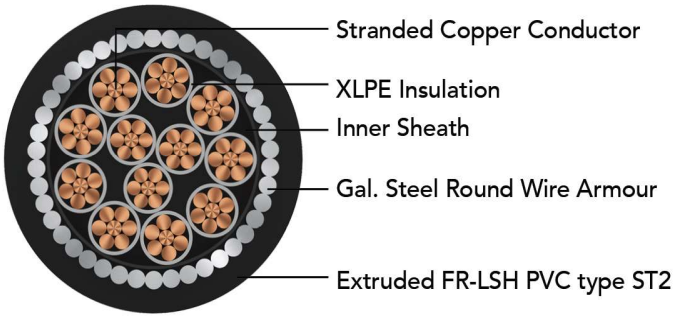
POLYCAB
Connection Zindagi Ka

CABLES



LT XLPE CABLE

Document ID: TE/QMS/F/02

DESIGN CODE : LVIS09CXSWYL008C2.5SA002S

Particulars		8 Core X 2.5 Sq.mm
Name of Manufacturer		Polycab India Ltd.
Type of cable		2XWY
Voltage Grade V		1100
No of cores X size in sqmm		8 Core X 2.5 Sq.mm
Conductor		
a)	Material	Plain annealed Copper as per Class 2 of IS:8130/2013
b)	Max. d.c. resistance of conductor at 20° C (ohm/km)	7.41
c)	Shape of the conductor	Stranded Circular
Insulation		
a)	Material	XLPE as per IS 7098(Pt-1)/88, Latest
b)	Nominal thickness (mm)	0.7
c)	Core Identification	All cores Grey with number printing
Inner Sheath		
a)	Material	Extruded PVC Type ST2 as per IS:5831/84
b)	Minimum thickness (mm)	0.3
Armouring		
a)	Material	Galvanised Steel
b)	Type of armouring	Round Wire
c)	Nominal size of armour (mm)	1.4
d)	Tolerance	+/- 0.040
Outer Sheath		
a)	Material	Extruded FR-LSH PVC Type ST2 as per IS:5831/84
b)	Thickness (mm)	1.24 (Min.)
c)	Colour of outer sheath.	Black
Electrical Parameters		
a)	Max. a.c. resistance of conductor at 90° C (ohm/km)	9.5
b)	Calculated Cable reactance (ohm/km)	0.099
c)	Impedance of cable (ohm/km)	9.450

d Approx. Cable Capacitance (mfd/km)	0.210
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)	0.36
Continuous Current carrying capacities :-	
(a) In Ground at 30°C (A)	23
(b) In Air at 40°C (A)	20
Applicable Standard	IS 8130/2013,IS 7098 Part I/88, IS 5831/84, IS 3975/1999 etc. with latest up to date amendments
Approx. overall diameter of the cable in mm	18.0 +/- 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)	1000
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 ± 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.