CABLES

POLYCAB

LT XLPE CABLE

TDS Doc.No:PIL/TE/250425/000661

DESIGN CODE : LVIS09AXSFYL003C070SA002S

Particulars		3 Core X 70 Sq.mm
Name of Manufacturer		Polycab India Ltd
Type of cable		A2XFY
Voltage Grade V		1100
No of cores X size in sqmm		3 Core X 70 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)	0.443
c)	Shape of the conductor	Stranded Compacted Sector
Insulation		
a)	Material	XLPE as per IS 7098(Pt-1)/88, Latest
b)	Nominal thickness (mm)	1.1
c)	Core identification	Red,Yellow,Blue
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:5831/84
b)	Thickness (mm)	1.56 (Min.)
c)	Colour of sheath	Black
Electrical Parameters		
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	0.568
b)	Calculated Cable reactance (ohm/km)	0.0742

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c)	Impedance of cable (ohm/km)	0.573
d	Approx. Cable Capacitance (mfd/km)	0.56
	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)	6.61
Continuous Current carrying capacities :-		
(a)	In Ground at 30°C (A)	164
(b)	In Air at 40°C (A)	175
	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)	6,300
	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