



INSTRUMENTATION CABLE

Document ID: TE/QMS/F/02

CABLE CODE: ICIS04CYSWYL002P1.5SA002S

| Particulars | 2 Pair X 1.5 sqmm |
|---|---|
| Name of Manufacturer | POLYCAB INDIA LTD |
| Type of Cable | Overall Screened |
| No of Elements X Size in mm ² | 2P X 1.5 |
| 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) | 12.3 |
| 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) White & Blue with number printing on core |
| 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 mm ² (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 | Round Wire |
| c) Nominal size of armour (mm) | 0.9 |
| d) Tolerance on armour dimensions | ± 0.030 mm |
| Outer sheath | |
| a) Material | Extruded FR-LSH PVC Type ST1 to IS: 5831 |

| | |
|---------------------|-------------|
| a) Thickness mm | 1.24 (Min.) |
| b) 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 | <40 |
| d) Dielectric strength for 1 minute (H.V Test) kV | 2 |

Max. tensile strength for Cables pulled with stocking (Newtons) $9 \times D^2$, D is the cable OD in mm

Approximate Overall diameter of cable mm 14.5 ± 2.0

Applicable Standard Generally as per IS 1554 Part I/88 & BSEN 50288-7

Standard Drum Length (Mtr.) $1000 \pm 5\%$

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