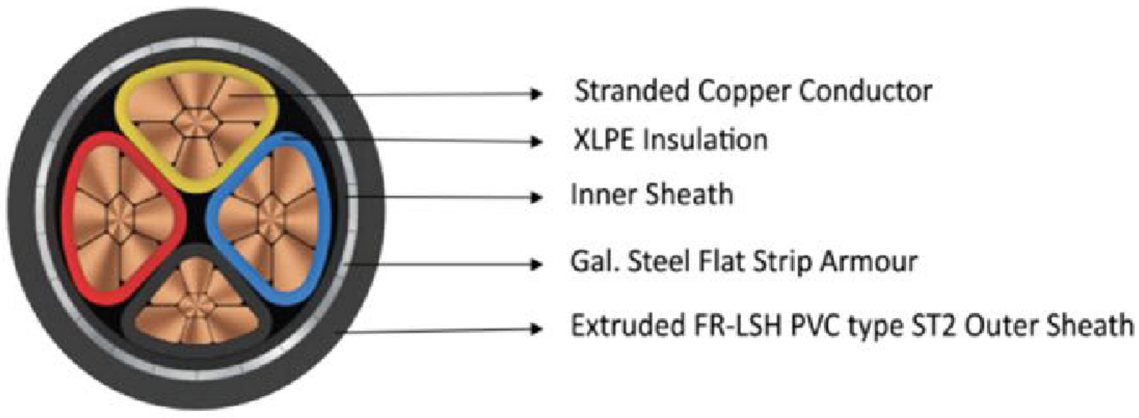
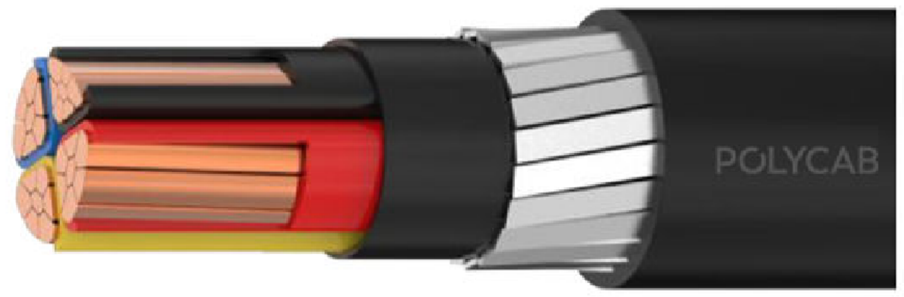
POLYCAB

# CABLES




# LT XLPE CABLE

**TDS Doc.No:PIL/TE/250425/000886**

**DESIGN CODE: LVIS09CXSFYL3.5C120SA001S**

| | Particulars | | 3.5 Core X 120 Sq.mm |
|---|---|---|---|
| | Name of Manufacturer | | Polycab India Ltd |
| | Type of cable | | 2XFY |
| | Voltage Grade V | | 1100 |
| | No of cores X size in sqmm | | 3.5 Core X 120 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 | 0.153 |
| | | Neutral | 0.268 |
| 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 | 1.2 |
| | | Neutral | 1.1 |
| c) | Core identification | | Red,Yellow,Blue,Black |
| | **Inner Sheath** | | |
| a) | Material | | Extruded PVC Type ST2 as per IS:5831/84 |
| b) | Minimum thickness (mm) | | 0.4 |
| | 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 |
| b) | Thickness (mm) | | 1.72 (Min.) |
| c) | Colour of sheath | | Black |
| | **Electrical Parameters** | | |
| a) | Max. a.c. resistance of conductor at 90° C (ohm/km) | | 0.196 |
| b) | Calculated Cable reactance (ohm/km) | | 0.0713 |
| c) | Impedance of cable (ohm/km) | | 0.209 |

Format ID: TE/QMS/F/07, R-00, Date: 16/03/2025

| | | |
|---|---|---|
| d) | Approx. Cable Capacitance (mfd/km) | 0.67 |
| | 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) | 17.17 |
| | **Continuous Current carrying capacities :-** | |
| (a) | In Ground at 30°C (A) | 287 |
| (b) | In Air at 40°C (A) | 320 |
| | 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 | 38.0 +/- 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) | 21500 |
| | 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