



# LT XLPE CABLE

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| Particulars  | 16 Core X 2.5 Sq.mm                                  |
|--|--|
| Name of Manufacturer                                   | Polycab India Ltd                                    |
| Type of cable  | 2XFY   |
| Voltage Grade V  | 1100   |
| No of cores X size in sqmm                             | 16 Core X 2.5 Sq.mm                                  |
| <b>Conductor</b>                                       |  |
| 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                                    |
| <b>Insulation</b>                                      |  |
| 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                  |
| <b>Inner Sheath</b>                                    |  |
| a) Material  | Extruded PVC Type ST2 as per IS:5831/84              |
| b) Minimum thickness (mm)                              | 0.3  |
| <b>Armouring</b>                                       |  |
| 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%  |
| <b>Outer Sheath</b>                                    |  |
| 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  |
| <b>Electrical Parameters</b>                           |  |
| 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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Note: -The values given above are subject to tolerances as per the relevant standards.

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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  | 21.5 +/- 2.0  |
| Minimum bending radius                       | 12 times Overall diameter   |
| Max. Tensile strength                        |   |
| i) for Cables pulled with stocking (Newtons) | 9 x D <sup>2</sup> , D is the cable OD in mm  |
| ii) for Cables pulled with pulling eyes (N)  | 2,000   |
| 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                   |