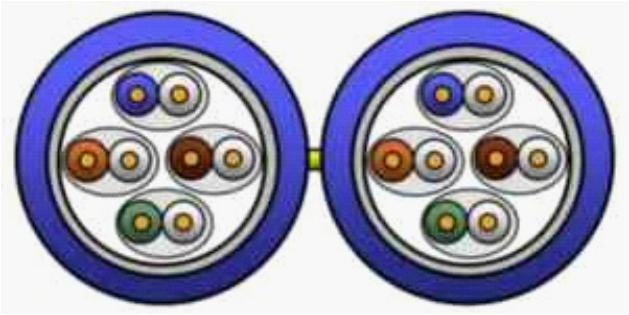

1890ENC

Part Number: 1890ENC

Category 7A Nonbonded-Pair ScTP Cable

Product Description

CAT7A (1000MHz) shotgun, 2 x 4-Pair, S/FTP shielded, Premise Horizontal Cable, 22 AWG solid bare copper conductors, Foam Polyolefin insulation, each pair with Beldfoil® shield, overall tinned copper braid shield (50% coverage), LSZH jacket (passes bundle flame test IEC60332-3-24)

Product Specifications

Technical Specifications

Application 1:	Horizontal and building backbone cable
Application 2:	Support current and future Category 6a, 7 and 7a applications: 10GBase-T (10 Gigabit Ethernet), 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T, FDDI, ATM

Construction and Dimensions

Conductor:

Element	AWG	Stranding	Material	No. of Pairs
Individual shielded pair	22	Solid	Bare copper	8

Min Elongation at Breakof Conductors:	10 %

Insulation:

Element	Type	Material	Nominal Diameter
Individual shielded pair	Dielectric	Foamed polyethylene	1.54 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	Aluminium / Polyester	100 %
Aluminum facing outside			

Outershield 1:

Type	Material	Min. Coverage
Braid	Tinned copper	30 in

Outerjacket 1:

Element	Material	Nominal Diameter	Diameter +/- Tolerance	Ripcord
	FRNC / LSNH	8.1 mm	0.3 mm	Yes
Figure 8 construction				

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

Electrical Characteristics

Conductor DCR:

Max. Conductor DCR	Max DCR Unbalanced Between Pairs	Max. DCR Unbalanced Within Pair
95 Ohm/100m	4 %	2 Ohm

Capacitance:

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

Min Insulation Resistance:	5000 mOhm/1000ft

Impedance:

Nominal Characteristic Impedance
100 mOhm/ft

Delay:

Max. Delay Skew	Nominal Velocity of Propagation (VP)
25 ns/100m	78 ns/100m

High Freq:

Element	Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT	Min. PSNEXT	Min. ACR	Min. PSACR	Min. ACRF (ELFEXT)	Min. PSACRF (PSELFEXT)	Min. RL (Return Loss)	Min. PSANEXT	Min. PSAACRF	Min. TCL	Min. ELTCTL
	1 MHz	2.1 db/100m	78 dB	75 dB	75.9 dB	72.9 dB	78 dB	75 dB	20 dB	67 dB	67 dB	40 dB	23 dB
	4 MHz	3.7 db/100m	78 dB	75 dB	74.3 dB	71.3 dB	78 dB	75 dB	23 dB	67 dB	67 dB	34 dB	15 dB
	10 MHz	5.8 db/100m	78 dB	75 dB	72.2 dB	69.2 dB	75.3 dB	72.3 dB	25 dB	67 dB	67 dB	30 dB	10.9 dB
	16 MHz	7.3 db/100m	78 dB	75 dB	70.7 dB	67.7 dB	71.2 dB	68.2 dB	25 dB	67 dB	67 dB	28 dB	5.1 dB
	31.2 MHz	10.3 db/100m	78 dB	75 dB	67.7 dB	64.7 dB	65.4 dB	62.4 dB	23.6 dB	67 dB	63.3 dB	25.2 dB	
	62.5 MHz	14.6 db/100m	78 dB	75 dB	63.4 dB	60.4 dB	59.4 dB	56.4 dB	21.5 dB	67 dB	57.3 dB	22 dB	
	100 MHz	18.5 db/100m	75.4 dB	72.4 dB	56.9 dB	53.9 dB	55.3 dB	52.3 dB	20.1 dB	67 dB	53.2 dB	20 dB	
	155 MHz	23.2 db/100m	72.5 dB	69.5 dB	49.3 dB	46.3 dB	51.5 dB	48.5 dB	18.8 dB	67 dB	49.4 dB	18.1 dB	
	250 MHz	29.7 db/100m	69.4 dB	66.4 dB	39.7 dB	36.7 dB	47.3 dB	44.3 dB	17.3 dB	67 dB	45.2 dB	16 dB	
	500 MHz	42.8 db/100m	64.9 dB	61.9 dB	22.2 dB	19.2 dB	41.3 dB	38.3 dB	17.3 dB	67 dB	39.2 dB		
	600 MHz	47.1 db/100m	63.7 dB	60.7 dB	16.6 dB	13.6 dB	39.7 dB	36.7 dB	17.3 dB	65.8 dB	37.6 dB		
	1000 MHz	61.9 db/100m	60.4 dB	57.4 dB	-1.5 dB	-4.5 dB	35.3 dB	32.3 dB	15.1 dB	62.5 dB	33.2 dB		
	1200 MHz	68.4 db/100m	59.2 dB	56.2 dB	-9.1 dB	-12.1 dB	33.7 dB	30.7 dB	14.3 dB				

): Limits below 4MHz are for information only;): Values at 1000 MHz are for information only

Current:

Max. Recommended Current
1.5 A

Voltage:

Voltage Rating
72 dB

Coupling Attenuation:

Coupling Attenuation
Type I V

Transfer Impedance:

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

Use

Burning Load:	1700 kJ/m
Max Recommended Pulling Tension:	200 lbs

Safety

ISO/IEC Flammability:	IEC 60332-3-24
Amt of Halogen Acid Gas; MaxConductivity:	10 µS/mm
Amt of Halogen Acid Gas; Min pH:	4.3
Smoke Density; Min Transmittance:	60 %
Amt of Halogen IEC 60754-1 /EN50267-1:	Zero

Temperature Range

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

Mechanical Characteristics

Min Bend Radius During Installation:	65 mm
Min Bend Radius During Operation:	33 mm

Part Number

Standards

ISO/IEC Compliance:	ISO/IEC 11801 2nd edition (2002) and ISO/IEC 11801 Amendment 2 (2010)
CENELEC Compliance:	EN 50173-1 (2011)

History

Revision Date:	41059
Revision Number:	1

Product Variants

Part Number	Color	Put-Up Type	Length
1890ENC.00500	GRAY	Reel	500 m

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