



Description:

The shielded jacketed 9L283XX series provides shielding from external electrical interference and allows for greater flexibility, ease of termination, while providing exterior protection from the environment.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
10	28	7x36	TC - Tinned Copper

Conductor Spacing Center to Center: .050 +/- .002

Conductor Spacing Outside Center to Outside Center: .45 +/- .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 Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape (Foil Side In)	100.000

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
2-28	7x36	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.038

Overall Cabling

Overall Nominal Thickness: .122 +/- .012

Overall Nominal Width: .60

Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +105°C

Bulk Cable Weight: 44 lbs/1000 ft.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

UL AWM Style: 20081

UL Rating: 105°C, 300 V RMS, VW-1

CSA Specification: AWM II A 105°C 300 V, FT1

9L28310 Flat - Shielded Jacketed 9L283XX Series

CSA Rating:	105°C, 300 V RMS, FT1
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):	10/01/2005
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

Plenum (Y/N):	No
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Surface Printing (Overall)

Surface Printing:	BELDEN-T 28 AWG CSA AWM II A 105°C 300 V FT-1 LL7874 (UL LOGO) AWM STYLE 20081 VW-1 E12683
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Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Description	Impedance (Ohm)
(GSG) with shield grounded	45

Nom. Inductance:

Description	Inductance (µH/ft)
@ 1 MHz (GSG) with shield grounded	.11

Nom. Capacitance Conductor to Conductor:

Description	Capacitance (pF/ft)
@ 1 kHz (GSG) with shield grounded	70
@ 1 MHz (GSG) with shield grounded	50

Nominal Velocity of Propagation:

Description	VP (%)
	60

Nominal Delay:

Delay (ns/ft)
1.7 NS/FT. (GSG) with shield grounded

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
68.2 OHMS/1000 FT. MAX.

Nom. Attenuation:

Description	Freq. (MHz)	Attenuation (dB/100 ft.)
(GSG) with shield grounded	10	6
(GSG) with shield grounded	20	9.5
(GSG) with shield grounded	30	12.5
(GSG) with shield grounded	40	14.9
(GSG) with shield grounded	50	17.2
(GSG) with shield grounded	60	19
(GSG) with shield grounded	70	21.5
(GSG) with shield grounded	80	23
(GSG) with shield grounded	90	24.5
(GSG) with shield grounded	100	26

9L28310 Flat - Shielded Jacketed 9L283XX Series

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 with ground connected to shield	3	1.5	2
10 ft. sample length with ground connected to shield	5	.9	1.5
10 ft. sample length with ground connected to shield	7	.7	1.2

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
9L28310 010100	100 FT	4.700 LB	BLACK	E	10 #28 PVC FS PVC RIBBON

Notes:

E = MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'

Shielded Jacketed 9L283XX Series

.050" Pitch, 28 AWG, PVC

Product Description

Belden's shielded jacketed 9L283XX series was designed to help meet the FCC EMI/RFI requirements. In addition, the cable provides shielding from external electrical interference along with excellent crosstalk attenuation. The thin extruded jacket allows for greater flexibility, ease of termination, and reduced space requirements, while providing exterior protection from the environment. The core cable is Belden's 9L280XX PVC series allowing easy termination to any standard IDC connector. All cables are 100% shielded with a Duofoil® shield (aluminum/polyester/aluminum) and can be terminated with the two 28 AWG drain wires. Thirteen 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.

Application: External interconnection or internal wiring of electronic equipment.

Physical Specifications

Conductor	28 AWG (7x36) Tinned Copper
Insulation	.010" Nom. Wall Gray PVC
Pitch	.050" ± .002"
Shielding	Duofoil Shield (Aluminum/Polyester/Aluminum)
Drain Wires	Two 28 AWG (7x36) Tinned Copper
Jacket	.038" Nom. Wall Black PVC
Temperature Rating	-20 to +105°C
Flammability Rating	UL: VW-1; CSA: FT1
UL Approval	File #E12683, Style 20081
CSA Approval	File #LL7874, CSA AWM II A 105°C 300V FT1
Packaging	100

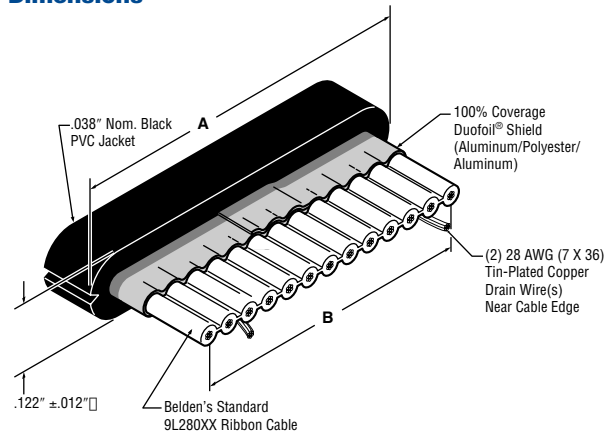
Electrical Specifications

Voltage Rating	300V RMS
Current Rating	1A
Conductor Resistance	68.2Ω/1000 ft.
Insulation Resistance	>1 x 10 ¹⁰ Ω • 10 ft. (3m)
Impedance*	45Ω
Capacitance* (@ 1 MHz)	50 pF/ft. (164 pF/m)
Inductance* (@ 1 MHz)	.11 μH/ft. (.36 μH/m)
Propagation Delay*	1.70 ns/ft. (5.6 ns/m)

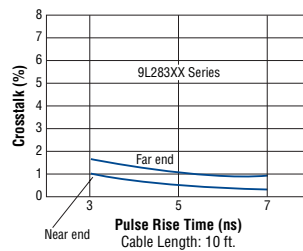
*Test Configuration: G-S-G (ground-signal-ground), with shield grounded.

Part No.	No. of Cond.	Dimensions			
		Width "A"		Span "B"	
		Inch	mm	Inch	mm
9L28309	9	.55	13.97	.40 ±.008	10.16 ±.20
9L28310	10	.60	15.24	.45 ±.008	11.43 ±.20
9L28315	15	.85	21.59	.70 ±.008	17.78 ±.20
9L28320	20	1.10	27.94	.95 ±.008	24.13 ±.20
9L28325	25	1.35	34.29	1.20 ±.008	30.48 ±.20
9L28326	26	1.40	35.56	1.25 ±.008	31.75 ±.20
9L28334	34	1.80	45.72	1.65 ±.008	41.91 ±.20
9L28337	37	1.95	49.53	1.80 ±.012	45.72 ±.30
9L28340	40	2.10	53.34	1.95 ±.012	49.53 ±.30
9L28350	50	2.60	66.04	2.45 ±.012	62.23 ±.30
9L28360	60	3.10	78.74	2.95 ±.012	74.93 ±.30

Dimensions



Unbalanced Crosstalk*



Attenuation*

