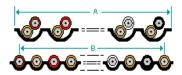
Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9V28060 Flat - Vari-Twist® 9V280XX Series





For more Information please call

1-800-Belden1



General Description:

Belden's PVC Vari-Twist series was designed to reduce crosstalk in the balanced mode by twisting the pairs, but can be mass-terminated in the flat sections with standard IDC connectors.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
30	28	7x36	TC - Tinned Copper

Wall Thickness (in.)

Total Number of Conductors:	60
Conductor Spacing Center to Center Flat Section:	.050 +/005
Conductor Spacing Outside Center to Outside Center:	2.95 +/020

Insulation

Insulation Material:

Insulation Material

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

Outer Shield

Outer Shield Material:



Overall Cable

Overall Nominal Thickness Flat Section:	.042 +/003
Overall Nominal Thickness Twisted Section:	.080
Overall Nominal Width:	3.00
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		

Spacing

Twisted Pair Spacing Center to Center: .100

Mechanical Characteristics (Overall)

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

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9V28060 Flat - Vari-Twist® 9V280XX Series

Applicable S	pecifications and Agency Compliance	(Overall)
Applicable Sta	andards & Environmental Programs	
UL AWM St	yle:	2693 and 2697
UL Rating:		105°C, 300 V RMS, VW-1
EU Directiv	e 2011/65/EU (ROHS II):	Yes
EU CE Mari	С	Yes
EU Directiv	e 2000/53/EC (ELV):	Yes
EU Directiv	e 2002/95/EC (RoHS):	Yes
EU RoHS C	ompliance Date (mm/dd/yyyy):	10/01/2005
EU Directiv	e 2002/96/EC (WEEE):	Yes
EU Directiv	e 2003/11/EC (BFR):	Yes
CA Prop 65	(CJ for Wire & Cable):	Yes
MII Order #	39 (China RoHS):	Yes
Flame Test		
UL Flame T	est:	VW-1
Plenum/Non-F	Plenum	
Plenum (Y/	N):	No

Electrical Characteristics (Overall)

Nom. Inductance:

Description	Inductance (µH/ft)
@ 1 MHz	.24

Nom. Capacitance Conductor to Conductor:

Description	Capacitance (pF/ft)
@ 1 kHz	20
@ 1 MHz	16

Nominal Velocity of Propagation:



Nominal Delay:

Delay (ns/ft) 1.6 NS/FT.

Nom. Conductor DC Resistance:

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

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
10	3.5
20	5.5
30	7.2
40	8.8
50	10.2
60	12
70	13
80	14.2
90	15
100	16

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)
115

Nominal Unbalanced Characteristic Impedance:

Description Impedance (Ohm)

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Detailed Specifications & Technical Data





9V28060 Flat - Vari-Twist® 9V280XX Series

100

Dielectric Withstand Voltage: 2, 000 V RMS

Typical Balanced Crosstalk - dB Suppression:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Crosstalk (dB)
10 ft. sample length		10	100	35

Typical Unbalanced Crosstalk:

Description	Pulse Rise Time (NS) (MHz)	Near End % (MHz)	Far End % (MHz)
10 ft. sample length all grounds connected together.	3	5.8	5.2
10 ft. sample length all grounds connected together.	5	4	3.2
10 ft. sample length all grounds connected together.	7	2.5	2.8

Notes (Overall)

Notes: The transition area is included in the twisted length to assure a full 2 inches of flat termination area.

Kennedy Information (Overall)

Construction:

18" of Twisted Pairs, 2" of Flat Section

Put Ups and Colors:

14 0 00 44	Durtum	Chin Waisht	Color	Natas	Itom Docc
Item #	Putup	Ship Weight	Color	Notes	item besc
					4

Revision Number: 1 Revision Date: 05-14-2007

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Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

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