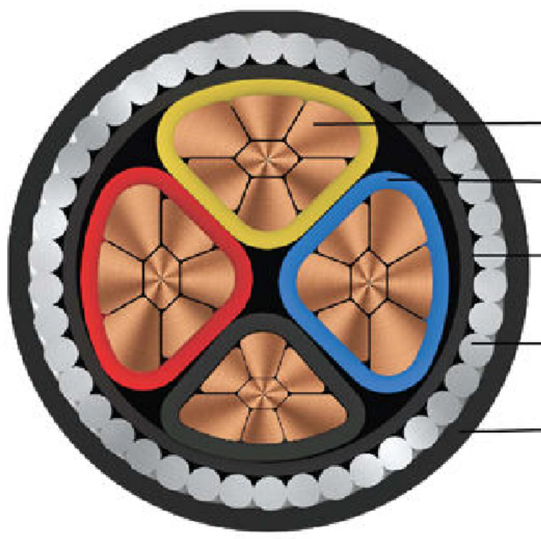
# CABLES

POLYCAB







# LT XLPE CABLE

**TDS Doc.No:PIL/TE/250425/001484**

**DESIGN CODE : LVIS09CXSWYL3.5C400SA001S**

| Particulars | | | 3.5 Core X 400 Sq.mm |
|---|---|---|---|
| Name of Manufacturer | | | Polycab India Ltd |
| Type of cable | | | 2XWY |
| Voltage Grade V | | | 1100 |
| No of cores X size in sqmm | | | 3.5 Core X 400 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 | 0.0470 |
| | | Neutral | 0.0991 |
| 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 | 2.0 |
| | | Neutral | 1.6 |
| c) | Core identification | | Red,Yellow,Blue,Black |
| **Inner Sheath** | | | |
| a) | Material | | Extruded PVC Type ST2 as per IS:5831/84 |
| b) | Minimum thickness (mm) | | 0.7 |
| **Armouring** | | | |
| a) | Material | | Galvanised Steel |
| b) | Type of armouring | | Round Wire |
| c) | Nominal size of armour (mm) | | 3.15 |
| d) | Tolerance on armour dimensions | | ± 0.080 mm |
| **Outer Sheath** | | | |
| a) | Material | | Extruded FR-LSH PVC Type 'ST2' as per IS:5831 |
| b) | Thickness (mm) | | 2.68 (Min.) |
| c) | Colour of outer sheath. | | Black |
| **Electrical Parameters** | | | |
| a) | Max. a.c. resistance of conductor at 90° C (ohm/km) | | 0.0641 |

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| | | |
|---|---|---|
| b) | Calculated Cable reactance (ohm/km) | 0.0702 |
| c) | Impedance of cable (ohm/km) | 0.0951 |
| d | Approx. Cable Capacitance (mfd/km) | 0.72 |
| 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) | | 57.23 |
| **Continuous Current carrying capacities :-** | | |
| (a) | In Ground at 30°C (A) | 528 |
| (b) | In Air at 40°C (A) | 662 |
| 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 | | 70.0 ± 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) | 69,250 |
| 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