



## 10GX13

**Part Number:** 10GX13

Enhanced Category 6A Nonbonded-Pair Cable

## Product Description

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

## Product Specifications

## Technical Specifications

### Product Description

### Application

**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

### Classification

### Construction and Dimensions

**Conductor:**

AWG	Stranding	Material	No. of Pairs
23	Solid	BC - Bare Copper	4

### Conductor

**Total Number of Conductors:**

8

**Insulation:**

**Material**

## Insulation

### Color Chart 1:

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

## InnerShield

## Cabling<sup>1</sup>

### Outerjacket 1:

Material	Material Trade Name	Nominal Diameter	Ripcord	Separator Material
PVC - Polyvinyl Chloride	Flamarrest®	0.295 mm	Yes	Patented RoundFlex - Double H Cross-Web

### OuterJacket1

### OuterJacket2

## Part Number

## Static Ground

## Tracer

## Electrical Characteristics

### Conductor DCR:

Max. Conductor DCR	Max. DCR Unbalance
7.4 Ohm/100m	3 %

### Capacitance:

## Nominal Mutual Capacitance

17 pF/ft

## General Electrical Parameters

### Delay:

Max. Delay Description	Max. Delay Skew	Nominal Velocity of Propagation (VP)	Typical Delay Skew
537 @ 100MHz	45 ns/100m	68 ns/100m	35 ns/100m

### High Freq:

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. PSNEXT	Min. PSACR	Min. PSACRF (PSELFEXTLoss)	Min. RL (Return Loss)	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance	Min. PSANEXT	Min. PSAACRF	Min. TCL	Min. ELTCTL
1 MHz	2.1 db/100m	73.3 dB	71.2 dB	68.8 dB	20 dB	100 ± 15 Ohm	105 ± 10 Ohm	67 dB	67 dB	40 dB	35 dB
4 MHz	3.8 db/100m	64.3 dB	60.5 dB	56.8 dB	23 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	67 dB	40 dB	23 dB
8 MHz	5.3 db/100m	59.8 dB	54.4 dB	50.7 dB	24.5 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	61.1 dB	40 dB	16.9 dB
10 MHz	5.9 db/100m	58.3 dB	52.4 dB	48.8 dB	25 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	59.2 dB	40 dB	15 dB
16 MHz	7.5 db/100m	55.2 dB	47.8 dB	44.7 dB	25 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	55.1 dB	38 dB	10.9 dB
20 MHz	8.4 db/100m	53.8 dB	45.4 dB	42.8 dB	25 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	53.2 dB	37 dB	9 dB
25 MHz	9.4 db/100m	52.3 dB	43 dB	40.8 dB	24.3 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	51.2 dB	32 dB	7 dB
31.25 MHz	10.5 db/100m	50.9 dB	40.4 dB	38.9 dB	23.6 dB	100 ± 15 Ohm	100 ± 10 Ohm	67 dB	49.3 dB	35.1 dB	
62.5 MHz	15 db/100m	46.4 dB	31.4 dB	32.9 dB	21.5 dB	100 ± 15 Ohm	100 ± 10 Ohm	66.6 dB	43.3 dB	32 dB	
100 MHz	19.1 db/100m	43.3 dB	24.2 dB	28.8 dB	20.1 dB	100 ± 15 Ohm	100 ± 10 Ohm	63.5 dB	39.2 dB	30 dB	
200 MHz	27.6 db/100m	38.8 dB	11.2 dB	22.8 dB	18 dB	100 ± 22 Ohm	100 ± 10 Ohm	59 dB	33.2 dB	27 dB	
250 MHz	31.1 db/100m	37.3 dB	6.3 dB	20.8 dB	17.3 dB	100 ± 32 Ohm	100 ± 10 Ohm	57.5 dB	31.2 dB	26 dB	
300 MHz	34.3 db/100m	36.1 dB	1.9 dB	19.3 dB	16.8 dB	100 ± 32 Ohm	100 ± 10 Ohm	56.3 dB	29.7 dB	25.2 dB	
350 MHz	37.2 db/100m	35.1 dB		17.9 dB	16.3 dB	100 ± 32 Ohm	100 ± 10 Ohm	55.3 dB	28.3 dB	24.6 dB	

400 MHz	40.1 db/100m	34.3 dB		16.8 dB	15.9 dB	100 ± 32 Ohm	100 ± 10 Ohm	54.5 dB	27.2 dB	24 dB	
450 MHz	42.7 db/100m	33.5 dB		15.7 dB	15.5 dB	100 ± 32 Ohm	100 ± 10 Ohm	53.7 dB	26.1 dB	23.5 dB	
500 MHz	45.3 db/100m	32.8 dB		14.8 dB	15.2 dB	100 ± 32 Ohm	100 ± 10 Ohm	53 dB	25.2 dB	23 dB	
550 MHz	47.7 db/100m	32.2 dB		14 dB	14.9 dB	100 ± 32 Ohm	100 ± 10 Ohm	52.4 dB	24.4 dB		
600 MHz	50.1 db/100m	31.6 dB		13.2 dB	14.7 dB	100 ± 32 Ohm	100 ± 10 Ohm	51.8 dB	23.6 dB		
625 MHz	51.2 db/100m	31.4 dB		12.9 dB	14.5 dB	100 ± 32 Ohm	100 ± 10 Ohm	51.6 dB	23.3 dB		
750 MHz	56.7 db/100m	30.2 dB		11.3 dB	14 dB			50.4 dB	21.7 dB		
860 MHz	61.2 db/100m	29.3 dB		10.1 dB	13.6 dB			49.5 dB	20.5 dB		

### Voltage:

#### UL Voltage Rating

300V RMS

### Coupling Attenuation

### Screening

### Transfer Impedance

### Use

Suitability - Outdoor:

No

Suitability - Sunlight Resistance:

No

Max Recommended Pulling Tension:

40 lbs

### Material

### Safety

C(UL) Flammability:

FT6

CSA Flammability:

FT6

UL Flammability:

NFPA 262 Plenum Flame Test (UL910)

## Temperature Range

Installation Temp Range:	+5°C To +50 °C
Operating Temp Range:	-20°C To +60°C
Storage Temp Range:	-20°C To +75 °C

## Mechanical Characteristics

### Bend Radius

Min Bend Radius/Minor Axis:	1.2 in
Min Bend Radius/Installation:	3 in

## Crush Resistance

## Connectors

## Stripping Performance

## EU Directive

EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes

## Part Number

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

## Applicable Patents

Country:	US
Patent:	8030571

## Standards

ISO/IEC Compliance:	11801 ed 2.1 (2008) Class EA
Telecommunications Standards:	ANSI/TIA/EIA 568 C.2 Category 6A
CA Prop 65 (CJ for Wire & Cable):	Yes
CEC/C(UL) Specification:	CMP

MII Order #39 (China RoHS):	Yes
NEC/(UL) Specification:	CMP

## Contact Information

PHONE_NUM:	1-800-Belden1
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## History

## Usage

## Put Ups and Colors

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.
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## Product Variants

Part Number	Color	Put-Up Type	Length
10GX13 0041000	YELLOW	Reel	1000 in
10GX13 0042500	YELLOW	Reel	2500 in
10GX13 0045000	YELLOW	Reel	5000 in
10GX13 0051000	GREEN, DARK	Reel	1000 in
10GX13 0071000	VIOLET	Reel	1000 in
10GX13 0081000	GRAY	Reel	1000 in
10GX13 0091000	WHITE	Reel	1000 in
10GX13 0101000	BLACK	Reel	1000 in
10GX13 0101500	BLACK	Reel	1500 in
10GX13 D151000	BLUE	Reel	1000 in
10GX13 D152500	BLUE	Reel	2500 in

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