



## LT XLPE CABLE

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| Particulars                |   | 3 Core X 35 Sq.mm   |
|----------------------------|---|---|
| Name of Manufacturer       |   | Polycab India Ltd   |
| Type of cable              |   | A2XFY   |
| Voltage Grade V            |   | 1100  |
| No of cores X size in sqmm |   | 3 Core X 35 Sq.mm   |
| Conductor                  |   |   |
| a)                         | Material  | H2/H4 Grade Aluminium as per Class 2 of IS: 8130/2013, latest |
| b)                         | Max. d.c. resistance of conductor at 20° C (ohm/km) | 0.868   |
| c)                         | Shape of the conductor                              | Stranded Compacted Sector                                     |
| Insulation                 |   |   |
| a)                         | Material  | XLPE as per IS 7098(Pt-1)/88, Latest                          |
| b)                         | Nominal thickness (mm)                              | 0.9   |
| c)                         | Core identification                                 | Red, Yellow, Blue   |
| Inner Sheath               |   |   |
| a)                         | Material  | Extruded PVC Type ST2 as per IS:5831/84                       |
| 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 x 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 sheath                                    | Black   |
| Electrical Parameters      |   |   |
| a)                         | Max. a.c. resistance of conductor at 90° C (ohm/km) | 1.11  |
| b)                         | Calculated Cable reactance (ohm/km)                 | 0.0787  |

|  |   |   |
|--|---|---|
| c)   | Impedance of cable (ohm/km)                                       | 1.11  |
| d  | Approx. Cable Capacitance (mfd/km)                                | 0.50  |
|  | 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)  | 3.31  |
| <b>Continuous Current carrying capacities :-</b> |   |   |
| (a)  | In Ground at 30°C (A)   | 114   |
| (b)  | In Air at 40°C (A)  | 114   |
|  | Applicable Standard   | IS 7098 Part I/88, IS 8130/2013, 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   |   |
| (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)                           | 3,150   |
|  | 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  |
| <b>FR-LSH PROPERTIES</b>                         |   |   |
| 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  |