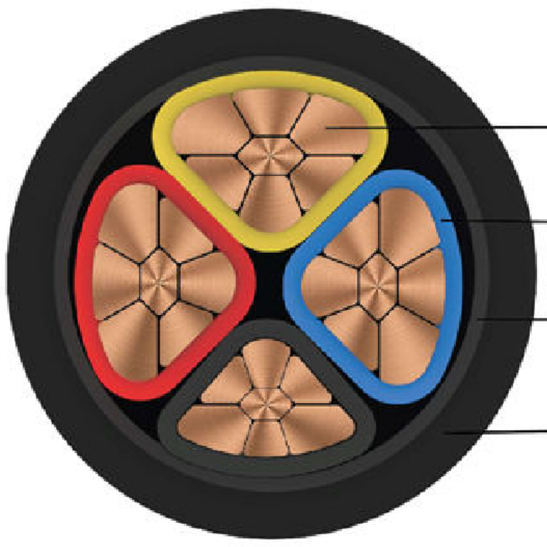
POLYCAB

# CABLES



Stranded Copper Conductor

XLPE Insulation

Inner Sheath

Extruded FR-LSH PVC type ST2 Outer Sheath




# LT XLPE CABLE

**TDS Doc.No:PIL/TE/250425/000402**

**DESIGN CODE : LVIS09CXUAYL3.5C035SA001S**

| Particulars | | 3.5 Core X 35 Sq.mm |
|---|---|---|
| Name of Manufacturer | | Polycab India Ltd |
| Type of cable | | 2XY |
| Voltage Grade V | | 1100 |
| No of cores X size in sqmm | | 3.5 Core X 35 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 | 0.524 |
| | Neutral | 1.15 |
| 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 | 0.9 |
| | Neutral | 0.7 |
| c) Core identification | | Red,Yellow,Blue,Black |
| **Inner Sheath** | | |
| a) Material | | Extruded PVC Type ST2 as per IS:5831/84 |
| b) Minimum thickness (mm) | | 0.3 |
| **Outer Sheath** | | |
| a) Material | | Extruded FR-LSH PVC Type 'ST2' as per IS:5831 |
| b) Thickness (mm) | | 2.0 (Nom.) |
| c) Colour of outer sheath. | | Black |
| **Electrical Parameters** | | |
| a) Max. a.c. resistance of conductor at 90° C (ohm/km) | | 0.669 |
| b) Calculated Cable reactance (ohm/km) | | 0.0787 |
| c) Impedance of cable (ohm/km) | | 0.674 |
| d Approx. Cable Capacitance (mfd/km) | | 0.00 |
| Maximum conductor temperature under normal operating conditions | | 90°C |

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| | |
|---|---|
| Maximum conductor temperature at the termination of short circuit | 250°C |
| Short Circuit rating of conductor for the duration of 1 sec (kA) | 5.01 |
| **Continuous Current carrying capacities :-** | |
| (a) In Ground at 30°C (A) | 146 |
| (b) In Air at 40°C (A) | 147 |
| Applicable Standard | IS 7098 Part I/88, IS 8130, IS 5831 etc. with latest up to date amendments |
| Approx. overall diameter of the cable in mm | 23.5 ± 2.0 |
| Minimum bending radius | 12 times Overall diameter |
| Max. Tensile strength | |
| (i) for Cables pulled with stocking (Newtons) | 5 x $D^2$, D is the cable OD in mm |
| ii) for Cables pulled with pulling eyes (N) | 6,050 |
| 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