Gray Ribbon 9L300XX Series

CABLE

.025" Pitch, 30 AWG, PVC

Product Description

FLAT

Belden's miniaturized .025" pitch extruded gray ribbon cable provides higher signal density, greater design flexibility, and an alternative to the expensive Teflon® transmission cables. The cable is manufactured to precise tolerances which allows for mass-termination to standard .050" contact IDC connectors while assuring consistent and reliable electrical characteristics. With the miniaturization of the interconnects, significant reduction in components can be achieved. The cable is constructed of stranded 30 AWG (7x38) tinned copper conductors. Insulation material consists of Gray PVC, with a Red polarity stripe for proper circuit alignment. Standard conductor counts are 26 and 50; other sizes are available upon request. The cable is UL approved and CSA certified, and passes the VW-1 Vertical Wire Flame Test.

Color Code: Gray with Red polarity stripe.

Application: Internal interconnection or internal wiring of electronic equipment.

Physical Specifications

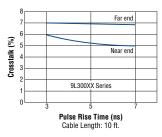
| Conductor | 30 AWG (7x38) Tinned Copper |
|---------------------|---|
| Insulation | .0075" Nom. Wall Gray PVC |
| Pitch | .025" ± .002" |
| Temperature Rating | -40 to +105°C |
| Flammability Rating | UL: VW-1, CSA: FT1 |
| UL Approval | File #E12683, Style 2678 |
| CSA Approval | File #LL7874, CSA AWM I A 105°C 150V FT1 |
| Packaging | H100, H300 |

Electrical Specifications

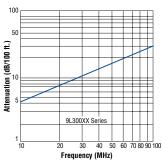
| Voltage Rating | 150V RMS |
|------------------------|--------------------------|
| Current Rating | .5A |
| Conductor Resistance | 108Ω/1000 ft. |
| Insulation Resistance | >1 x 10¹⁰Ω • 10 ft. (3m) |
| Impedance* | 70Ω |
| Capacitance* (@ 1 MHz) | 24 pF/ft. (79 pF/m) |
| Inductance* (@ 1 MHz) | .14 μH/ft. (.46 μH/m) |
| Propagation Delay* | 1.52 ns/ft. (4.99 ns/m) |
| ±T +0 " " 0000/ 1: 1 " | |

^{*}Test Configuration: G-S-G (ground-signal-ground).

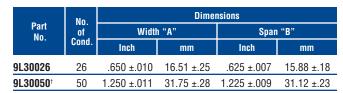
Unbalanced Crosstalk



Attenuation

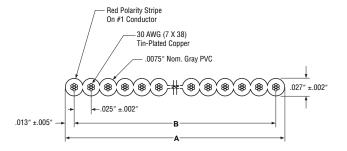


Teflon is a DuPont trademark.



[†]Available in H100 packaging only.

Dimensions



Gray Ribbon 2L280XX Series

1mm Pitch, 28 AWG, PVC

Product Description

Belden's 1mm (.03937" pitch) extruded gray ribbon cable was designed for the disk drive market where the 2mm IDC connector is widely used. The cable provides improved space reduction, easy breakouts for circuit routing, and maintains the current carrying capacity required for these applications. In addition, the electrical performance meets those requirements specified by the SCSI-3 parallel interface document. The cable is constructed of stranded 28 AWG (7x36) tinned copper conductors. Insulation material consists of Gray PVC, with a Black polarity stripe for proper circuit alignment. Standard conductor counts are 26, 34, 40, 44 and 50; other sizes are available upon request. The cable is UL approved and CSA certified, and passes the VW-1 Vertical Wire Flame Test.

Color Code: Gray with Black polarity stripe.

Application: Internal interconnection or internal wiring of electronic equipment.

Physical Specifications

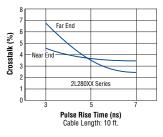
| Conductor | 28 AWG (7x36) Tinned Copper |
|---------------------|---|
| Insulation | .010" Nom. Wall Gray PVC |
| Pitch | 1mm ± 0.51mm (.0394" ± .002") |
| Temperature Rating | -40 to +105°C |
| Flammability Rating | UL: VW-1; CSA: FT1 |
| UL Approval | File #E12683, Style 2651 |
| CSA Approval | File #LL7874, CSA AWM I A 105°C 300V FT1 |
| Packaging | H100, R300 |
| | |

Electrical Specifications

| Voltage Rating | 300V RMS |
|------------------------|--------------------------|
| Current Rating | 1A |
| Conductor Resistance | 68.2Ω/1000 ft. |
| Insulation Resistance | >1 x 10¹⁰Ω • 10 ft. (3m) |
| Impedance* | 90Ω |
| Capacitance* (@ 1 MHz) | 16.5 pF/ft. (54 pF/m) |
| Inductance* (@ 1 MHz) | .16 μH/ft. (.52 μH/m) |
| Propagation Delay* | 1.47 ns/ft. (4.8 ns/m) |
| | |

^{*}Test Configuration: G-S-G (ground-signal-ground).

Unbalanced Crosstalk³



20 15 16 17 100 (17)

Frequency (MHz)

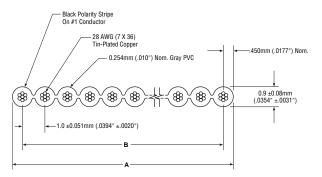
40 50 60 70 80 90 100

Attenuation*

| | No. | Dimensions | | | |
|-------------|-------|-------------|-----------|-------------|-----------|
| Part No. | of | Width "A" | | Span "B" | |
| | Cond. | Inch | mm | Inch | mm |
| 2L28026** | 26 | 1.020 ±.008 | 25.9 ±.20 | .984 ±.008 | 25.0 ±.20 |
| 2L28034** | 34 | 1.335 ±.012 | 33.9 ±.30 | 1.299 ±.012 | 33.0 ±.30 |
| 2L28040** | 40 | 1.571 ±.012 | 39.9 ±.30 | 1.535 ±.012 | 39.0 ±.30 |
| 2L28044** | 44 | 1.728 ±.012 | 43.9 ±.30 | 1.693 ±.012 | 43.0 ±.30 |
| 2L28050 | 50 | 1.965 ±.012 | 49.9 ±.30 | 1.929 ±.012 | 49.0 ±.30 |

^{**}Available in H100 packaging only.

Dimensions



Gray Ribbon 9L280XX Series

CABLE

.050" Pitch, 28 AWG, PVC

Product Description

FLAT

Belden's (9L280XX Series) .050" pitch extruded gray ribbon cable was designed for general purpose electronic interconnect applications. The cable provides reliable mass-termination to standard .100" contact IDC connectors, flexibility, consistent electricals and breakouts can be made easily with the tear feature design. The cable is constructed of stranded 28 AWG (7x36) tinned copper conductors. Insulation material consists of Gray PVC, with a Red polarity stripe for proper circuit alignment. Various conductor counts are standard; other sizes are available upon request. The cable is UL approved and CSA certified, and passes the VW-1 Vertical Wire Flame Test.

Color Code: Gray with Red polarity stripe (standard).

Application: Internal interconnection or internal wiring of electronic equipment.

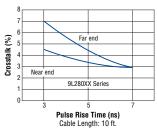
Physical Specifications

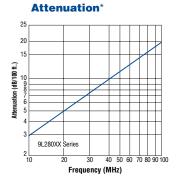
| Conductor | 28 AWG (7x36) Tinned Copper |
|---------------------|---|
| Insulation | .010" Nom. Wall Gray PVC |
| Pitch | .050" ± .002" |
| Temperature Rating | -40 to +105°C |
| Flammability Rating | UL: VW-1; CSA: FT1 |
| UL Approval | File #E12683, Style 2651 |
| CSA Approval | File #LL7874, CSA AWM I A 105°C 300V FT1 |
| Packaging | H100, H300, R300 |
| | |

Electrical Specifications

| Voltage Rating | 300V RMS |
|--|--------------------------|
| Current Rating | 1A |
| Conductor Resistance | 68.2Ω/1000 ft. |
| Insulation Resistance | >1 x 10¹⁰Ω • 10 ft. (3m) |
| Impedance* | 105Ω |
| Capacitance* (@ 1 MHz) | 15 pF/ft. (49 pF/m) |
| Inductance* (@ 1 MHz) | .20 μH/ft. (.66 μH/m) |
| Propagation Delay* | 1.40 ns/ft. (4.6 ns/m) |
| *Tost Configuration: G.S.G. (ground signal ground) | |

Unbalanced Crosstalk*

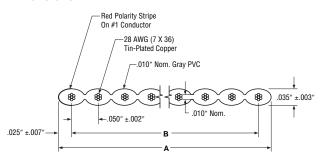




| Part No. | No. | Dimensions | | | |
|----------------------|-------|------------|------------|------------|------------|
| Standard | of | Width "A" | | Span "B" | |
| [UL & CSA] | Cond. | Inch | mm | Inch | mm |
| 9L28009 | 9 | .45 ±.008 | 11.43 ±.20 | .40 ±.008 | 10.16 ±.20 |
| 9L28010 | 10 | .50 ±.008 | 12.70 ±.20 | .45 ±.008 | 11.43 ±.20 |
| 9L28014 [†] | 14 | .70 ±.008 | 17.78 ±.20 | .65 ±.008 | 16.51 ±.20 |
| 9L28015** | 15 | .75 ±.008 | 19.05 ±.20 | .70 ±.008 | 17.78 ±.20 |
| 9L28016 | 16 | .80 ±.008 | 20.32 ±.20 | .75 ±.008 | 19.05 ±.20 |
| 9L28020 | 20 | 1.00 ±.008 | 25.40 ±.20 | .95 ±.008 | 24.13 ±.20 |
| 9L28024 [†] | 24 | 1.20 ±.008 | 30.48 ±.20 | 1.15 ±.008 | 29.21 ±.20 |
| 9L28025 | 25 | 1.25 ±.008 | 31.75 ±.20 | 1.20 ±.008 | 30.48 ±.20 |
| 9L28026 | 26 | 1.30 ±.008 | 33.02 ±.20 | 1.25 ±.008 | 31.75 ±.20 |
| 9L28034 | 34 | 1.70 ±.008 | 43.18 ±.20 | 1.65 ±.008 | 41.91 ±.20 |
| 9L28036** | 36 | 1.80 ±.012 | 45.72 ±.30 | 1.75 ±.012 | 44.45 ±.30 |
| 9L28037** | 37 | 1.85 ±.012 | 46.99 ±.30 | 1.80 ±.012 | 45.72 ±.30 |
| 9L28040 | 40 | 2.00 ±.012 | 50.80 ±.30 | 1.95 ±.012 | 49.53 ±.30 |
| 9L28050 | 50 | 2.50 ±.012 | 63.50 ±.30 | 2.45 ±0.12 | 62.23 ±.30 |
| 9L28060 | 60 | 3.00 ±.012 | 76.20 ±.30 | 2.95 ±.012 | 74.93 ±.30 |
| 9L28064 | 64 | 3.20 ±.012 | 81.28 ±.30 | 3.15 ±.012 | 80.01 ±.30 |

^{**} Available in H100 packaging only.

Dimensions



[†] Not available in R300 packaging.

Gray Ribbon 9L260XX Series

.050" Pitch, 26 AWG, PVC

Product Description

Belden's (9L260XX series) .050" pitch extruded gray ribbon cable was designed for general purpose electronic interconnect applications where higher current carrying capacities are required. The design also conforms to the electrical performance specifications outlined by the SCSI-3 parallel interface document. As with the 9L280XX series, the cable provides reliable mass-termination to standard .100" contact IDC connectors, flexibility, consistent electricals and breakouts can be made easily with the tear feature design. In addition, the overall cable thickness is only .038" ± .002" allowing mateability with all standard IDC connectors. The cable is constructed of stranded 26 AWG (7x34) tinned copper conductors. Insulation material consists of Gray PVC, with a Blue polarity stripe for proper circuit alignment. Various conductor counts are standard; other sizes are available upon request. The cable is UL approved and CSA certified, and passes the VW-1 Vertical Wire Flame Test.

Color Code: Gray with Blue polarity stripe (standard).

Application: Internal interconnection or internal wiring of electronic equipment.

Physical Specifications

| Conductor | 26 AWG (7x34) Tinned Copper |
|---------------------|---|
| Insulation | .010" Nom. Wall Gray PVC |
| Pitch | .050" ± .002" |
| Temperature Rating | -40 to +105°C |
| Flammability Rating | UL: VW-1; CSA: FT1 |
| UL Approval | File #E12683, Style 2651 |
| CSA Approval | File #LL7874, CSA AWM I A 105°C 300V FT1 |
| Packaging | H100, H300, R300 |
| | |

Electrical Specifications

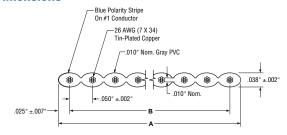
| Voltage Rating | 300V RMS |
|---------------------------|--------------------------|
| Current Rating | 1.5A |
| Conductor Resistance | 43Ω/1000 ft. |
| Insulation Resistance | >1 x 10¹⁰Ω • 10 ft. (3m) |
| Impedance* | 90Ω |
| Capacitance* (@ 1 MHz) | 18 pF/ft. (59.06 pF/m) |
| Inductance* (@ 1 MHz) | .15 μH/ft. (.49 μH/m) |
| Propagation Delay* | 1.48 ns/ft. (4.85 ns/m) |
| *T + 0 " " 0000 / 1 : 1 " | |

^{*}Test Configuration: G-S-G (ground-signal-ground).

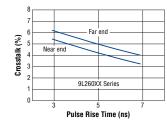
| Part No. | No. | Dimensions | | | |
|-----------------------|-------|------------|------------|------------|------------|
| Standard of | | Width "A" | | Span "B" | |
| [UL & CSA] Con | Cond. | Inch | mm | Inch | mm |
| 9L26010 | 10 | .50 ±.008 | 12.70 ±.20 | .45 ±.008 | 11.43 ±.20 |
| 9L26014 ⁺⁺ | 14 | .70 ±.008 | 17.78 ±.20 | .65 ±.008 | 16.51 ±.20 |
| 9L26016** | 16 | .80 ±.008 | 20.32 ±.20 | .75 ±.008 | 19.05 ±.20 |
| 9L26020 ⁺⁺ | 20 | 1.0 ±.008 | 25.40 ±.20 | .95 ±.008 | 24.13 ±.20 |
| 9L26025** | 25 | 1.25 ±.008 | 31.75 ±.20 | 1.20 ±.008 | 30.48 ±.20 |
| 9L26026 ^{††} | 26 | 1.30 ±.008 | 33.02 ±.20 | 1.25 ±.008 | 31.75 ±.20 |
| 9L26034** | 34 | 1.70 ±.008 | 43.18 ±.20 | 1.65 ±.008 | 41.91 ±.20 |
| 9L26040 [†] | 40 | 2.00 ±.012 | 50.80 ±.30 | 1.95 ±.012 | 49.53 ±.30 |
| 9L26068** | 68 | 3.40 ±.012 | 86.36 ±.30 | 3.35 ±.012 | 85.09 ±.30 |

^{**}Available in H100 packaging only.

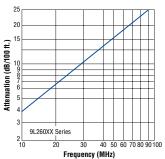
Dimensions



Unbalanced Crosstalk³



Attenuation*



[†] Not available in H300 packaging. †† Not available in R300 packaging.