 (Min.)
c)	Colour of sheath		Black
Electrical Parameters			
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)		0.265

Format ID: TE/QMS/F/007, R-00, Date: 16/03/2025

b)	Calculated Cable reactance (ohm/km)	0.0718
c)	Impedance of cable (ohm/km)	0.275
d	Approx. Cable Capacitance (mfd/km)	0.64
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)		14.17
Continuous Current carrying capacities :-		
(a)	In Ground at 30°C (A)	249
(b)	In Air at 40°C (A)	284
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		44.5 +/- 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)	15,600
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