

## 10GX13 Multi-Conductor - Enhanced Category 6A Nonbonded-Pair Cable



For more Information  
please call

1-800-Belden1



### General Description:

CAT6A (625MHz), 4-Pair, U/UTP-Unshielded, Plenum-CMP, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, FEP Insulation, Patented Double-H Splines, Ripcord, Flamarrest® Jacket

### Usage (Overall)

**Suitable Applications:** Premise Horizontal Cable, 10 Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, Noisy Environments, PoE

### 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 Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	PVC - Polyvinyl Chloride

**Outer Jacket Ripcord:** Yes

#### Overall Cable

**Overall Cabling Separator Material:** Patented RoundFlex - Double H Cross-Web

**Overall Nominal Diameter:** 0.295 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:** -20°C To +60°C

**Bulk Cable Weight:** 38 lbs/1000 ft.

**Max. Recommended Pulling Tension:** 40 lbs.

**Min. Bend Radius/Minor Axis:** 1.200 in.

**Min. Bend/Installation:** 3 in.

### 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 EA

## 10GX13 Multi-Conductor - Enhanced Category 6A Nonbonded-Pair Cable

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):	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:	Category 6A - TIA 568.C.2

**Applicable Patents:**

<b>Country</b>
www.belden.com/p

**Flame Test**

UL Flame Test:	NFPA 262 Plenum Flame Test (UL910)(FT6)
C(UL) Flame Test:	FT6
CSA Flame Test:	FT6

**Suitability**

Suitability - Outdoor:	No
Sunlight Resistance:	No

**Plenum/Non-Plenum**

Plenum (Y/N):	Yes
Non-Plenum Number:	10GX12

### Electrical Characteristics (Overall)

**Nom. Mutual Capacitance:**

<b>Capacitance (pF/ft)</b>
17.000

Maximum Capacitance Unbalance (pF/100 m):	50
---	----

**Nominal Velocity of Propagation:**

<b>VP (%)</b>
68.000

**Maximum Delay:**

<b>Delay (ns/100 m)</b>
537 @ 100MHz

**Typical Delay Skew:**

<b>Delay Skew (ns/ft)</b>
35.000

**Max. Delay Skew:**

<b>Delay Skew (ns/100 m)</b>
45

**Maximum Conductor DC Resistance:**

<b>DCR @ 20°C (Ohm/100 m)</b>
7.400

**Max. Operating Voltage - UL:**

<b>Voltage</b>
300 V RMS

**Maximum DCR Unbalanced:**

<b>DCR Unbalance @ 20°C (%)</b>
3.000

### Electrical Characteristics-Premise (Overall)

**Premise Cable Electrical Table 1:**

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. PSNEXT (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.100	73.3	71.2	20.000
4	3.800	64.3	60.5	23.000
8	5.300	59.8	54.4	24.500
10	5.900	58.3	52.4	25.000
16	7.500	55.2	47.8	25.000

## 10GX13 Multi-Conductor - Enhanced Category 6A Nonbonded-Pair Cable

20	8.400	53.8	45.4	25.000
25	9.400	52.3	43	24.300
31.25	10.500	50.9	40.4	23.600
62.5	15.000	46.4	31.4	21.500
100	19.100	43.3	24.2	20.100
200	27.600	38.8	11.2	18.000
250	31.100	37.3	6.3	17.300
300	34.300	36.1	1.9	16.800
350	37.200	35.1		16.300
400	40.100	34.3		15.900
450	42.700	33.5		15.500
500	45.300	32.8		15.200
550	47.700	32.2		14.900
600	50.100	31.6		14.700
625	51.200	31.4		14.500
750	56.700	30.2		14.000
860	61.200	29.3		13.600

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. PSACRF (dB)
1	100+/- 15	105+/- 10	68.8
4	100+/- 15	100+/- 10	56.8
8	100+/- 15	100+/- 10	50.7
10	100+/- 15	100+/- 10	48.8
16	100+/- 15	100+/- 10	44.7
20	100+/- 15	100+/- 10	42.8
25	100+/- 15	100+/- 10	40.8
31.25	100+/- 15	100+/- 10	38.9
62.5	100+/- 15	100+/- 10	32.9
100	100+/- 15	100+/- 10	28.8
200	100+/- 22	100+/- 10	22.8
250	100+/- 32	100+/- 10	20.8
300	100+/- 32	100+/- 10	19.3
350	100+/- 32	100+/- 10	17.9
400	100+/- 32	100+/- 10	16.8
450	100+/- 32	100+/- 10	15.7
500	100+/- 32	100+/- 10	14.8
550	100+/- 32	100+/- 10	14.0
600	100+/- 32	100+/- 10	13.2
625	100+/- 32	100+/- 10	12.9
750			11.3
860			10.1

Premise Cable Electrical Table 4:

Frequency (MHz)	Min. PSANEXT (dB)	Min. PSAACRF (dB)	Min. TCL (dB)	Min. ELTCTL (dB)
1.000	67.000	67.000	40.000	35.000
4.000	67.000	67.000	40.000	23.000
8.000	67.000	61.100	40.000	16.900
10.000	67.000	59.200	40.000	15.000
16.000	67.000	55.100	38.000	10.900
20.000	67.000	53.200	37.000	9.000
25.000	67.000	51.200	32.000	7.000
31.250	67.000	49.300	35.100	
62.500	66.600	43.300	32.000	
100.000	63.500	39.200	30.000	
200.000	59.000	33.200	27.000	
250.000	57.500	31.200	26.000	
300.000	56.300	29.700	25.200	
350.000	55.300	28.300	24.600	
400.000	54.500	27.200	24.000	
450.000	53.700	26.100	23.500	
500.000	53.000	25.200	23.000	
550.000	52.400	24.400		
600.000	51.800	23.600		
625.000	51.600	23.300		
750.000	50.400	21.700		
860.000	49.500	20.500		

## 10GX13 Multi-Conductor - Enhanced Category 6A Nonbonded-Pair Cable

### Notes (Overall)

**Notes:** Jacket sequentially printed every 2 ft/1m. 0.295" cable dimension per TIA 6@1 equivalent diameter. Third party channel verified to TIA/EIA-568-C.2, Category 6a.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
10GX13 D151000	1,000 FT	43.000 LB	BLUE		CAT6A 4PR U/UTP CMP REEL
10GX13 D152500	2,500 FT	115.000 LB	BLUE		CAT6A 4PR U/UTP CMP REEL
10GX13 0041000	1,000 FT	43.000 LB	YELLOW		CAT6A 4PR U/UTP CMP REEL
10GX13 0042500	2,500 FT	115.000 LB	YELLOW		CAT6A 4PR U/UTP CMP REEL
10GX13 0045000	5,000 FT	215.000 LB	YELLOW		CAT6A 4PR U/UTP CMP REEL
10GX13 0051000	1,000 FT	43.000 LB	GREEN, DARK		CAT6A 4PR U/UTP CMP REEL
10GX13 0071000	1,000 FT	43.000 LB	VIOLET		CAT6A 4PR U/UTP CMP REEL
10GX13 0081000	1,000 FT	43.000 LB	GRAY		CAT6A 4PR U/UTP CMP REEL
10GX13 0091000	1,000 FT	43.000 LB	WHITE		CAT6A 4PR U/UTP CMP REEL
10GX13 0101000	1,000 FT	43.000 LB	BLACK		CAT6A 4PR U/UTP CMP REEL
10GX13 0101500	1,500 FT	64.500	BLACK		CAT6A 4PR U/UTP CMP REEL

Revision Number: 12    Revision Date: 02-27-2014

© 2014 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 herein 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 "AS IS" 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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.