

Product: 1868ENH

Category 5e Patch Cable, 4 Pair, F/UTP, LSZH Indoor

Product Description

Category 5e Patch Cable (100MHz), 4-Pair, 26 AWG stranded (7x34) bare copper conductors, F/UTP, Polyethylene insulation, Beldfoil® shield, AWG 26 stranded (7x34) tinned copper drainwire, LSZH jacket

Technical Specifications

Product Overview

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
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/patents.

Construction Details

Conductor

Element	Size	Stranding	Material	No. of Pairs	No. of Elements
Individual Pair	26 AWG	7x34	BC - Bare Copper	4	8

Insulation

Element	Material	Nom. Insulation Diameter	Color Code
Individual Pair	PE - Polyethylene	0.95 mm (0.037 in)	Black/Blue & Blue, Black/Orange & Orange, Black/Green & Green, Black/Brown & Brown

Cable Core

Description
4 pairs twisted together

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	26 AWG (7x34) TC

Table Notes:	Aluminum facing inside in contact with drain wire

Outer Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	5.4 mm (0.21 in)

Overall Cable Diameter (Nominal):	5.4 mm (0.21 in)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
145 Ohm/km	56 pF/m (17 pF/ft)	160 pF/100m	100 Ohm

Delay

Max. Delay Skew	Nom. Velocity of Prop.
40 ns/100m	60%

High Frequency

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

Table Notes:	Limits below 4 MHz are for information only. Reference standard: IEC 61156-5

Transfer Impedance

Frequency	Max. Transfer Impedance
1 Mhz	Max. 50 mOhm/m
10 Mhz	Max. 100 mOhm/m
30 Mhz	Max. 200 mOhm/m
100 Mhz	Max. 1000 mOhm/m

Transfer Impedance Class:	Grade 2
Screening Class:	Type II
Table Notes:	Coupling Attenuation

Voltage

Voltage Rating
72 V DC

Mechanical Characteristics

Temperature

Operating	Installation
-30°C to +60°C	0°C To +50°C

Bend Radius

Stationary Min.	Installation Min.
21 mm (0.83 in)	42 mm

Max. Pull Tension:	45 N (10 lbf)
Bulk Cable Weight:	31 kg/km

Standards and Compliance

Environmental Suitability:	Indoor
Flammability / Reaction to Fire:	IEC 60332-1-2
IEEE Compliance:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA 568.2-D
ISO/IEC Compliance:	ISO/IEC 11801-1
CENELEC Compliance:	EN 50173-1, Segregation class according EN50174-2 = a
European Halogen Free Standards:	IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 2.5 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3
European Directive Compliance:	EU CE Mark
UK Regulation Compliance:	UKCA Mark

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system.

History

Update and Revision:	Revision Number: 0.296 Revision Date: 02-03-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
1868ENH.00B100	Gray, RAL 7032	Flat Box	100 m	8719605004574

1868ENH.00500	Gray, RAL 7032	Reel	500 m	8719605004567
1868ENH.001000	Gray, RAL 7032	Reel	1,000 m	8719605004550

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