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## **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



## 9L28020 Flat - Gray Ribbon 9L280XX Series



For more Information please call

1-800-Belden1



#### **General Description:**

**CSA Flame Test:** 

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 28 7x36 TC - Tinned Copper **Total Number of Conductors:** 20 **Conductor Spacing Center to Center:** .050 +/- .002 **Conductor Spacing Outside Center to Outside Center:** .95 +/- .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:** 1.00 +/- .008 **Mechanical Characteristics (Overall) Operating Temperature Range:** -40°C To +105°C **Bulk Cable Weight:** 23 lbs/1000 ft Applicable Specifications and Agency Compliance (Overall) **Applicable Standards & Environmental Programs UL AWM Style:** 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): EU CE Mark: Yes EU Directive 2000/53/EC (ELV): Yes EU Directive 2002/95/EC (RoHS): 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

FT1

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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

#### **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:**

m #	Putup	Ship Weight	Color	Notes	Item Desc

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## **Detailed Specifications & Technical Data**





### 9L28020 Flat - Gray Ribbon 9L280XX Series

9L28020 008H100	100 FT	2.600 LB	GRAY	20 #28 STR PVC RIBBON (SMI80)

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

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product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).

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