Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9L28009 Flat - Gray Ribbon 9L280XX Series



For more Information please call

1-800-Belden1



General Description:

Plenum (Y/N):

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 ma	applications. The cable provides reliable mass-termination to standard IDC connectors.				
Physical Characteristics (Overall)					
Conductor AWG:					
# Conductors AWG Stranding Conductor Material					
9 28 7x36 TC - Tinned Copper					
Total Number of Conductors:	9				
Conductor Spacing Center to Center:	.050 +/002				
Conductor Spacing Outside Center to Outside Center:	.40 +/008				
Insulation Materials					
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:	.45 +/006				
Machanical Characteristics (Overall)					
Mechanical Characteristics (Overall)	-40°C To +105°C				
Operating Temperature Range:					
Bulk Cable Weight:	10 lbs/1000 ft.				
Applicable Specifications and Agency Compliance (Overall)				
Applicable Standards & Environmental Programs	407/0 0001/ DM0 1/1/4				
UL Rating:	105°C, 300 V RMS, VW-1				
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				
Plenum/Non-Plenum					

No

Page 1 of 3 08-26-2016

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9L28009 Flat - Gray Ribbon 9L280XX Series

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: 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
9L28009 008H100	100 FT	1.100 LB	GRAY		9 #28 STR PVC RIBBON (SMI 80)
9L28009 008H300	300 FT	4.200 LB	GRAY		9 #28 STR PVC RIBBON

Page 2 of 3 08-26-2016

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9L28009 Flat - Gray Ribbon 9L280XX Series

Revision Date: 09-14-2012 Revision Number: 2

© 2016 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, 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 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).

Page 3 of 3