CABLES

POLYCAB

LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/000763 **DESIGN CODE: LVIS09CXSFYL3.5C095SA002S**

Particulars	3.5 Core X 95 Sq.mm
Name of Manufacturer	Polycab India Ltd
Type of cable	2XFY
Voltage Grade V	1100
No of cores X size in sqmm	3.5 Core X 95 Sq.mm
Conductor	
a) Material	Plain annealed Copper as per Class 2 of IS:8130/2013, latest
b) Max. D.C. resistance of conductor at 20° C (ohm/km) Main	0.193
Neutral	0.387
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	1.1
Neutral	1.0
c) Core identification	Red,Yellow,Blue,Black
Inner Sheath	
a) Material	Extruded PVC Type ST2 as per IS:5831/84
b) Minimum thickness (mm)	0.4
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)	1.56 (Min.)
c) Colour of outer sheath.	Black
Electrical Parameters	
a) Max. a.c. resistance of conductor at 90° C (ohm/km)	0.247
b) Calculated Cable reactance (ohm/km)	0.0725

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c) Impedance of cable (ohm/km)	0.257
d) Approx. Cable Capacitance (mfd/km)	0.65
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)	13.59
Continuous Current carrying capacities :-	
a) In Ground at 30°C (A)	254
b) In Air at 40°C (A)	279
Applicable Standard	IS 7098 Part I/88, IS 8130, IS 5831, IS 3975 etc. with latest up to date amendments
Approx. overall diameter of the cable in mm	34.5 +/- 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)	16,750
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