Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

9V28310 Flat - Shielded Jacketed Vari-Twist® 9V283XX Series

For more Information please call

1-800-Belden1

No longer Available
1-800-BELDEN1

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.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
5	28	7x36	TC - Tinned Copper

Conductor Spacing Center to Center Flat Section:	.050 +/- .005
Conductor Spacing Outside Center to Outside Center:	.45 +/- .012

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
PVC - Polyvinyl Chloride	.010

Substrate Thickness and Material:	.010" Clear PVC
Insulation Resistance:	>10, 000 Mega Ohms

Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Duofoil®	Tape	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:	.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

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 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

Plenum/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 (%)
	64

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
1 Amp per conductor @ 20°C

Nominal Balanced Characteristic Impedance:

Description	Impedance (Ohm)
With shield grounded	100

Nominal Unbalanced Characteristic Impedance:

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.

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc

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