

## M/S. DELTON CABLES LIMITED

## CONSTRUCTIONAL &amp; TECHNICAL DATA SHEET



**Delton**  
We Connect . We Protect



S. NO.	DESCRIPTION				
1	Name of Manufacturer		Delton Cables Limited, Faridabad (India)		
2	Cable Type		Fire Resistant Screened Cable		
3	Applicable Standard		Generally Confirming to IS-6380,9968-1 & BS EN 50288-7, IS 5831, IS 8130.		
4	Voltage Grade	Volts	500		
5	Cable Size (No. of Pairs x Sq.mm)		1P x 1.5	6P x 1.5	12P x 1.5
6	<b>CONDUCTOR</b>				
a)	Material		Annealed Bare Copper of class 2 as per IS-8130		
b)	Area of conductor	mm <sup>2</sup>	1.5 (Conductor strand diameter is nominal & will meet the required CR value as per IS 8130)		
c)	Shape of Conductor		Non Compacted Circular		
d)	Heat Barrier Tape		Single layer of Glass Mica Tape should be provide on Conductor		
7	<b>INSULATION</b>				
a)	Material		Extruded EPR as per IS 9968-1		
b)	Composite Thickness of insulation (Nominal.) +Glass Mica	mm	1.00		
c)	Core Identification		Black & White	Black, & White with number tape for Pair Identification	
8	<b>Individual Screen</b>				
a)	Material		Not Applicable	Aluminium Mylar Tape	
b)	Thickness (mm)		Not Applicable	0.05	
c)	Coverage (%) / Overlap (%)		Not Applicable	100 / 25	
d)	Drain Wire				
i)	Material		Not Applicable	Stranded Tinned Copper	
ii)	Size		Not Applicable	0.5 Sq.mm (7/0.3 mm)	
9	<b>Overall Screen</b>				
a)	Material		Aluminium Mylar Tape		
b)	Thickness (mm)		0.05		
c)	Coverage (%) / Overlap (%)		100 / 25		
d)	Drain Wire				
i)	Material		Stranded Tinned Copper		
ii)	Size		0.5 Sq.mm (7/0.3 mm)		
10	<b>INNER SHEATH</b>				
a)	Material		Extruded FRLS PVC Type ST2 as per IS 5831		
b)	Min.Thickness (As per IS 7098-1)	mm	0.3	0.4	
c)	Colour		Black		
d)	Rip cord below Inner Sheath		Yes		
11	<b>ARMOURING</b>				
a)	Material		Galvanized Steel as per IS 3975		
b)	Type of armouring		Round Wire	Flat strips	Flat strips
c)	Nominal size of armour	mm	1.4	4 x 0.8	4 x 0.8
12	<b>OUTER SHEATH</b>				
a)	Material		Extruded FRLS PVC Type ST2 as pe IS 5831		
b)	Minimum Thickness	mm	1.24	1.56	1.88
c)	Colour		Light Blue		
d)	Rodent and Termite attack protection		Yes		

<b>13</b>	<b>ELECTRICAL PARAMETERS</b>				
a)	Maximum Conductor d.c. Resistance at 20 <sup>0</sup> C	Ohm/km	12.1	12.34	12.34
b)	Maximum conductor temperature under normal operating conditions	<sup>0</sup> C	90		
c)	Mutual capacitance at 1.0 KHz (Max.)	nF/Km	Core to Core <150		
			Core to Screen <400		
d)	High Voltage Test (HV Test)	KV rms	2 KV for 1 minutes		
e)	Circuit Integrity Test/fire survival test		As per IEC 60551-11 Flame at 750 deg C for 90 minutes		
<b>14</b>	<b>FRLS Properties</b>				
a)	Min. Temp. Index at O.I of 21		250 Deg.C when tested as per ASTM D - 2863		
b)	Smoke density rating		20 % (Max.) when tested as per ASTM D - 2843		
c)	Min. Oxygen index at room temp. (27 deg)		29% as per ASTM D - 2863		
d)	Flammability test		Shall pass the test when tested as per IEC-60332-I		
e)	Max. HCL Emission		20% (By Weight) when tested as per IEC-60754-I		
<b>15</b>	<b>PACKING</b>				
a)	Approx. overall diameter of the cable (+/- 2mm)	mm	20	33	44
b)	Minimum bending radius		15 x OD		
c)	Printing details		Delton Cables Ltd, Voltage Grade, No. of Pair x Conductor size, Year of Manufacturing, FRLS		
d)	Sequential length marking		Shall be provided at every one meter length by printing		
e)	Standard Packing Length	Mtrs	1000 ± 5%		
f)	Drum Material		Non Returnable Wooden Drum		
g)	Individual Quantity tolerance		±5%		
h)	Overall Quantity tolerance		±5%		