

Technical Particulars of BMS Cables

		CB CODE:	ICBS04CYUAYL006C0.5S
S.No	Particulars	6Core X 0.5	
1	Name of Manufacturer	Polycab Wires Pvt. Ltd	
2	Type of Cable	Screened BMS Cable	
3	No of Elements X Size in mm ²	6Core X 0.5	
4	Voltage Grade V	300/500	
5	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)	39.00	
c)	Shape of conductor	Bunched Circular	
6	Insulation		
a)	Material	PVC Type A	
b)	Minimum Thickness mm	0.44	
c)	Core Identification	All Grey With Number	
7	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	0.5 mm ² (16/0.2mm)	
8	Outersheath		
a)	Material	Extruded FRLS PVC Type ST1	
b)	Nominal Thickness mm	0.9	
c)	Colour of Outer Sheath	Blue	
9 a)	Maximum conductor temperature under normal operating conditions °C	70	
b)	Maximum conductor temperature at the termination of short circuit °C	160	
c)	Short Circuit rating of conductor for the duration of 1 sec (kA)	0.06	
10	Minimum bending radius	12 times Overall diameter	
11	Electrical Parameters		
a)	Max. a.c. resistance of conductor at operating temperature (Ω/km)	46.66	
b)	Mutual capacitance nf/km	<250	
c)	Insulation resistance MΩ/km	10.0	
d)	Inductance to resistance ratio (L/R) μH/Ω	<25	
e)	Dielectric strength for 1 minute (H.V Test) kV	2	
12	Max. tensile strength for Cables pulled with stocking (Newtons)	5 x D ² , D is the cable OD in mm	
13	Applicable Standard	Generally as per EN 50288-7	
14	Approximate Overall diameter of cable mm	8.0 ± 1.0	
15	FRLS Properties		
i)	Oxygen Index (ASTM 2863-77)	Min 29%	
ii)	Temperature Index (ASTM 2863-77)	Min 250 °C	
iii)	Smoke Density Rating	Max. 60% as per ASTM D- 2843	
iv)	Acid Gas Generation	Max. 20% as per IEC- 754- 1	
v)	Flammability Test	As per IEC-332-1	
16	Printing	YEAR POLYCAB 300/500 VOLTS GRADE FRLS, CABLE SIZE SCREENED WITH SEQUENTIAL MARKING at every one meter interval.	