







## LT XLPE CABLE

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| Particulars  | 19 Core X 2.5 Sq.mm                                  |
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| Name of Manufacturer                                   | Polycab India Ltd                                    |
| Type of cable  | 2XFY   |
| Voltage Grade V  | 1100   |
| No of cores X size in sqmm                             | 19 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  | Wrapping of Tapes                                    |
| b) Minimum thickness (mm)                              | 0.3  |
| Armouring  |  |
| a) Material  | Galvanised Steel                                     |
| b) Type of armouring                                   | Flat Strip   |
| c) Nominal size of armour (mm)                         | $4.0 \times 0.8$                                     |
| d) Tolerance on armour dimensions                      | +/- 10%  |
| Outer Sheath   |  |
| a) Material  | Extruded FR-LSH PVC Type ST2 as per IS:5831/84       |
| b) Thickness (mm)                                      | 1.40 (Min.)  |
| c) Colour of outer sheath.                             | Black  |
| Electrical Parameters                                  |  |
| a) Max. a.c. resistance of conductor at 90° C (ohm/km) | 9.45   |
| b) Calculated Cable reactance (ohm/km)                 | 0.099  |
| c) Impedance of cable (ohm/km)                         | 9.45   |
| d) Approx. Cable Capacitance (mfd/km)                  | 0.21   |
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| 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)   | 18  |
| b) In Air at 40°C (A)  | 16  |
| 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                        | 22.5 +/- 2.0  |
| Minimum bending radius   | 12 times Overall diameter   |
| Max. Tensile strength  |   |
| <ul><li>i) for Cables pulled with stocking<br/>(Newtons)</li></ul> | 9 x D <sup>2</sup> , D is the cable OD in mm  |
| ii) for Cables pulled with pulling eyes (N)                        | 2,375   |
| 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  |
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