CABLES

POLYCAB





LT PVC CABLE

TDS Doc.No:PIL/TE/250425/000896

DESIGN CODE : LVIS09AYSFYL003C120SA001S

Particulars		3 CoreX 120 Sqmm
Name of Manufacturer		Polycab India Ltd
Type of cable		AYFY
Voltage Grade V		1100
No of cores X size in sqmm		3 X 120
Conductor		
a)	Material	H2/H4 Grade Aluminium as per Class 2 of IS: 8130/84,latest
b)	Max. d.c. resistance of conductor at 20° C (ohm/km)	0.253
c)	Shape of the conductor	Stranded Compacted Sector
Insulation		
a)	Material	PVC Type 'A' as per IS:5831, latest
b)	Nominal thickness (mm)	1.6
c)	Core identification	Red,Yellow,Blue
Inner Sheath		
a)	Material	Extruded PVC Type ST1 to IS:5831/84
b)	Minimum thickness (mm)	0.4
Armouring		
a)	Material	Gal.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 ST1 to IS:5831/84
b)	Thickness (mm)	1.72 (Min.)
c)	Colour of outer sheath.	
Electrical Parameters		
a)	Max. a.c. resistance of conductor at 70°C (ohm/km)	0.305

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

b)	Calculated Cable reactance (ohm/km)	0.0744
c)	Impedance of cable (ohm/km)	0.314
d	Approx. Cable Capacitance (mfd/km)	1.28
Maximum conductor temperature under normal operating conditions		70°C
Maximum conductor temperature at the termination of short circuit		160°C
Short Circuit rating of conductor for the duration of 1 sec (kA)		9.12
Continuous Current carrying capacities for stanc		
(a)	In Ground at 30°C (A)	185
(b)	In Air at 40°C (A)	186
Applicable Standard		IS 1554 Part I/88, IS 8130, IS 5831, IS 3975 etc. with latest up to date amendments
Approx. overall diameter of the cable in mm		36.5 ± 3.0
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)	10,800
Embossing		POLYCAB ELECTRIC 1100 VOLTS GRADE FR-LSH
Printing		YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE FR-LSH, CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.
Standard Drum Length (Mtr.)		500 Mtr. ± 5%
Non Standard Drum Length		Max. 5% of order quantity & Min. 200 M
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:332-1

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