



Part Number: 1868ENH.001000

Category 5e Nonbonded-Pair ScTP Cable

Product Description

Cat. 5e (100MHz), 4-Pair, F/UTP Foil shielded, Work Area Patch Cable, 26 AWG stranded (7x34) bare copper conductors, Polyethylene insulation, Beldfoil® shield, AWG 26 stranded (7x34) tinned copper drainwire, LSZH jacket, RJ-45 compatible

Technical Specifications

Suitable Applications:	Work area patch cable; Support current and future Category 5e applications, such as: 1000Base - T (Gigabit Ethernet), 100 Base - T, 10 Base - T, FDDI, ATM
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Construction and Dimensions

Conductor:

Element	AWG	Stranding	Material	No. of Pairs
Individual pair	26	Stranded 7xAWG34	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 pair	Dielectric	Polyethylene	0.95 mm
Min Elongation at Breakof Insulation:			100 %

Color Chart 1:

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

Outershield 1:

Type	Material	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Position
Tape	Aluminum / Polyester	100 %	Stranded tinned copper	26 (7xAWG34)	Under foil
Aluminum facing inside in contact with drain wire in in					

Outerjacket 1:

Material	Color	Nominal Diameter	Diameter +/- Tolerance	Max. Diameter	Min. Wall Thickness	Nominal Wall Thickness
FRNC / LSZH	Grey (RAL 7032) and Blue (RAL 5015)	5.4 mm	0.3 mm	5.9 mm	0.4 mm	0.45 mm

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

Conductor DCR:

Max. Conductor DCR	Max DCR Unbalanced Between Pairs [%]	Max. DCR Unbalanced Within Pair [%]
145 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
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Impedance:

Nominal Characteristic Impedance
100 Ohm

Delay:

Max. Delay Skew	Min. Velocity of Propagation
40 ns/100m	60 %

High Freq:

Element	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. TCL [dB]	Min. ELTCTL [dB]
	1 MHz	3.2 dB/100m	65.3 dB	62.3 dB	62.1 dB	59.1 dB	64 dB	61 dB	20 dB	40 dB	35 dB
	4 MHz	6 dB/100m	56.3 dB	53.3 dB	50.3 dB	47.3 dB	52 dB	49 dB	23 dB	34 dB	23 dB
	10 MHz	9.5 dB/100m	50.3 dB	47.3 dB	40.8 dB	37.8 dB	44 dB	41 dB	25 dB	30 dB	15 dB
	16 MHz	12.1 dB/100m	47.2 dB	44.2 dB	35.2 dB	32.2 dB	39.9 dB	36.9 dB	25 dB	28 dB	10.9 dB
	20 MHz	13.5 dB/100m	45.8 dB	42.8 dB	32.2 dB	29.2 dB	38 dB	35 dB	25 dB	27 dB	9 dB
	31.25 MHz	17.1 dB/100m	42.9 dB	39.9 dB	25.8 dB	22.8 dB	34.1 dB	31.5 dB	23.3 dB	25.1 dB	5.5 dB
	62.5 MHz	24.8 dB/100m	38.4 dB	35.4 dB	13.6 dB	10.6 dB	28.1 dB	25.1 dB	20.7 dB	22 dB	
	100 MHz	32 dB/100m	35.3 dB	32.3 dB	3.3 dB	0.3 dB	24 dB	21 dB	19 dB	20 dB	

); Limits below 4MHz are for information only.

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:	395 kJ/m
Max Recommended Pulling Tension:	45 N

Safety

ISO/IEC Flammability:	IEC 60332-1
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Temperature Range

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

Mechanical Characteristics

Min Bend Radius During Installation:	42 mm
Min Bend Radius During Operation:	21 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.2-1 (2002)
CENELEC Compliance:	EN 50173-1 (2011)

History

Revision Number:	9
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Product Variants

Part Number	Color	Put-Up Type	Length
1868ENH.001000	GRAY, RAL 7032	Reel	1000 m
1868ENH.00500	GRAY, RAL 7032	Reel	500 m
1868ENH.00B100	GRAY	Flat Box	100 m
1868ENH.001000	GRAY, RAL 7032	Reel	500 m
1868ENH.001000			

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