# **Detailed Specifications & Technical Data**

# **ENGLISH MEASUREMENT VERSION**



# 9L28025 Flat - Gray Ribbon 9L280XX Series



For more Information please call

1-800-Belden1



# **General Description:**

Belden's .050" pitch gray ribbon cable was designed for general purpose electronic interconnect applications. The cable provides reliable mass-termination to standard IDC connectors.

applications. The cable provides reliable m	ass-termination to standard IDC connectors.				
Physical Characteristics (Overall)					
Conductor AWG:					
# Conductors AWG Stranding Conductor Material					
25         28         7x36         TC - Tinned Copper					
Total Number of Conductors:	25				
Conductor Spacing Center to Center:	.050 +/002				
Conductor Spacing Outside Center to Outside Center:	1.20 +/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 Cable Overall Nominal Thickness:	.035 +/003				
Overall Nominal Width:	1.25 +/008				
	1.20 17 1.000				
Mechanical Characteristics (Overall)					
Operating Temperature Range:	-40°C To +105°C				
Bulk Cable Weight:	29 lbs/1000 ft.				
<b>Applicable Specifications and Agency Compliance</b>	(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 Directive 2011/65/EU (ROHS II):	Yes				
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				

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Plenum/Non-Plenum

Plenum (Y/N): No

# **Surface Printing (Overall)**

#### **Electrical Characteristics (Overall)**

#### Nom. Characteristic Impedance:

Description	Impedance (Ohm)		
(GS)	150		
(GSG)	105		

#### Nom. Inductance:

Description	Inductance (µH/ft)		
@ 1 MHz (GS)	.29		
@ 1 MHz (GSG)	.20		

#### Nom. Capacitance Conductor to Conductor:

Description	Capacitance (pF/ft)
@ 1 kHz (GSG)	18
@ 1 MHz (GS)	10
@ 1 MHz (GSG)	15

#### Nominal Velocity of Propagation:

Description	VP	(%)
	72	

#### Nominal Delay:

Delay (ns/ft) 1.40 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	2.8
20	4.8
30	6.5
40	8.3
50	9.8
60	12
70	13
80	14
90	15.8
100	17

# Max. Operating Voltage - UL:

Voltage 300 V RMS

#### Max. Recommended Current:

Current
1 Amp per conductor @ 20°C

#### 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	4.8	7
10 ft. sample length	5	3.5	4.7
10 ft. sample length	7	3	3

### Notes (Overall)

Notes: GS=Ground-Signal Mode; GSG=Ground-Signal-Ground Mode

# **Polarity Identification (Overall)**

Polarity Identification: RED POLARITY STRIPE ON #1 CONDUCTOR

# **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9L28025 008H100	100 FT	3.200 LB	GRAY		25 #28 STR PVC RIBBON

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# 9L28025 Flat - Gray Ribbon 9L280XX Series

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