



## Description:

Belden's 1.00mm pitch gray ribbon cable was designed for the disk drive market where the 2.00mm IDC connector is widely used.

## Physical Characteristics (Overall)

### Conductor

#### AWG:

# Conductors	AWG	Stranding	Conductor Material
26	28	7x36	TC - Tinned Copper

Conductor Spacing Center to Center: .0394 +/- .002

Conductor Spacing Outside Center to Outside Center: .984 +/- .008

### Insulation

#### Insulation Material:

Insulation Material	Wall Thickness (in.)
PVC - Polyvinyl Chloride	.010

Insulation Resistance: >10,000 Megaohms

### Outer Shield

#### Outer Shield Material:

Outer Shield Material
Unshielded

### Overall Cabling

Overall Nominal Thickness: .0354 +/- .0031

Overall Nominal Width: 1.02 +/- .008

## Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +105°C

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

UL AWM Style:	2651
UL Rating:	105°C, 300 V RMS, VW-1
CSA Specification:	AWM I A 105°C 300 V FT1
CSA Rating:	105°C, 300 V RMS, FT1
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):	07/01/2005
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

### Flame Test

UL Flame Test: VW-1

CSA Flame Test: FT1

### Plenum/Non-Plenum

Plenum (Y/N): No

## Surface Printing (Overall)

Surface Printing: BELDEN-T 28 AWG CSA AWM I A 105°C 300 V FT1 LL7874 (UL LOGO)  
AWM STYLE 2651 VW-1 E12683

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Description	Impedance (Ohm)
(GS)	130
(GSG)	90

### Nom. Inductance:

Description	Inductance (µH/ft)
@ 1 MHz (GS)	.24
@ 1 MHz (GSG)	.16

### Nom. Capacitance Conductor to Conductor:

Description	Capacitance (pF/ft)
@ 1 kHz (GSG)	20
@ 1 MHz (GS)	9.5
@ 1 MHz (GSG)	16.5

### Nominal Velocity of Propagation:

Description	VP (%)
	69

### Nominal Delay:

Delay (ns/ft)
1.47 NS/FT. (GSG)

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
68.2 OHMS/1000 FT. MAX.

### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
10	3.3
20	5.1
30	7
40	8.3
50	9.8
60	11.6
70	13.1
80	14.2
90	16.4
100	17.6

### Max. Operating Voltage - Non-UL:

Voltage
300 V RMS

### Max. Recommended Current:

Current
1 Amp per conductor @ 20°C

## 2L28026 Flat - Gray Ribbon 2L280XX Series

**Dielectric Withstand Voltage:** 2,000 V RMS

### Typical Unbalanced Crosstalk:

Description	Pulse Rise Time (NS) (MHz)	Near End % (MHz)	Far End % (MHz)
10 ft. sample length	3	4.3	6.7
10 ft. sample length	5	3.8	3.4
10 ft. sample length	7	3.6	2.5

### Notes (Overall)

**Notes:** GSG=Ground-Signal-Ground Mode

### Polarity Identification (Overall)

**Polarity Identification:** BLACK POLARITY STRIPE ON #1 CONDUCTOR

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
2L28026 008H100	100 FT	2.900 LB	GRAY		26 #28 STR PVC RIBBON

# Gray Ribbon 2L280XX Series

1mm Pitch, 28 AWG, PVC

## Product Description

Belden's 1mm (.03937" pitch) extruded gray ribbon cable was designed for the disk drive market where the 2mm IDC connector is widely used. The cable provides improved space reduction, easy breakouts for circuit routing, and maintains the current carrying capacity required for these applications. In addition, the electrical performance meets those requirements specified by the SCSI-3 parallel interface document. The cable is constructed of stranded 28 AWG (7x36) tinned copper conductors. Insulation material consists of Gray PVC, with a Black polarity stripe for proper circuit alignment. Standard conductor counts are 26, 34, 40, 44 and 50; other sizes are available upon request. The cable is UL approved and CSA certified, and passes the VW-1 Vertical Wire Flame Test.

**Color Code:** Gray with Black polarity stripe.

**Application:** Internal interconnection or internal wiring of electronic equipment.

## Physical Specifications

<b>Conductor</b>	28 AWG (7x36) Tinned Copper
<b>Insulation</b>	.010" Nom. Wall Gray PVC
<b>Pitch</b>	1mm ± 0.51mm (.0394" ± .002")
<b>Temperature Rating</b>	-40 to +105°C
<b>Flammability Rating</b>	UL: VW-1; CSA: FT1
<b>UL Approval</b>	File #E12683, Style 2651
<b>CSA Approval</b>	File #LL7874, CSA AWM I A 105°C 300V FT1
<b>Packaging</b>	H100, R300

## Electrical Specifications

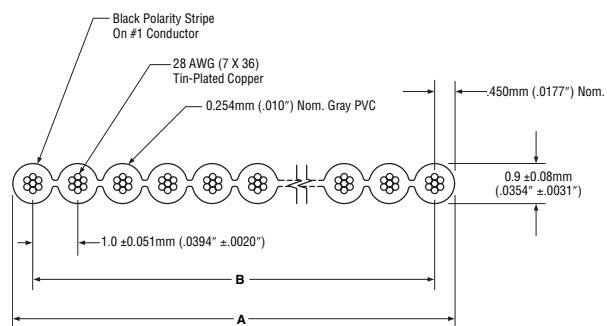
<b>Voltage Rating</b>	300V RMS
<b>Current Rating</b>	1A
<b>Conductor Resistance</b>	68.2Ω/1000 ft.
<b>Insulation Resistance</b>	>1 x 10 <sup>10</sup> Ω • 10 ft. (3m)
<b>Impedance*</b>	90Ω
<b>Capacitance* (@ 1 MHz)</b>	16.5 pF/ft. (54 pF/m)
<b>Inductance* (@ 1 MHz)</b>	.16 μH/ft. (.52 μH/m)
<b>Propagation Delay*</b>	1.47 ns/ft. (4.8 ns/m)

\*Test Configuration: G-S-G (ground-signal-ground).

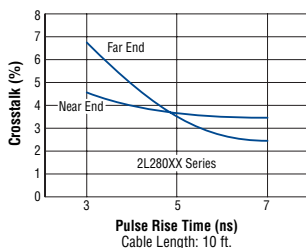
Part No.	No. of Cond.	Dimensions			
		Width "A"		Span "B"	
		Inch	mm	Inch	mm
<b>2L28026**</b>	26	1.020 ±.008	25.9 ±.20	.984 ±.008	25.0 ±.20
<b>2L28034**</b>	34	1.335 ±.012	33.9 ±.30	1.299 ±.012	33.0 ±.30
<b>2L28040**</b>	40	1.571 ±.012	39.9 ±.30	1.535 ±.012	39.0 ±.30
<b>2L28044**</b>	44	1.728 ±.012	43.9 ±.30	1.693 ±.012	43.0 ±.30
<b>2L28050</b>	50	1.965 ±.012	49.9 ±.30	1.929 ±.012	49.0 ±.30

\*\*Available in H100 packaging only.

## Dimensions



## Unbalanced Crosstalk\*



## Attenuation\*

