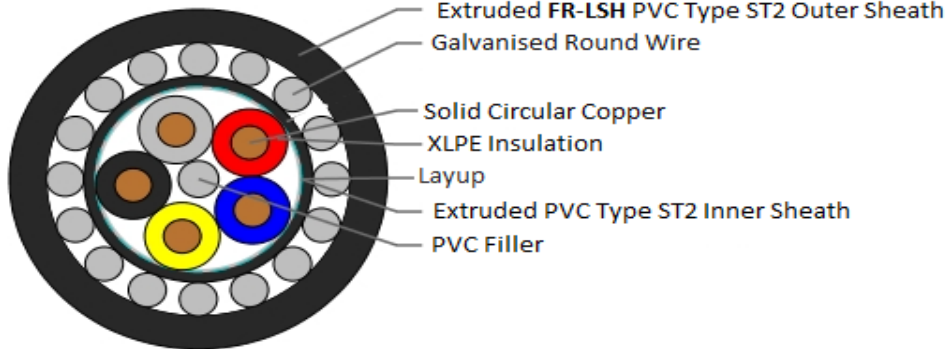


**Manufacturing Data Sheet:**
**Low Voltage XLPE Cable**
**Design Code : LVIS09CXSWYL005C004SA002S**
**Date :**
**Rev No. :**


| S.No | Particulars   | 5 X 4   |
|------|---|---|
| 1    | Name of Manufacturer                                | Polycab Wires Pvt. Ltd                                |
| 2    | Type of cable                                       | 2XWY  |
| 3    | Voltage Grade V                                     | 1100  |
| 4    | No of cores X size in sqmm                          | <b>5 X 4</b>  |
| 5    | <b>Conductor</b>                                    |   |
| a)   | Material  | Plain annealed Copper as per Class 1 of IS:8130/2013  |
| b)   | Max. d.c. resistance of conductor at 20° C (ohm/km) | 4.61  |
| c)   | Shape of the conductor                              | Solid Circular  |
| 6    | <b>Insulation</b>                                   |   |
| a)   | Material  | XLPE as per IS 7098(Pt-1)/88, Latest                  |
| b)   | Nominal thickness (mm)                              | 0.7   |
| c)   | Core Identification                                 | Red, Yellow, Blue, Black & Grey                       |
| 7    | <b>Inner Sheath</b>                                 |   |
| a)   | Material  | PVC Type 'ST2' as per IS:5831/84                      |
| b)   | Minimum thickness (mm)                              | 0.3   |
| 8    | <b>Armouring</b>                                    |   |
| a)   | Material  | Galvanised Steel                                      |
| b)   | Type of armouring                                   | Round Wire  |
| c)   | Nominal size of armour (mm) ± 0.040                 | 1.40  |
| 9    | <b>Outer Sheath</b>                                 |   |
| i)   | Material  | <b>Extruded FR-LSH</b> PVC Type ST2 as per IS:5831/84 |
| ii)  | Thickness (mm)                                      | 1.24 (Min.)   |
| iii) | Colour of outer sheath.                             | Black   |
|      | <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                           |

| S.No   | Particulars   | 5 X 4   |
|--|---|---|
| 10   | <b>Electrical Parameters</b>                                      |   |
| a)   | Max. a.c. resistance of conductor at 90° C (ohm/km)               | 5.88  |
| b)   | Calculated Cable reactance (ohm/km)                               | 0.0916  |
| c)   | Impedance of cable (ohm/km)                                       | 5.88  |
| d)   | Approx. Cable Capacitance (mfd/km)                                | 0.23  |
| 11   | Maximum conductor temperature under normal operating conditions   | 90°C  |
| 12   | Maximum conductor temperature at the termination of short circuit | 250°C   |
| 13   | Short Circuit rating of conductor for the duration of 1 sec (kA)  | 0.57  |
| 14   | <b>Continuous Current carrying capacities :-</b>                  |   |
| (a)  | In Ground at 30°C (A)   | 45  |
| (b)  | In Air at 40°C (A)  | 41  |
| 15   | Applicable Standard   | IS 8130/2013, IS 7098 Part I/88, IS 5831/84, IS 3975/88 etc. with latest up to date amendments  |
| 16   | Approx. overall diameter of the cable in mm                       | 17.0 ± 2.0  |
| 17   | Minimum bending radius  | 12 times Overall diameter   |
| 18   | 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)                           | 1,200   |
| 19   | Standard Drum Length (Mtr.)                                       | 1000 Mtr. ±5%   |
| 20   | Non Standard Drum Length (Mtr.)                                   | Maximum 5% of order quantity  |
| 21   | <b>Printing</b>   | <b>YEAR POLYCAB ELECTRIC 1100 VOLTS GRADE XLPE FR-LSH , CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval.</b> |
| <b>Note:-The values given above are subject to tolerances as per the relevant standards.</b> |   |   |