







## **BMS CABLE**

## Document ID: TE/QMS/F/02 DESIGN CODE : ICBS04CYUAYL016C2.5S

Particulars	16C X 2.5 Sqmm
Name of Manufacturer	Polycab India Ltd
Type of Cable	Screened BMS Cable
No of Elements X Size in mm <sup>2</sup> (No X Sq.mm)	16C X 2.5
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 Σ</li><li>(Ω/km)</li></ul>	20° C 7.98
c) Shape of conductor	Bunched Circular
Insulation	
a) Material	Extruded PVC Type 'A'
b) Minimum Thickness (mm)	0.53
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 <sup>2</sup> (16/0.2 mm)
Outer sheath	
a) Material	Extruded FR-LSH PVC Type ST1
b) Nominal thickness (mm)	1.29
c) Colour Of Outersheath	Blue
Approximate Overall diameter of cable (mm)	18.0 ± 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





	trical Parameters	
a)	Max. a.c. resistance of conductor at operating temperature ( $\Omega/km$ )	9.5
b)	Mutual capacitance (nf/km)	<250
c)	Insulation resistance (M $\Omega$ /km)	10
d)	Inductance to resistance ratio (L/R) ( $\mu H/\Omega$ )	<60
e)	Dielectric strength for 1 minute (H.V Test) (kV)	2.0
	tensile strength for Cables pulled with ing (Newtons)	9 x D², D is the cable OD in mm
FR-L	SH PROPERTIES	
FR-L a)		Min. 29% as per ASTM D- 2863
		Min. 29% as per ASTM D- 2863 Min. 250 Deg.C as per ASTM D- 2863
a)	Oxygen Index	·
a) b)	Oxygen Index Temperature Index	Min. 250 Deg.C as per ASTM D- 2863
a) b) c)	Oxygen Index Temperature Index Smoke Density Rating	Min. 250 Deg.C as per ASTM D- 2863  Max. 60% as per ASTM D- 2843

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