

## 1872A Multi-Conductor - Enhanced Category 6 Bonded-Pair Cable



For more Information  
please call

1-800-Belden1



### Description:

23 AWG bonded-pairs, solid bare copper conductor, non-plenum, polyolefin insulation, rip cord, see color code chart (below), PVC jacket (blue, red, yellow, orange, green, gold, purple, white, black or gray).

### Usage (Overall)

**Suitable Applications:** Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, Noisy Environments

### Physical Characteristics (Overall)

#### Conductor

**AWG:**

# Pairs	AWG	Stranding	Conductor Material
4	23	Solid	BC - Bare Copper

#### Insulation

**Insulation Material:**

Insulation Material
PO - Polyolefin

#### Outer Shield

**Outer Shield Material:**

Outer Shield Material
Unshielded

#### Outer Jacket

**Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

**Outer Jacket Ripcord:** Yes

#### Overall Cabling

**Overall Nominal Diameter:** 9.271 x 9.271 mm

#### Pair

**Pair Color Code Chart:**

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

### Mechanical Characteristics (Overall)

**Operating Temperature Range:** -20°C To +80°C

**Bulk Cable Weight:** 43.158 Kg/Km

**Max. Recommended Pulling Tension:** 200.169 N

**Min. Bend Radius (Install)/Minor Axis:** 25.400 mm

## 1872A Multi-Conductor - Enhanced Category 6 Bonded-Pair Cable

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR, UL444
CEC/C(UL) Specification:	CMR
Other Standards:	11801 Category 5
EU CE Mark:	No
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	568-B.2-1 Category 6
Other Specification:	UL verified to Category 6

#### Flame Test

UL Flame Test:	UL1666 Riser
CSA Flame Test:	FT4

#### Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1874A

### Electrical Characteristics (Overall)

#### Nom. Mutual Capacitance:

Capacitance (pF/m)  
49.215

#### Nominal Velocity of Propagation:

VP (%)  
70

Maximum Capacitance Unbalance (pF/100 m): 49.2

#### Maximum Delay:

Delay (ns/100 m)  
510 @ 100MHz

#### Max. Delay Skew:

Delay Skew (ns/100 m)  
25

#### Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)  
9

#### Max. Operating Voltage - UL:

Voltage  
300 V RMS

#### Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)  
3

## 1872A Multi-Conductor - Enhanced Category 6 Bonded-Pair Cable

### Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)
1	1.9	74.3	72.3	70	70	20.0
4	3.7	65.3	63.3	59	59	23.0
8	5.3	60.3	58.8	53	53	24.5
10	5.9	59.3	57.3	51	51	25.0
16	7.5	56.3	54.3	46	46	25.0
20	8.4	54.8	52.8	44	44	25.0
25	9.5	53.4	51.4	42	42	24.3
31.25	10.6	51.9	49.9	39	39	23.6
62.5	15.4	47.4	45.4	30	30	21.5
100	19.8	44.3	42.3	25	25	21.0
155	25.1	41.5	39.5	14	14	21.0
200	29.0	39.8	37.8	10	10	21.0
250	32.8	38.3	36.3	3	3	18.0
300	35.2	37.2	34.2	0	0	18.0
310	37.1	36.9	34.9			18.0
350	39.8	36.2	34.2			17.0
400**	43.0	35.3	33.3			14.0
500**	49.0	33.8	31.8			14.0

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 12	100 ± 15	67.8	64.8
4	100 ± 12	100 ± 15	55.7	52.8
8	100 ± 12	100 ± 15	49.7	46.7
10	100 ± 12	100 ± 15	47.8	44.8
16	100 ± 12	100 ± 8	43.7	40.7
20	100 ± 12	100 ± 8	41.7	38.7
25	100 ± 15	100 ± 8	39.8	36.8
31.25	100 ± 15	100 ± 8	37.9	34.9
62.5	100 ± 15	100 ± 8	31.8	28.9
100	100 ± 15	100 ± 8	27.8	24.8
155	100 ± 15	100 ± 8	23.9	20.9
200	100 ± 15	100 ± 8	21.7	18.8
250	100 ± 20	100 ± 8	19.8	16.8
300	100 ± 20	100 ± 8	18.2	15.2
310	100 ± 20	100 ± 8	17.9	14.9
350	100 ± 22	100 ± 8	16.9	13.9
400**	100 ± 32	100 ± 8	15.7	12.7
500**	100 ± 32	100 ± 8	13.8	10.8

### Notes (Overall)

**Notes:** Belden IBDN. Jacket sequentially marked at 2 ft. intervals. US Patent #'s 5, 606, 151; 5, 734, 126; 5, 821, 467 \*\*Values above 350 MHz are information only. Third party verified to TIA/EIA-568-B.2-1, Category 6.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1872A F6HA1000	305 MT	16.783 KG	GRAY, DARK PEARL		4 PR #23 PP PVC
1872A F6H1000	305 MT	16.783 KG	GRAY, DARK PEARL	C	4 PR #23 PP PVC
1872A X6GA1000	305 MT	16.783 KG	GOLD X6G		4 PR #23 PP PVC
1872A X6G1000	305 MT	16.783 KG	GOLD X6G	C	4 PR #23 PP PVC
1872A 002A1000	305 MT	16.783 KG	RED		4 PR #23 PP PVC
1872A 0021000	305 MT	16.783 KG	RED	C	4 PR #23 PP PVC
1872A 003A1000	305 MT	16.783 KG	ORANGE		4 PR #23 PP PVC
1872A 0031000	305 MT	16.783 KG	ORANGE	C	4 PR #23 PP PVC
1872A 004A1000	305 MT	16.783 KG	YELLOW		4 PR #23 PP PVC
1872A 0041000	305 MT	16.783 KG	YELLOW	C	4 PR #23 PP PVC

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1872A 005A1000	305 MT	16.783 KG	GREEN, DARK		4 PR #23 PP PVC
1872A 0051000	305 MT	16.783 KG	GREEN, DARK	C	4 PR #23 PP PVC
1872A 006A1000	305 MT	16.783 KG	BLUE, LIGHT		4 PR #23 PP PVC
1872A 0061000	305 MT	16.783 KG	BLUE, LIGHT	C	4 PR #23 PP PVC
1872A 007A1000	305 MT	16.783 KG	VIOLET		4 PR #23 PP PVC
1872A 0071000	305 MT	16.783 KG	VIOLET	C	4 PR #23 PP PVC
1872A 009A1000	305 MT	16.783 KG	WHITE		4 PR #23 PP PVC
1872A 0091000	305 MT	16.783 KG	WHITE	C	4 PR #23 PP PVC
1872A 0101000	305 MT	16.783 KG	BLACK	C	4 PR #23 PP PVC

**Notes:**

C = CRATE REEL PUT-UP.

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