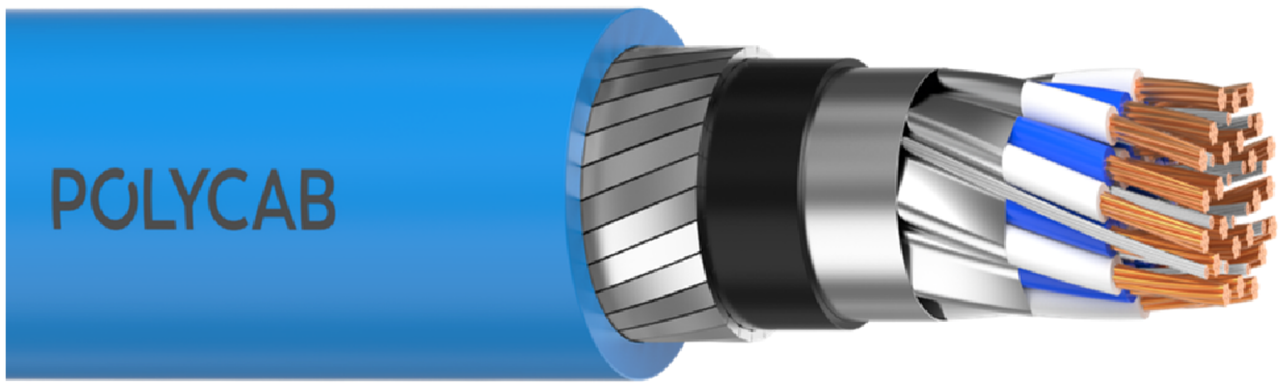
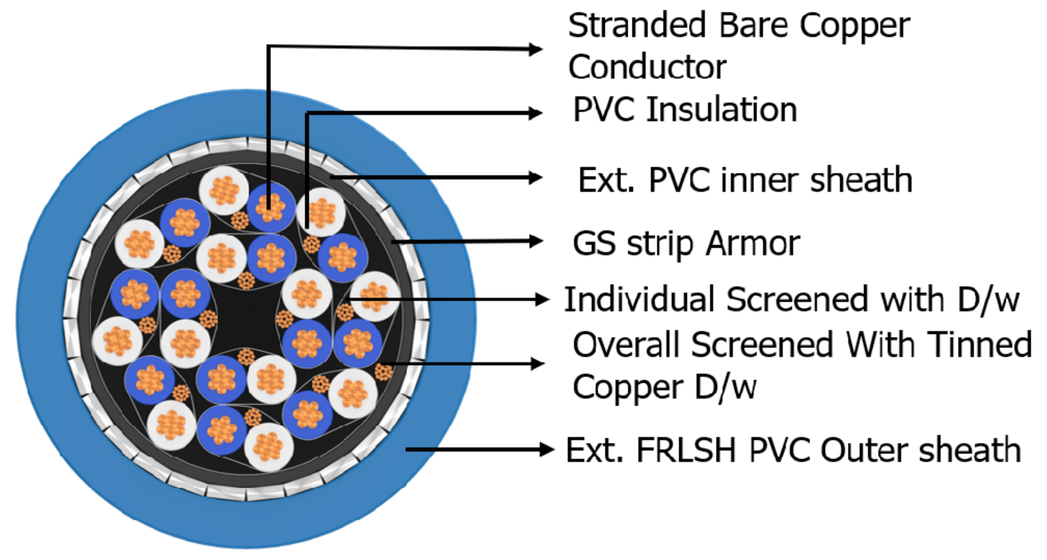
# CABLES

POLYCAB




## INSTRUMENTATION CABLE

**TDS Doc.No:PIL/TE/250425/004283**

**CABLE CODE: ICIS04CYSFYL012P001SA003S**

| Particulars | 12 Pair X 1 sqmm |
|---|---|
| Name of Manufacturer | POLYCAB INDIA LTD |
| Type of Cable | Individual & Overall Screened |
| No of Elements X Size in mm² | 12P X 1 |
| Voltage Grade (V) | 300/500 |
| **Conductor** | |
| a) Material | Plain Stranded Copper (Class-2) as per IS: 8130/2013 |
| b) Maximum D.C. resistance of conductor at 20° C (Ω/km) | 18.5 |
| c) Shape of conductor | Stranded Circular |
| **Insulation** | |
| a) Material | PVC Type A as per IS:5831 |
| b) Minimum Thickness mm | 0.44 |
| c) Pair/Triad identification | White & Blue with numbered Polyester tape (OR)<br>White & Blue with number printing on core |
| **Individual Screen** | |
| a) Material | Aluminium mylar tape |
| b) Nominal Thickness mm | 0.018 |
| c) Material of Drain Wire | Flexible ATC |
| d) Size of Drain Wire (Approx.) | 0.5 mm² (16/0.2 mm) |
| **Collective Screen** | |
| a) Material | Aluminium mylar tape |
| b) Nominal Thickness mm | 0.018 |
| c) Material of Drain Wire | Flexible ATC |
| d) Size of Drain Wire (Approx.) | 0.5 mm² (16/0.2 mm) |
| **Inner sheath** | |
| a) Material | Extruded PVC Type ST1 to IS: 5831 |
| 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 ST1 to IS: 5831 |

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| | |
|---|---|
| b) Thickness mm | 1.40 (Min.) |
| c) colour of sheath | Blue |
| **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 |
| Maximum conductor temperature under normal operating conditions °C | 70 |
| Minimum bending radius | 12 times Overall diameter |
| **Electrical Parameters** | |
| a) Mutual capacitance nf/km | <250 |
| b) Insulation resistance MΩ/km | 10 |
| c) Inductance to resistance ratio (L/R) µH/Ω | <25 |
| d) Dielectric strength for 1 minute (H.V Test) kV | 2 |
| Max. tensile strength for Cables pulled with stocking (Newtons) | 9 x $D^2$, D is the cable OD in mm |
| Approximate Overall diameter of cable mm | 24 ± 2.0 |
| Applicable Standard | Generally, as per IS 1554 Part I/88 & BSEN 50288-7 |
| Standard Drum Length (Mtr.) | 1000 ± 5% |
| Non-Standard Drum Length (Mtr.) | Maximum 5% of order quantity |
| Embossing | POLYCAB 300/500 VOLTS GRADE FR-LSH |
| Printing | YEAR POLYCAB 300/500 VOLTS GRADE FR-LSH CABLE SIZE SCREENED with SEQUENTIAL LENGTH MARKING at EVERY ONE METER INTERVAL |



Note:-The values given above are subject to tolerances as per the relevant standards