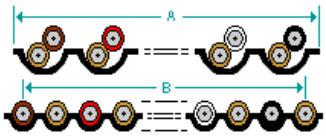
BELDENCable

9V28014 Flat - Vari-Twist® 9V280XX Series



For more information please call

1-800-Belden1

See Put-ups and Colors

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:

CONDUCTOR:

Number of Pairs	7
Total Number of Conductors	14
AWG	28
Stranding	7x36
Conductor Material	TC - Tinned Copper

INSULATION:

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

PAIR:

Pair Lay Length & Direction - adjacent pairs	1/2" Nom. Lay Length - Adjacent pairs have opposite direction lay

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

SPACING:

Conductor Spacing Center to Center Flat Section	.050 +/- .005 in.
Conductor Spacing Outside Center to Outside Center	.65 +/- .012 in.
Twisted Pair Spacing Center to Center	.100 in.

OVERALL:

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Overall Nominal Width	.70 in.
Overall Nominal Thickness Flat Section	.042 +/- .003 in.
Overall Nominal Thickness Twisted Section	.080 in.
Overall Twisted Length	18 in.
Flat Section Center to Center Spacing	20 +/- .50 in.
Overall Flat Section Length	2 +.5/-.0 in.

OUTER SHIELD:

Outer Shield Material	Unshielded

MECHANICAL CHARACTERISTICS:

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

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

UL AWM Style	2693 and 2697
UL Rating	105°C, 300 V RMS, VW-1
EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	10/01/2005

FLAME TEST:

UL Flame Test	VW-1

PLENUM/NON-PLENUM:

Plenum (Y/N)	N

ELECTRICAL CHARACTERISTICS:

Nominal Balanced Characteristic Impedance :

Description	Nominal Balanced Characteristic Impedance (Ohms)
	115

Nominal Unbalanced Characteristic Impedance :

Description	Nominal Unbalanced Characteristic Impedance (Ohms)
	100

Nom. Inductance :

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

Nom. Capacitance Conductor to Conductor :

Description	Nom. Capacitance Conductor to Conductor (pF/ft)
@ 1 kHz	20
@ 1 MHz	16

Nominal Velocity of Propagation :

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Description	Nominal Velocity of Propagation (%)
	64

Nominal Delay	1.6 NS/FT. ns/ft
Nom. Conductor DC Resistance @ 20 Deg. C	68.2 OHMS/1000 FT. MAX. Ohms/1000 ft

Nom. Attenuation :

Description	Frequency (MHz)	Nom. 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

Typical Balanced Crosstalk - dB Suppression :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Typ. dB Sup. for both near/far end is better than (dB)
10 ft. sample length		10	100	35

Typical Unbalanced Crosstalk :

Description	Pulse Rise Time (NS)	Near End (%)	Far End (%)	Typical Unbalanced Crosstalk (dB)
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	

Max. Operating Voltage - UL	300 V RMS
Max. Recommended Current	1 Amp per conductor @ 20°C
Dielectric Withstand Voltage	2, 000 V RMS

NOTES:

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

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
9V28014 000H100	7 PR #28 PVC VARI-TWIST	H100	2.5	NONE	E

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

Revision Number: 1 Revision Date: 10-11-2005