



## INSTRUMENTATION CABLE

Document ID: TE/QMS/F/02

CABLE CODE: ICIS04CYSWYL003P1.5SA002S

Particulars	3 Pair X 1.5 sqmm
Name of Manufacturer	POLYCAB INDIA LTD
Type of Cable	Overall Screened
No of Elements X Size in mm <sup>2</sup>	3P X 1.5
Voltage Grade (V)	300/500
<b>Conductor</b>	
Material	Plain Stranded Copper (Class-2) as per IS: 8130/2013
Maximum D.C. resistance of conductor at 20° C (Ω/km)	12.3
Shape of conductor	Stranded Circular
<b>Insulation</b>	
Material	PVC Type A as per IS:5831
Minimum Thickness mm	0.44
Pair/Triad identification	White & Blue with numbered Polyester tape (OR) White & Blue with number printing on core
<b>Collective Screen</b>	
Material	Aluminium mylar tape
Nominal Thickness mm	0.018
Material of Drain Wire	Flexible ATC
Size of Drain Wire (Approx.)	0.5 mm <sup>2</sup> (16/0.2 mm)
<b>Inner sheath</b>	
Material	Extruded PVC Type ST1 to IS: 5831
Minimum Thickness mm	0.3
<b>Armouring</b>	
Material	Galvanised Steel
Type of armouring	Round Wire
Nominal size of armour (mm)	0.9
Tolerance on armour dimensions	± 0.030 mm
<b>Outer sheath</b>	
Material	Extruded FR-LSH PVC Type ST1 to IS: 5831
Thickness mm	1.24 (Min.)
colour of sheath	Blue
<b>FR-LSH PROPERTIES</b>	
Oxygen Index	Min. 29% as per ASTM D- 2863

Temperature Index	Min. 250 Deg.C as per ASTM D- 2863
Smoke Density Rating	Max. 60% as per ASTM D- 2843
Acid Gas Generation	Max. 20% as per IEC- 754- 1
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**

Mutual capacitance nf/km	<250
Insulation resistance MΩ/km	10
Inductance to resistance ratio (L/R) μH/Ω	<40
Dielectric strength for 1 minute (H.V Test) kV	2
Max. tensile strength for Cables pulled with stocking (Newtons)	9 x D <sup>2</sup> , D is the cable OD in mm
Approximate Overall diameter of cable mm	15.5 ± 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 EVERYONE METER INTERVAL