Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9V28350 Flat - Shielded Jacketed Vari-Twist® 9V283XX Series





No longer Available 1-800-BELDEN1 For more Information please call

1-800-Belden1



General Description:

The shielded jacketed 9V283XX series provides shielding from external electrical interference and allows for greater flexibility, ease of termination, while providing exterior protection from the environment.

50

Physical Characteristics (Overall)

Total Number of Conductors:

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
25	28	7x36	TC - Tinned Copper

Total Hamber of Conductors.	
Conductor Spacing Center to Center Flat Section:	.050 +/005
Conductor Spacing Outside Center to Outside Center:	2.45 +/- 017

Insulation

Insulation Material:

Insulation Material Wall Thickn	ess (in.)
PVC - Polyvinyl Chloride .010	
Substrate Thickness and Material:	
Insulation Resistance:	

Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Duofoil®	Таре	Aluminum Foil-Polyester Tape-Aluminum Foil	100

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 Cable

Overall Nominal Thickness Flat Section:	.127 +/012
Overall Nominal Thickness Twisted Section:	.147
Overall Nominal Width:	2.60
Overall Flat Section Length:	2 +.5/0
Overall Twisted Length:	18 in.
Flat Section Center to Center Spacing:	20 +/50

Pair

Pair Color Code Chart:

Number	Color
1	Brown/Tan
2	Red/Tan
3	Orange/Tan
4	Yellow/Tan
5	Green/Tan
6	Blue/Tan
7	Purple/Tan
8	Gray/Tan
9	White/Tan
10	Black/Tan
Over 10 pair	Repeat as required

Page 1 of 3 11-05-2015

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Spacing

Twisted Pair Spacing Center to Center: .100

Mechanical Characteristics (Overall)

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

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

UL AWM Style:	20081	
UL Rating:	105°C, 300 V RMS, VW-1	
EU Directive 2011/65/EU (ROHS II):	Yes	
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	
me Test		
UL Flame Test:	VW-1	
num/Non-Plenum		
Plenum (Y/N):	No	

Surface Printing (Overall)

Electrical Characteristics (Overall)

Nom. Inductance:

Description Inductance (μH/ft)
@ 1 MHz | .13

Nom. Capacitance Conductor to Conductor:

Description	Capacitance (pF/ft)
@ 1 kHz (GSG) with shield grounded	35
@ 1 MHz (GSG) with shield grounded	29

Nominal Velocity of Propagation:

Description VP (%)

Nominal Delay:

Delay (ns/ft)
1.6 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.)
(GS) with shield grounded	10	5
(GS) with shield grounded	20	7.6
(GS) with shield grounded	30	9
(GS) with shield grounded	40	11.2
(GS) with shield grounded	50	12.4
(GS) with shield grounded	60	14.4
(GS) with shield grounded	70	16
(GS) with shield grounded	80	18
(GS) with shield grounded	90	20
(GS) with shield grounded	100	21.2

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current

Page 2 of 3 11-05-2015

Detailed Specifications & Technical Data

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1 Amp per conductor @ 20°C

Nominal Balanced Characteristic Impedance:

Description	Impedance (Ohm)	
With shield grounded	100	

Nominal Unbalanced Characteristic Impedance:

ĺ	Description	Impedance (Ohm)
	(GSG)with shield grounded	60

Dielectric Withstand Voltage:

2, 000 V RMS

Typical Balanced Crosstalk - dB Suppression:

Description	Start Freq. (MHz)	Stop Freq. (MHz)	Crosstalk (dB)
10 ft. sample length-near end	10	100	30
10 ft. sample length-far end	10	100	35

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	1.4	.9
10 ft. sample length with ground connected to shield	5	1	.4
10 ft. sample length with ground connected to shield	7	.8	.4

Notes (Overall)

Notes: The transition area is included in the twisted length to assure a full 2 inches of flat termination area. GS=Ground-Signal Mode. GSG=Ground-Signal-Ground Mode.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc

Revision Number: 1 Revision Date: 03-03-2011

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Page 3 of 3 11-05-2015