

## 3633 Multi-Conductor - Enhanced Category 6 Bonded-Pair Cable



For more Information  
please call

1-800-Belden1



### General Description:

CAT6+ (400MHz), 4-Bonded-Pairs, U/UTP-Unshielded, Plenum-CMP, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, FEP Insulation, Patented X-Spline, Ripcord, Flamarrest® PVC jacket.

### Usage (Overall)

**Suitable Applications:** Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, Noisy Environments

### Physical Characteristics (Overall)

#### Conductor

AWG:

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

**Total Number of Conductors:** 8

#### Insulation

Insulation Material:

Insulation Material
FEP - Fluorinated Ethylene Propylene

#### Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material	Nom. Wall Thickness (in.)
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride	0.018

Outer Jacket Diameter:

Nom. Dia. (in.)
0.235

**Outer Jacket Ripcord:** Yes

#### Overall Cable

**Overall Cabling Separator Material:** Patented X-Spline Center Member

**Overall Nominal Diameter:** 0.235 in.

#### 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)

**Storage Temperature Range:** -20°C To +75°C

**Installation Temperature Range:** +5°C To +50°C

**Operating Temperature Range:** 0°C To +75°C

**UL Temperature Rating:** 75°C

**Bulk Cable Weight:** 32 lbs/1000 ft.

**Max. Recommended Pulling Tension:** 50 lbs.

**Min. Bend Radius/Minor Axis:** 0.500 in.

**Min. Bend/Installation:** 2 in.

## 3633 Multi-Conductor - Enhanced Category 6 Bonded-Pair Cable

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
EU Directive 2011/65/EU (ROHS II):	Yes
Other Standards:	ISO/IEC 11801 ed 2.1 (2008) Class E
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/03/2009
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:	Category 6 - TIA 568.C.2

#### Applicable Patents:

Country
www.belden.com/p

#### Flame Test

UL Flame Test:	NFPA 262
C(UL) Flame Test:	FT6

#### Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No
Suitability - Burial:	No
Sunlight Resistance:	No

#### Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	3632

### Electrical Characteristics (Overall)

#### Nom. Mutual Capacitance:

Capacitance (pF/ft)
15.5

Maximum Capacitance Unbalance (pF/100 m):	90
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#### Nominal Velocity of Propagation:

VP (%)
72.000

#### Maximum Delay:

Freq. (MHz)	Delay (ns/100 m)
100.000	537.600

#### Typical Delay Skew:

Delay Skew (ns/ft)
30.000

#### Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
7.700

#### Max. Operating Voltage - UL:

Voltage
300 V RMS

#### Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)
3.000

## 3633 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)
0.772	1.800	81.00	81.00	79.2	79.2	
1	2.000	79.3	79.3	77.3	77.3	20.000
4	3.700	70.3	70.3	66.6	66.6	23.000
8	5.200	65.8	65.8	60.6	60.6	24.500
10	5.800	64.3	64.3	58.5	58.5	25.000
16	7.400	61.2	61.2	53.9	53.9	25.000
20	8.300	59.8	59.8	51.5	51.5	25.000
25	9.300	58.3	58.3	49.1	49.1	25.000
31.25	10.400	56.9	56.9	46.5	46.5	25.000
62.5	15.000	52.4	52.4	37.4	37.4	25.000
100	19.300	49.3	49.3	30.0	30.0	25.000
155	24.600	46.4	46.4	21.8	21.8	22.800
200	28.300	44.8	44.8	16.5	16.5	21.600
250	32.100	43.3	43.3	11.2	11.2	20.500
300	35.600	42.1	40.1	6.5	6.5	20.100
350	38.900	41.1	41.1	2.3	2.3	19.800
400	42.000	38.3	38.2	-3.7	-3.7	19.500
450	45.000	37.5	37.5			18.900
500	47.900	36.8	36.8			18.400
550	50.600	36.21	36.2			18.000
600	53.300	35.6	35.6			17.500
650	55.900	35.1	35.1			17.200

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ACRF (dB)	Min. PSACRF (dB)
.772			75.0	73.0
1	100 ± 12	100 ± 12	72.8	70.8
4	100 ± 12	100 ± 10.4	60.8	58.8
8	100 ± 12	100 ± 8	54.7	52.7
10	100 ± 12	100 ± 7.3	52.8	50.8
16	100 ± 12	100 ± 5.7	48.7	46.7
20	100 ± 12	100 ± 5	46.8	44.8
25	100 ± 15	100 ± 5	44.8	42.8
31.25	100 ± 15	100 ± 5	42.9	40.9
62.5	100 ± 15	100 ± 5	36.9	34.9
100	100 ± 15	100 ± 5	32.8	30.8
155	100 ± 15	100 ± 5	28.9	26.9
200	100 ± 15	100 ± 5	26.8	24.8
250	100 ± 20	100 ± 5	24.8	22.8
300	100 ± 20	100 ± 5	23.3	21.3
350	100 ± 22	100 ± 5	21.9	19.9
400	100 ± 22	100 ± 5	20.8	18.8
450	100 ± 22	100 ± 5	19.7	17.7
500	100 ± 22	100 ± 5	18.8	16.8
550	100 ± 22	100 ± 5	18.0	16.0
600	100 ± 22	100 ± 5	17.2	15.2
650	100 ± 22	100 ± 5	16.5	14.5

Premise Cable Electrical Table 4:

Frequency (MHz)	Min. TCL (dB)	Min. ELTCTL (dB)
0.772	42.000	37.200
1.000	42.000	35.000
4.000	42.000	23.000
8.000	42.000	16.900
10.000	42.000	15.000
16.000	40.000	10.900
20.000	39.000	9.000
25.000	38.000	7.000
31.250	37.100	
62.500	34.000	
100.000	32.000	
155.000	30.100	
200.000	29.000	
250.000	28.000	

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### Notes (Overall)

**Notes:** Jacket sequentially marked at 2 ft./1m intervals. Third party verified to ANSI/TIA-568-C.2 Category 6. Values above 400 MHz are for engineering information only.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3633 D15A1000	1,000 FT	35.000 LB	BLUE	C	CAT6E 4PRB U/UTP CMP RIB
3633 D15U1000	1,000 FT	33.000 LB	BLUE		CAT6E 4PRB U/UTP CMP BOX
3633 D151000	1,000 FT	33.000 LB	BLUE	C	CAT6E 4PRB U/UTP CMP REEL
3633 002A1000	1,000 FT	35.000 LB	RED	C	CAT6E 4PRB U/UTP CMP RIB
3633 0021000	1,000 FT	33.000 LB	RED	C	CAT6E 4PRB U/UTP CMP REEL
3633 003A1000	1,000 FT	35.000 LB	ORANGE	C	CAT6E 4PRB U/UTP CMP RIB
3633 0031000	1,000 FT	33.000 LB	ORANGE	C	CAT6E 4PRB U/UTP CMP REEL
3633 004A1000	1,000 FT	35.000 LB	YELLOW	C	CAT6E 4PRB U/UTP CMP RIB
3633 0041000	1,000 FT	33.000 LB	YELLOW	C	CAT6E 4PRB U/UTP CMP REEL
3633 005A1000	1,000 FT	35.000 LB	GREEN, DARK	C	CAT6E 4PRB U/UTP CMP RIB
3633 0051000	1,000 FT	33.000 LB	GREEN, DARK	C	CAT6E 4PRB U/UTP CMP REEL
3633 008A1000	1,000 FT	35.000 LB	GRAY	C	CAT6E 4PRB U/UTP CMP RIB
3633 008U1000	1,000 FT	32.000 FT	GRAY		CAT6E 4PRB U/UTP CMP BOX
3633 0081000	1,000 FT	33.000 LB	GRAY	C	CAT6E 4PRB U/UTP CMP REEL
3633 009A1000	1,000 FT	35.000 LB	WHITE	C	CAT6E 4PRB U/UTP CMP RIB
3633 009U1000	1,000 FT	32.000 LB	WHITE		CAT6E 4PRB U/UTP CMP BOX
3633 0091000	1,000 FT	33.000 LB	WHITE	C	CAT6E 4PRB U/UTP CMP REEL
3633 010A1000	1,000 FT	35.000 LB	BLACK	C	CAT6E 4PRB U/UTP CMP RIB
3633 0101000	1,000 FT	33.000 LB	BLACK	C	CAT6E 4PRB U/UTP CMP REEL

**Notes:**

C = CRATE REEL PUT-UP.

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