

M/S. DELTON CABLES LIMITED
CONSTRUCTIONAL & TECHNICAL DATA SHEET



Delton
We Connect . We Protect



S. NO.	DESCRIPTION		
1	Name of Manufacturer		Delton Cables Limited, Faridabad (India)
2	Voltage Grade	Volts	225
3	Cable Size (No. of Pair x Sq.mm)		2P x 0.5Sq.mm
4	Cable Type		Thermocouple Cable (KX TYPE)
5	CONDUCTOR		
a)	Material		(+Ve) Chromel and (-Ve) Alumel
b)	Number of Strand /Strand Diameter (Before Stranding)	mm	7/0.3
c)	Max. D.C Resistance of Conductor loop at 20deg.C	Ohm/Km	2269 (Loop)
d)	Shape of the Conductor		Stranded Circular
6	INSULATION		
a)	Material		Extruded PVC Type YI 3 as per VDE-0207-IV
b)	Thickness of insulation (Min. / Max.)	mm	0.25 / 0.35
c)	Min. Volume Resistivity	Ohms-cm	1×10^{14} at 20 deg.C
		Ohms-cm	1×10^{11} at 70 deg.C
d)	Core Identification		((+Ve) Yellow and (-Ve) Red. Also Numbered Polyester Tape shall be provided over each pair identification
e)	Pair Twist Lay	mm	50
7	OVERALL SCREEN		
a)	Material		Aluminium Mylar Tape
b)	Thickness (mm)		0.055
c)	Coverage (%) / Overlap (%)		100 / 25
d)	Drain Wire		
i)	Material		Stranded Tinned Copper
ii)	Size		0.5 Sq.mm (7/0.3 mm)
			Drain wire laid under the contact with aluminium side of the tape
	Fillers		
	Material		Non- Hygroscopic flame retardant fillers provided, wherever applicable
8	OUTER SHEATH		
a)	Material		Extruded PVC Type YM 1 as per VDE-0207-V with FRLS Properties
b)	Minimum Thickness	mm	1.80
c)	Colour		Sky Blue
9	ELECTRICAL PARAMETERS		
a)	Minimum Insulation Resistance	M.Ohm/km	100
b)	Mutual capacitance at 0.8 KHz (Max.) (between conductor)	nF/km	200
c)	High Voltage Test (HV Test)	KV rms	2 KV for 1 minutes Core to Core 0.5KV RMS for 1 minutes for Core to Screen
d)	Thermal emf test		As per ANSI MC: 96.1
e)	Crosstalk at 0.8 KHz (Min.)	dB	60
f)	Maximum conductor temperature under normal operating conditions	deg.C	70
g)	Maximum conductor temperature at the termination of short circuit	deg.C	160

10	FRLS Properties		
a)	Min. Oxygen index at room temp.		29% as per ASTM D - 2863
b)	Min. Temp. Index at O.I of 21		250 ⁰ C when tested as per ASTM D - 2863
c)	Max. HCL Emission		20% (By Weight) when tested as per IEC-60754-I
d)	Smoke density rating		60 % (Max.) when tested as per ASTM D - 2843
e)	Flammability test		Shall pass the test when tested as per IEC-60332- Cat.C
f)	Swedish Chimney Test		Provided as per SS 424 1475 Cl.F3
11	Applicable Standard		Generally conforming to ANSI MC: 96.1, VDE-0207-IV, VDE-0207-V, ASTM D-2863, ASTM D-2843, IEC-60754-I, IEC-60332-3 Cat.C & SS 4241475 Cl.F3
a)	Approx. overall diameter of the cable (+/- 2mm)	mm	10.00
b)	Printing details		Delton Cables Ltd, Insulation Material, Conductor size, Number of Pair, 225V, Type of Cable, Year of Manufacturing and FRLS at intervals not exceeding 625mm FRLS at every 5 Mtrs
c)			Progressive marking of the length of cable at every one meter.
d)	Standard Packing Length in meters (+/-5% tolerance)	mtrs	500 / 1000
e)	Drum Material		Non Returnable Wooden Drum As per IS-10418
f)	Overall Quantity tolerance		±5%

Item above is subject to tolerance as per relevant standards.