# **Detailed Specifications & Technical Data**

METRIC MEASUREMENT VERSION



# 9L28026 Flat - Gray Ribbon 9L280XX Series



For more Information please call

1-800-Belden1



#### **General Description:**

**UL Flame Test:** 

**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.

#### 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:** 26 **Conductor Spacing Center to Center:** .050 +/- .002 **Conductor Spacing Outside Center to Outside Center:** 1.25 +/- .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:** 1.30 +/- .008 **Mechanical Characteristics (Overall) Operating Temperature Range:** -40°C To +105°C **Bulk Cable Weight:** 44.646 Kg/Km 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

VW-1

FT1

Page 1 of 3 01-09-2015

# **Detailed Specifications & Technical Data**

## **METRIC MEASUREMENT VERSION**



# 9L28026 Flat - Gray Ribbon 9L280XX Series

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/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 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             |
|-----------------|--------|-------------|-------|-------|-----------------------|
| 9L28026 008H100 | 100 FT | 3.300 LB    | GRAY  |       | 26 #28 STR PVC RIBBON |

Page 2 of 3 01-09-2015

# **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



# 9L28026 Flat - Gray Ribbon 9L280XX Series

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

© 2015 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 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 73/23/EEC), as amended by directive 93/68/EEC.

Page 3 of 3