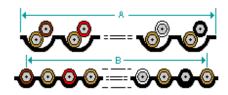
**ENGLISH MEASUREMENT VERSION** 



### 8V28036 Flat - Vari-Twist® 8V280XX Series





For more Information please call

1-800-Belden1





# **Description:**

Belden^s® FEP Vari-Twist series was designed for high and low temperatures while reducing 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:

1	# Pairs	AWG	Stranding	Conductor Material
F	18	28	7x36	SPC - Silver Plated Copper

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

Conductor Spacing Outside Center to Outside 1.75+/- .017

Center:

### Insulation

### **Insulation Material:**

Insulation Material	Wall Thickness (in.)
FEP - Fluorinated Ethylene Propylene	.010

Substrate Thickness and Material: .010" Clear FEP

Insulation Resistance: >100, 000 Mega Ohms

# **Outer Shield**

### **Outer Shield Material:**

Outer Shield Material Unshielded

### **Overall Cable**

Overall Nominal Thickness Flat Section:	.042 +/003
Overall Nominal Thickness Twisted Section:	.080
Overall Nominal Width:	1.80
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

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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:** -70°C To +150°C

# **Applicable Specifications and Agency Compliance (Overall)**

### **Applicable Standards & Environmental Programs**

UL AWM Style:	UL Style 20468
UL Rating:	150°C, 150 V, 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):	07/01/2005
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

# Flar

**IEEE Flame Test:** 383 (70, 000 BTU)

# Plenum/Non-Plenum

Plenum (Y/N): No

# **Electrical Characteristics (Overall)**

# Nom. Inductance:

Description	Inductance (µH/ft)
@ 1 MHz	.22

### Nom. Capacitance Conductor to Conductor:

Description	Capacitance (pF/ft)
@ 1 kHz	10.1
@ 1 MHz	10.6

# Nominal Velocity of Propagation:

Description	VP (%	<b>%</b> )
	77	

# **Nominal Delay:**

Delay (ns/ft) 1.32

# Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 68.2

Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100 ft.)

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10	1.9
20	2.7
30	3.5
40	4
50	4.6
60	5.2
70	5.7
80	6.1
90	6.5
100	6.9

#### Max. Operating Voltage - UL:

Voltage 150 V RMS

### Max. Recommended Current:

Current
1 Amp per conductor @ 20°C

### **Nominal Balanced Characteristic Impedance:**

Description	Impedance (Ohm)
	145

### **Nominal Unbalanced Characteristic Impedance:**

Description	Impedance (Ohm)
	130

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	30

### Typical Unbalanced Crosstalk:

Description	Pulse Rise Time (NS) (MHz)	Near End % (MHz)	Far End % (MHz)
10 ft. sample length all grounds connected together.	3	12.3	6.6
10 ft. sample length all grounds connected together.	5	10.4	4.3
10 ft. sample length all grounds connected together.	7	10.8	3.3

# **Notes (Overall)**

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

#### **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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