



BMS CABLE

Document ID: TE/QMS/F/02

DESIGN CODE : ICBS04CYUAYL006C001S

Particulars	6C X 1Sqmm
Name of Manufacturer	Polycab India Ltd
Type of Cable	Screened BMS Cable
No of Elements X Size in mm ² (No X Sq.mm)	6C X 1
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
b) Maximum d.c. resistance of conductor at 20° C (Ω/km)	19.5
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 mm ² (16/0.2 mm)
Outer sheath	
a) Material	Extruded FR-LSH PVC Type ST1
b) Nominal thickness (mm)	0.97
c) Colour Of Outersheath	Blue
Approximate Overall diameter of cable (mm)	9.4 ± 1.0
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

Electrical Parameters

a) Max. a.c. resistance of conductor at operating temperature (Ω/km)	23.3
b) Mutual capacitance (nf/km)	<250
c) Insulation resistance ($M\Omega/\text{km}$)	10
d) Inductance to resistance ratio (L/R) ($\mu\text{H}/\Omega$)	<25
e) Dielectric strength for 1 minute (H.V Test) (kV)	2.0
Max. tensile strength for Cables pulled with stocking (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
Printing	YEAR POLYCAB 300/500 VOLTS GRADE FR-LSH No of Core x Sqmm SCREENED WITH SEQUENTIAL MARKING AT EVERY ONE METER..