







## **BMS CABLE**

## Document ID: TE/QMS/F/02 DESIGN CODE : ICBS04CYUAYL012C1.5S

Particulars	12C X 1.5 Sqmm	
Name of Manufacturer	Polycab India Ltd	
Type of Cable	Screened BMS Cable	
No of Elements X Size in mm² (No X Sq.mm)	12C X 1.5	
Voltage Grade (Volts)	300/500	
Applicable standard (S)	Generally as per BSEN 50288-7	
Conductor		
a) Material	Plain annealed high conductivity Flexible copper conductor as per Class 5 of IEC:60228	
<ul> <li>b) Maximum d.c. resistance of conductor at 20° C (Ω/km)</li> </ul>	13.3	
c) Shape of conductor	Bunched Circular	
Insulation		
a) Material	Extruded PVC Type 'A'	
b) Minimum Thickness (mm)	0.44	
c) Core Identification	All cores grey with number printing	
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 (Sq.mm)	0.5 mm² (16/0.2 mm)	
Outer sheath		
a) Material	Extruded FR-LSH PVC Type ST1	
b) Nominal thickness (mm)	1.12	
c) Colour Of Outersheath	Blue	
Approximate Overall diameter of cable (mm)	13.6 ± 2.0	
Maximum conductor temperature under normal operating conditions (°C)	70	
Maximum conductor temperature at the termination of short circuit (°C)	160	
Minimum bending radius (mm)	12 times Overall diameter	





Elec	Electrical Parameters		
a)	Max. a.c. resistance of conductor at operating temperature ( $\Omega/km$ )	15.9	
b)	Mutual capacitance (nf/km)	<250	
c)	Insulation resistance (M $\Omega$ /km)	10	
d)	Inductance to resistance ratio (L/R) ( $\mu$ H/ $\Omega$ )	<40	
e)	Dielectric strength for 1 minute (H.V Test) (kV)	2.0	
	tensile strength for Cables pulled with ing (Newtons)	$9 \times D^2$ , D is the cable OD in mm	
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:60332-1	
Printi	ng	YEAR POLYCAB 300/500 VOLTS GRADE FR-LSH No of Core x Sqmm SCREENED WITH SEQUENTIAL MARKING AT EVERY ONE METER	

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