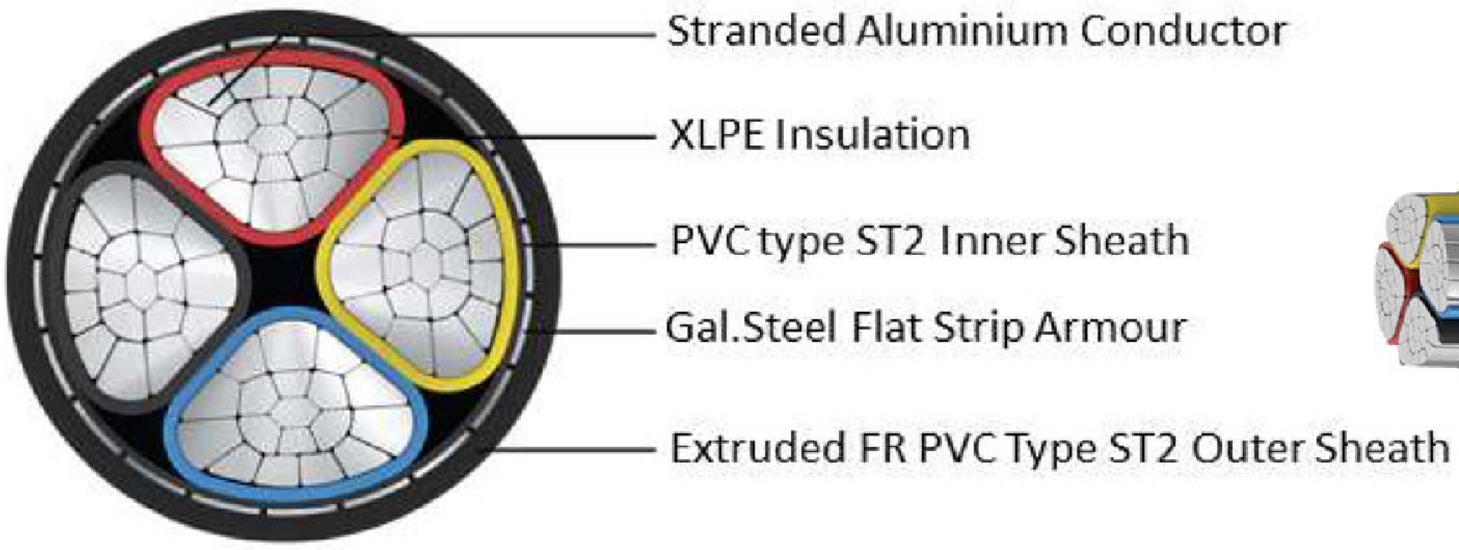
CABLES

POLYCAB





LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/000575

DESIGN CODE : LVIS09AXSFYF004C050SA001S

Particulars		4 Core X 50 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 50 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)	0.641
c)	Shape of the conductor	Stranded Compacted Sector
Insulation		
a)	Material	XLPE as per IS 7098(Pt-1)/88, Latest
b)	Nominal thickness (mm)	1.0
c)	Core identification	Red,Yellow,Blue,Black
Inner Sheath		
a)	Material	Wrapping of Tapes
b)	Minimum thickness (mm)	0.3
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 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)	0.822
b)	Calculated Cable reactance (ohm/km)	0.0780

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

c)	Impedance of cable (ohm/km)	0.826
d	Approx. Cable Capacitance (mfd/km)	0.53
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)		4.72
Continuous Current carrying capacities :-		
(a)	In Ground at 30°C (A)	134
(b)	In Air at 40°C (A)	138
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		28.5 +/- 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)	6,000
Embossing		POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR
Printing		YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR, 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 and Min Individual Non-Standard Drum 200 meters
FR PROPERTIES		
a)	Oxygen Index	Min. 29% as per ASTM D- 2863
b)	Temperature Index	Min. 250 Deg.C as per ASTM D- 2863
c)	Flammability Test	As per IEC:332-I

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