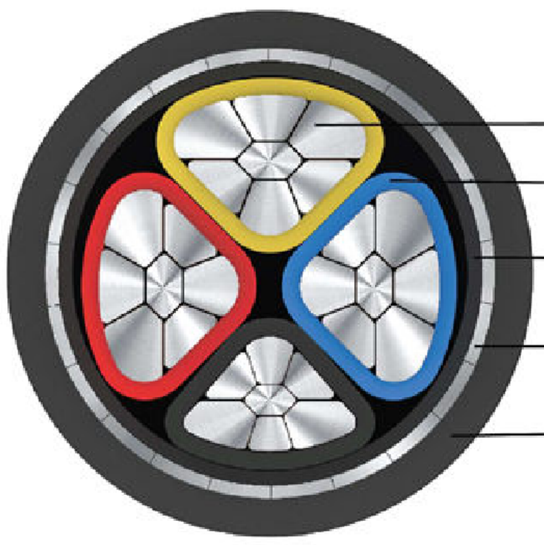
CABLES

POLYCAB





LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/001118 **DESIGN CODE : LVIS09AXSFYL3.5C185SA002S**

Particulars		3.5 Core X 185 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 185 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	0.164
	Neutral	0.320
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	1.6
	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		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)		1.88 (Min.)
c) Colour of outer sheath.		Black
Electrical Parameters		
a) Max. a.c. resistance of conductor at 90° C (ohm/km)		0.212

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

b)	Calculated Cable reactance (ohm/km)	0.0720
c)	Impedance of cable (ohm/km)	0.224
d	Approx. Cable Capacitance (mfd/km)	0.63
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)		17.48
Continuous Current carrying capacities :-		
(a)	In Ground at 30°C (A)	282
(b)	In Air at 40°C (A)	329
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		46.0 +/- 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)	19,500
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