

# Product: <u>1872A</u> ⊠ Category 6+ Cable, 4 Bonded-Pairs, U/UTP, CMR

# **Product Description**

Category 6+ Premise Horizontal Cable (350MHz), 4 Bonded-Pairs, 23 AWG Solid Bare Copper Conductors, U/UTP, Riser-CMR, PVC Jacket

## **Technical Specifications**

## **Product Overview**

Suitable Applications:	Premise Horizontal Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/resources/patents-

## **Construction Details**

#### Conductor

Size	Stranding	Material	Number of Pairs
23 AWG	Solid	BC - Bare Copper	4

#### Insulation

Material				
PO - Polyolefin White/Bl	ue Stripe & Blue, V	Vhite/Oran		
Bonded-Pair:	Yes			
Outer Jacket				
Material	Nom. Diameter	Ripcord		
PVC - Polyvinyl Chloride	0.365 x 0.165 in	Yes		
Overall Cable Diameter		in		

## **Electrical Characteristics**

Electricals							
Max. Conductor DCR	Max. Capacitance Unbalance						
75 Ohm/km	49 pF/100m						

#### Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	537.6 ns/100m	25 ns/100m	70%

#### 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]	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
1	1.9 dB/100m	75.3	75.3	73.4	73.4	67.8	64.8	20.0	100 ± 12 Ohm	100 ± 15 Ohm
4	3.7 dB/100m	66.3	66.3	62.6	62.6	55.7	52.8	23.0	100 ± 12 Ohm	100 ± 15 Ohm
8	5.3 dB/100m	61.8	61.8	56.5	56.5	49.7	46.7	24.5	100 ± 12 Ohm	100 ± 15 Ohm
10	5.9 dB/100m	60.3	60.3	54.4	54.4	47.8	44.8	25.0	100 ± 12 Ohm	100 ± 15 Ohm
16	7.5 dB/100m	57.2	57.2	49.7	49.7	43.7	40.7	25.0	100 ± 12 Ohm	100 ± 8 Ohm
20	8.4 dB/100m	55.8	55.8	47.3	47.3	41.8	38.8	25.0	100 ± 12 Ohm	100 ± 8 Ohm
25	9.5 dB/100m	54.3	54.3	44.9	44.9	39.8	36.8	24.3	100 ± 15 Ohm	100 ± 8 Ohm
31.25	10.6 dB/100m	52.9	52.9	42.2	42.2	37.9	34.9	23.6	100 ± 15 Ohm	100 ± 8 Ohm

62.5	15.4 dB/100m	48.4	48.4	33.0	33.0	31.8	28.9	21.5	100 ± 15 Ohm	100 ± 8 Ohm
100	19.8 dB/100m	45.3	45.3	25.5	25.5	27.8	24.8	21.0	100 ± 15 Ohm	100 ± 8 Ohm
155	25.1 dB/100m	42.4	42.4	17.3	17.3	24.0	21.0	21.0	100 ± 15 Ohm	100 ± 8 Ohm
200	29.0 dB/100m	40.8	40.8	11.8	11.8	21.7	18.8	21.0	100 ± 15 Ohm	100 ± 8 Ohm
250	32.8 dB/100m	39.3	39.3	6.5	6.5	19.8	16.8	18.0	100 ± 20 Ohm	100 ± 8 Ohm
300	36.4 dB/100m	38.1	38.1	1.7	1.7	18.3	15.3	18.0	100 ± 20 Ohm	100 ± 8 Ohm
310	39.8 dB/100m	37.1	37.1	-2.6	-2.6	16.9	13.9	17.0	100 ± 22 Ohm	100 ± 8 Ohm
350	43.0 dB/100m	36.3	36.3			15.8	12.8	14.0	100 ± 32 Ohm	100 ± 8 Ohm
400	46.0 dB/100m	35.5	35.5			14.7	11.7	14.0	100 ± 32 Ohm	100 ± 8 Ohm
500	48.9 dB/100m	34.8	34.8			13.8	10.8	14.0	100 ± 32 Ohm	100 ± 8 Ohm
550	51.8 dB/100m	34.2	34.2			13.0	10.0	14.0	100 ± 32 Ohm	100 ± 8 Ohm

#### Voltage

UL Voltage Rating

300 V (CMR)

## **Mechanical Characteristics**

#### Temperature

UL Temperature	Operating	Installation	Storage
75°C	-20°C To +75°C	0°C To +50°C	-20°C To +75°C

#### Bend Radius

Stationary Min. In	nstallation Min.
0.5 in (13 mm) 1.	.75 in (44.5 mm)
Max. Pull Tension:	40 lbs (1
Bulk Cable Weight:	32 lbs/10

## **Standards and Compliance**

Environmental Suitability:	Riser, Indoor
•	
Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	UL 1666 Riser, FT4, FT4, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CMR
CEC / C(UL) Compliance:	CMR
ICEA Compliance:	S-116-732-2013
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
NEMA Compliance:	ANSI/NEMA WC-66
Data Category:	Category 6
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 6
Third Party Performance Verification:	Category 6
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Plenum Number:	1874A

## **Product Notes**

Notes:

Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 350 MHz are for Engineering Information Only. Print Includes Descending Footage Markings from Max. Put-Up Length to 0.

## History

Update and Revision: Revision Number: 0.437 Revision Date: 12-15-2021

#### Variants

Item #	Color	Putup Type	Length	UPC
1872A 0101000	Black	Reel	1,000 ft	612825125464
1872A 0061000	Blue	Reel	1,000 ft	612825125419
1872A 006A1000	Blue	Reel-in-Box	1,000 ft	612825125402
1872A X6G1000	Gold	Reel	1,000 ft	612825125310

1872A X6GA1000	Gold	Reel-in-Box	1,000 ft	612825125303
1872A F6H1000	Gray	Reel	1,000 ft	612825125297
1872A F6HA1000	Gray	Reel-in-Box	1,000 ft	612825320647
1872A 0051000	Green	Reel	1,000 ft	612825125396
1872A 005A1000	Green	Reel-in-Box	1,000 ft	612825125389
1872A 0031000	Orange	Reel	1,000 ft	612825125358
1872A 003A1000	Orange	Reel-in-Box	1,000 ft	612825125341
1872A 0071000	Purple	Reel	1,000 ft	612825125433
1872A 007A1000	Purple	Reel-in-Box	1,000 ft	612825125426
1872A 0021000	Red	Reel	1,000 ft	612825125334
1872A 002A1000	Red	Reel-in-Box	1,000 ft	612825125327
1872A 0091000	White	Reel	1,000 ft	612825125457
1872A 009A1000	White	Reel-in-Box	1,000 ft	612825125440
1872A 0041000	Yellow	Reel	1,000 ft	612825125372
1872A 004A1000	Yellow	Reel-in-Box	1,000 ft	612825125365

© 2022 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.