Part Number: 1303E.00500

CATSNAKE S/FTP Cat6a PVC PVC upjacketed

Product Description

CATSNAKE S/FTP Cat6a PVC PVC upjacketed

Technical Specifications

Suitable Applications:	Field deployable CAT6a patch horizontal and building backbone cable; CobraNEt, eSnake, Ethersound, Digital audio over Ethernet; Support current and future Category 6A and 6 applications, such as: 10GBase - T(10 Gigabit Ethernet), 1000 Base - T (Gigabit Ethernet), 100 Base - T, 10 Base - T, FDDI, ATM; Compatible connectors Belden R301601 000S1 (T568A) and R301602 000S1 (T568B)

Construction and Dimensions

Conductor:

Element	AWG	Stranding	Material	No. of Pairs
Individual shielded pair	24	Stranded	Bare copper	4

Total Number of Conductors:	8
Total Number of Pairs:	4
Min Elongation at Breakof Conductors:	10 %

Insulation:

Element	Type	Material	Nominal Diameter
Individual shielded pair	Dielectric	Foamed Polyethylene	1.4 mm

Min Elongation at Breakof Insulation:	100 %

Color Chart 1:

Number	Color
Pair 1	White & Blue
Pair 2	White & Orange
Pair 3	White & Green
Pair 4	White & Brown

Innershield:

Element	Type	Material	Coverage [%]
Individual shielded pair	Tape	Aluminum / Polyester	100 %
Aluminum facing outside			

Outershield 1:

Type	Material	Drainwire Material	Drainwire AWG	Min. Coverage [%]
Braid	Tinned copper	Tinned Copper	26	80 %

Outerjacket 1:

Layer	Material	Color	Nominal Diameter	Diameter +/- Tolerance	Diameter - Tolerance	Nominal Wall Thickness	Separator Material
1	Matte rugged PVC	Black (RAL 9005)	7.2 mm	0.3 mm		0.45 mm	
2	Matte rugged PVC	Black (RAL 9005)	8.7 mm		0.3 mm	0.7 mm	Non-woven foil

Min Elongation at Breakof Jacket:	100 %
Min Tensile Strength of Jacket:	9 MPa

Electrical Characteristics

Conductor DCR:

Max. Conductor DCR	Max DCR Unbalanced Between Pairs [%]	Max. DCR Unbalanced Within Pair [%]
95 Ohm/km	4 %	2 Ohm

Capacitance:

Max. Capacitance Unbalance	Max. Mutual Capacitance
1,600 pF/m	56 pF/m

Min Insulation Resistance:	5000 MOhm*km

Impedance:

Nominal Characteristic Impedance
100 Ohm

Delay:

Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
25 ns/100m	77 %

High Freq:

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. PSANEXT	Min. PSAACRF	Min. TCL [dB]	Min. ELTCTL [dB]
1 MHz	2.5 dB/100m	75.3 dB	72.3 dB	72.8 dB	69.8 dB	68 dB	65 dB	20 dB	67 dB	67 dB	40 dB	35 dB
4 MHz	4.6 dB/100m	66.3 dB	63.3 dB	61.7 dB	58.7 dB	56 dB	53 dB	23 dB	67 dB	66.2 dB	34 dB	23 dB
10 MHz	7.1 dB/100m	60.3 dB	57.3 dB	53.2 dB	50.2 dB	48 dB	45 dB	25 dB	67 dB	58.2 dB	30 dB	15 dB
16 MHz	9 dB/100m	57.2 dB	54.2 dB	48.3 dB	45.3 dB	43.9 dB	40.9 dB	25 dB	67 dB	54.1 dB	28 dB	10.9 dB
31.2 MHz	12.6 dB/100m	52.9 dB	49.9 dB	50.4 dB	47.3 dB	38.1 dB	35.1 dB	23.6 dB	67 dB	48.3 dB	25.1 dB	5.1 dB
62.5 MHz	18 dB/100m	48.4 dB	45.4 dB	30.4 dB	27.4 dB	32.1 dB	9.1 dB	21.5 dB	65.6 dB	42.3 dB	22 dB	
100 MHz	23 dB/100m	45.3 dB	42.3 dB	22.3 dB	19.3 dB	28 dB	25 dB	20.1 dB	62.5 dB	38.2 dB	20 dB	
125 MHz	25.8 dB/100m	43.8 dB	40.8 dB	18 dB	15 dB	26.1 dB	23.1 dB	19.4 dB	61 dB	36.3 dB	19 dB	
200 MHz	33.1 dB/100m	40.8 dB	37.8 dB	7.7 dB	4.7 dB	22 dB	19 dB	18 dB	58 dB	32.2 dB	17 dB	
250 MHz	37.3 dB/100m	39.3 dB	36.3 dB	2 dB	-1 dB	20 dB	17 dB	17.3 dB	56.5 dB	30.2 dB	16 dB	
300 MHz	41.1 dB/100m	38.1 dB	35.1 dB	-3 dB	-6 dB	18.5 dB	15.5 dB	17.3 dB	55.3 dB	28.7 dB		
500 MHz	54.3 dB/100m	34.8 dB	31.8 dB	-19.5 dB	-22.5 dB	14 dB	11 dB	17.3 dB	52 dB	24.2 dB		

Current:

Max. Recommended Current [A]
1.5 A

Voltage:

Voltage Rating [V]
72 V

Coupling Attenuation:

Element	Coupling Attenuation [dB]
	Type II V dB
Type II	

Coupling Attenuation Class:	Type II

Transfer Impedance:

Frequency [MHz]	Description	Transfer Impedance
1 Mhz	Grade 2	Max.50 mOhm/m
10 Mhz		Max.100 mOhm/m
30 Mhz		Max.200 mOhm/m
100 Mhz		Max.1000 mOhm/m

Use

Burning Load:	900 kJ/m
Max Recommended Pulling Tension:	75 N

Safety

ISO/IEC Flammability:	IEC 60332-1

Temperature Range

Installation Temp Range:	0 to +50 °C
Operating Temp Range:	-30 to +60 °C

Mechanical Characteristics

Min Bend Radius During Installation:	64 mm
Min Bend Radius During Operation:	32 mm

Standards

ISO/IEC Compliance:	ISO/IEC 11801 2nd edition (2002) and ISO/IEC 11801 Amendment 2 (2010)
ANSI Compliance:	ANSI/TIA/EIA 568-B.2-10 (2008)
CENELEC Compliance:	EN 50173-1 (2011)

History

Revision Number:	1

Product Variants

Part Number	Color	Put-Up Type	Length
1303E.00500			
1303E.00500			
1303E.00500			
1303E.00500			
1303E.00500			
1303E.00500			
1303E.00500	BLACK	Reel	152 m
1303E.00500	BLACK	Reel	3000 m
1303E.00500	BLACK	Reel	305 m
1303E.00500	BLACK	Reel	500 m
1303E.00500	BLACK	Reel	499 m
1303E.00500			

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Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.