





b)

Calculated Cable reactance (ohm/km)

Impedance of cable (ohm/km)

Soild Aluminium Conductor

XLPE Insulation
PVC type ST2 Inner Sheath

Gal. Steel Round Wire Armour



DESIGN CODE: LVIS09AXSWYL003C006SA002S

Extruded FR-LSH PVC type ST2 Outer Sheath

LT XLPE CABLE

Document ID: TE/QMS/F/02

Parti	culars	3 Core X 6 Sq.mm
Name of Manufacturer		Polycab India Ltd
Type of cable		A2XWY
Voltage Grade V		1100
No of cores X size in sqmm		3 Core X 6 Sq.mm
Cond	luctor	
a)	Material	H2/H4 Grade Aluminium as per Class 1 of IS: 8130/201
b)	Max. d.c. resistance of conductor at 20° C (ohm/km)	4.6100
c)	Shape of the conductor	Solid Circular
Insul	ation	
a)	Material	XLPE as per IS 7098(Pt-1)/88, Latest
b)	Nominal thickness (mm)	0.7
c)	Core identification	Red,Yellow,Blue
Innei	r Sheath	
a)	Material	Extruded PVC Type ST2 as per IS:5831/84
b)	Minimum thickness (mm)	0.3
Armo	ouring	
a)	Material	Galvanised Steel
b)	Type of armouring	Round Wire
c)	Nominal size of armour (mm)	1.4
d)	Tolerance on armour dimensions	± 0.040 mm
Oute	er Sheath	
a)	Material	Extruded FR-LSH PVC Type 'ST2' as per IS:5831/84
b)	Thickness (mm)	1.24 (Min.)
c)	Colour of sheath	Black
Elect	rical Parameters	
a)	Max. a.c. resistance of conductor at 90° C	5.9

0.0862

5.9





b)

c)

d)

e)

Temperature Index

Smoke Density Rating

Acid Gas Generation

Flammability Test

d Approx. Cable Capacitance (mfd/km)	0.27		
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)	0.57		
Continuous Current carrying capacities:-			
(a) In Ground at 30°C (A)	46		
(b) In Air at 40°C (A)	42		
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	15.0 +/- 2.0		
Minimum bending radius	12 times Overall diameter		
Max. Tensile strength			
(i) for Cables pulled with stocking (Newtons)	$9 \times D^2$, D is the cable OD in mm		
(ii) for Cables pulled with pulling eyes (N)	540		
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.)	1000 Mtr. ±5%		
Non- Standard Drum Length (Mtr.)	Maximum 5% of order quantity		
FR-LSH PROPERTIES			
a) Oxygen Index	Min. 29% as per ASTM D- 2863		

Min. 250 Deg.C as per ASTM D- 2863

Max. 60% as per ASTM D- 2843

Max. 20% as per IEC- 754-1

As per IEC:332-I

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