

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			
10 28 7X36 TC - Tillied Copper			
Total Number of Conductors:	10		
Conductor Spacing Center to Center:	.050 +/002		
Conductor Spacing Outside Center to Outside Center:	.45 +/008		
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		
	-40°C To +105°C 17.858 Kg/Km		
Operating Temperature Range:	17.858 Kg/Km		
Operating Temperature Range: Bulk Cable Weight:	17.858 Kg/Km pliance (Overall)		
Operating Temperature Range: Bulk Cable Weight: Applicable Specifications and Agency Com	17.858 Kg/Km pliance (Overall)		
Operating Temperature Range: Bulk Cable Weight: Applicable Specifications and Agency Com Applicable Standards & Environmental Program	17.858 Kg/Km pliance (Overall) ns		
Operating Temperature Range: Bulk Cable Weight: Applicable Specifications and Agency Com Applicable Standards & Environmental Program UL AWM Style:	17.858 Kg/Km pliance (Overall) ns 2651		
Operating Temperature Range: Bulk Cable Weight: Applicable Specifications and Agency Com Applicable Standards & Environmental Program UL AWM Style: UL Rating:	17.858 Kg/Km pliance (Overall) ns 2651 105°C, 300 V RMS, VW-1		
Operating Temperature Range: Bulk Cable Weight: Applicable Specifications and Agency Com Applicable Standards & Environmental Program UL AWM Style: UL Rating: CSA Specification:	17.858 Kg/Km pliance (Overall) ns 2651 105°C, 300 V RMS, VW-1 AWM I A 105°C 300 V FT1		
Operating Temperature Range: Bulk Cable Weight: Applicable Specifications and Agency Com Applicable Standards & Environmental Program UL AWM Style: UL Rating: CSA Specification: CSA Rating:	17.858 Kg/Km pliance (Overall) ns 2651 105°C, 300 V RMS, VW-1 AWM I A 105°C 300 V FT1 105°C, 300 V RMS, FT1		
Operating Temperature Range: Bulk Cable Weight: Applicable Specifications and Agency Com Applicable Standards & Environmental Program UL AWM Style: UL Rating: CSA Specification: CSA Rating: EU Directive 2011/65/EU (ROHS II):	17.858 Kg/Km pliance (Overall) ns 2651 105°C, 300 V RMS, VW-1 AWM I A 105°C 300 V FT1 105°C, 300 V RMS, FT1 Yes		

Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

9L28010 Flat - Gray Ribbon 9L280XX Series

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
lame Test	
UL Flame Test:	VW-1
CSA Flame Test:	FT1
lenum/Non-Plenum	
Plenum (Y/N):	No

Surface Printing (Overall)

Surface Printing:

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



METRIC MEASUREMENT VERSION

9L28010 Flat - Gray Ribbon 9L280XX Series

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
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

Revision Number: 2 Revision Date: 10-05-2018

© 2019 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 2014/35/EU).