Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION





9L28010 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.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
10	28	7x36	TC - Tinned Copper

Total Number of Conductors:	10

Conductor Spacing Center to Center:	.050 +/002
Conductor Spacing Outside Center to Outside	.45 +/008

Conductor Spacing Outside Center to Outside

Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)
PVC - Polyvinyl Chloride	0.254

Insulation Resistance: >10,000 Megaohms

Outer Shield

Outer Shield Material:

Outer Shield Material Unshielded

Overall Cable

Overall Nominal Thickness:	.035 +/003

Overall Nominal Width: .50 +/- .008

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +105°C
Bulk Cable Weight:	17.858 Kg/Km

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 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

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07/01/2005
Yes
Yes
Yes
Yes
VW-1
FT1
No
BELDEN 28 AWG CSA AWM I A 105°C 300 V FT1 238400 (UL LOGO) AWM STYLE 2651 VW-1 E12683-HM ROHS

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

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

Nom. Inductance:

Description	Inductance (µH/m)
@ 1 MHz (GS)	0.95149
@ 1 MHz (GSG)	0.6562

Nom. Capacitance Conductor to Conductor:

Description	Capacitance (pF/m)
@ 1 kHz (GSG)	59.058
@ 1 MHz (GS)	32.81
@ 1 MHz (GSG)	49.215

Nominal Velocity of Propagation:

Description	VP	(%)
	72	

Nominal Delay:

Delay (ns/m) 1.40 NS/FT. (GSG)

Nom. Conductor DC Resistance:

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

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)			
10	9.1868			
20	15.7488			
30	21.3265			
40	27.2323			
50	32.1538			
60	39.372			
70	42.653			
80	45.934			
90	51.8398			
100	55.777			

Max. Operating Voltage - UL:

Voltage

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300 V RMS

Max. Recommended Current:

Current 1 Amp per conductor @ 20°C

2,000 V RMS Dielectric Withstand Voltage:

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
9L28010 008H100	100 FT	1.300 LB	GRAY		10 #28 STR PVC RIBBON
9L28010 008H300	300 FT	5.100 LB	GRAY		10 #28 STR PVC RIBBON

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