



**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 <a href="https://www.belden.com/patents">https://www.belden.com/patents</a> .

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: 0.294 Revision Date: 12-12-2023
----------------------	--

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

© 2024 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.