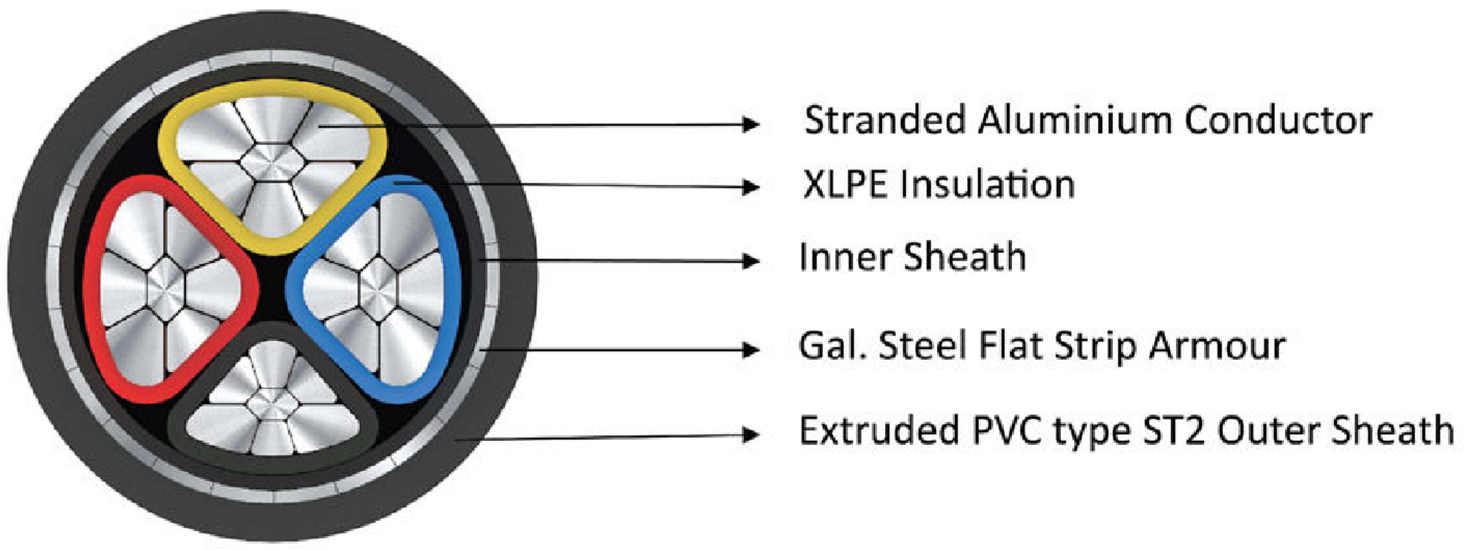
CABLES

POLYCAB





LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/001119 **DESIGN CODE : LVIS09AXSFY23.5C185SA001S**

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 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
Printing		YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE 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

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