

Part Number: 9L28015



Flat Gray Ribbon Cable 9L280 Series, #28-15c, .050" Pitch

Product Description

Belden .050" pitch gray ribbon cable was designed for general purpose electronic interconnect applications. The cable provides reliable mass-termination to standard IDC connectors.

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Material	Construction n x D	No. of Conductors
28	TC - Tinned Copper	Stranded	15

Total Number of Conductors:	15
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Insulation

Material	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.01 in

Color Chart

Color
Gray

Outer Shield Material

Material
Unshielded

Outer Jacket Material

Nominal Wall Thickness
0.035 in

Weight:	2.6(lbs)
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Electrical Characteristics

Capacitance

Element	Max. Capacitance Unbalance	Nom. Capacitance Conductor to Conductor
@ 1 kHz (GSG)	2.625 pF/ft	18 pF/ft
@ 1 MHz (GS)	2.625 pF/ft	10 pF/ft
@ 1 MHz (GSG)		15 pF/ft

Shielding:	Unshielded
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Construction and Dimensions

Cond Spacing Center-Center:	.050 in
Cond Spacing Center-Center Outside:	.70 in
OuterJacket1, Nominal Width:	.75(in)
Print Legend:	BELDEN-T 28 AWG CSA AWM I A 105°C 300 V FT1 LL7874 (UL LOGO) AWM STYLE 2651 VW-1 E12683

Conductor DCR

Nominal Conductor DCR
68.2 Ohm/1000ft

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Impedance Description
150 Ohm	(GS)
105 Ohm	(GSG)

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
10 MHz	2.8 dB/100ft
20 MHz	4.8 dB/100ft
30 MHz	6.5 dB/100ft
40 MHz	8.3 dB/100ft
50 MHz	9.8 dB/100ft
60 MHz	12 dB/100ft
70 MHz	13 dB/100ft
80 MHz	14 dB/100ft
90 MHz	15.8 dB/100ft
100 MHz	17 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.4 ns/ft	72 %

Unbalanced Crosstalk

Element	Typical Unbalanced NEXT %	Typical Unbalanced FEXT %	Typical Cross Talk Pulse Rise Time (ns)
10 ft. sample length	4.8 MHz	7 MHz	3 MHz
10 ft. sample length	3.5 MHz	4.7 MHz	5 MHz
10 ft. sample length	3 MHz	3 MHz	7 MHz

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. ACR [dB]
10 MHz		
20 MHz	2.6 dB/100m	
30 MHz		
40 MHz		
50 MHz		
60 MHz		
70 MHz		
80 MHz		
90 MHz		
100 MHz		
		2.6 dB

Current

Max. Recommended Current [A]
per conductor @ 20°C: 1 A

Inductance

Element	Nominal Inductance
@ 1 MHz (GS)	0.29 µH/ft
@ 1 MHz (GSG)	0.2 µH/ft

Voltage

Dielectric Withstand Voltage	UL Voltage Rating
2000 V RMS	300 V RMS

Applicable Standards & Environmental Programs

EU Directive 2000/53/EC (ELV):	Yes
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EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-07-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Standards

CSA Rating:	105°C, 300 V RMS, FT1
CSA AWM Specification:	I A 105°C 300V FT1
UL AWM Style:	2651
UL Rating:	105°C, 300 V RMS, VW-1

Flame Test

CSA Flammability:	FT1
UL Flammability:	VW-1

Safety

UL Voltage Rating:	300V RMS
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Suitability

Suitability - Indoor:	Yes
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Mechanical Characteristics

Operating Temp Range:	-40°C To +105°C
Bulk Cable Weight:	17(lbs/1000ft)
Min Bend Radius/Minor Axis:	2.625(in)
Min Bend Radius/Installation:	2.6(in)

Plenum/Non-Plenum

Plenum (Y/N):	No
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History

Variants

Item #	Color
9L28015 008H100	GRAY

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