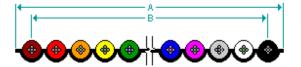
# **Detailed Specifications & Technical Data**

**ENGLISH MEASUREMENT VERSION** 



### 9R28010 Flat - Rainbow 9R280XX Series



For more Information please call

1-800-Belden1



# **Description:**

Belden's .050" pitch, color-coded PVC flat cable allows for quick identification and circuit tracing, along with easy breakouts for circuit routing, and is designed for mass-termination with standard IDC connectors.

# **Physical Characteristics (Overall)**

# Conductor

### AWG:

# Conductors	AWG	Stranding	<b>Conductor Material</b>
10	28	7x36	TC - Tinned Copper

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

Conductor Spacing Outside Center to Outside .45 +/- .006

Center:

### Insulation

### **Insulation Material:**

Insulation Material	Wall Thickness (in.)
PVC - Polyvinyl Chloride	0.005

Insulation Resistance: >10, 000 Mega Ohms

### **Insulation Color Code Chart:**

Color
Brown
Red
Orange
Yellow
Green
Blue
Purple
Gray
White
Black

# **Outer Shield**

**Outer Shield Material:** 

Outer Shield Material
Unshielded

# **Outer Jacket**

**Outer Jacket Material:** 

Outer Jacket Material Clear PVC

# **Overall Cabling**

Overall Nominal Thickness: .036 +/- .002

Overall Nominal Width: .50

## **Mechanical Characteristics (Overall)**

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

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# **Detailed Specifications & Technical Data**

### **ENGLISH MEASUREMENT VERSION**



# 9R28010 Flat - Rainbow 9R280XX Series

Bulk Cable Weight:	15 lbs/1000 ft.

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

# Ap

UL Rating:	AWM 20932, 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	
me Test		
UL Flame Test:	VW-1	

No

# Plenum/Non-Plenum

Plenum (Y/N):

**Electrical Characteristics (Overall)** 

#### Nom. Characteristic Impedance: **Description Impedance (Ohm)** (GS) 150 (GSG) 105

## Nom. Inductance:

Description	Inductance (µH/ft)
@ 1 MHz (GS)	.29
@ 1 MHz (GSG)	.20

## Nom. Capacitance Conductor to Conductor:

Description	Capacitance (pF/ft)
@ 1 kHz (GSG)	18
@ 1 MHz (GS)	10
@ 1 MHz (GSG)	15

# Nominal Velocity of Propagation:

Description	VP	(%)
	72	

# **Nominal Delay:**

Delay (ns/ft)
1.40 NS/FT. (GSG)

# 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	2.8
20	4.8
30	6.5
40	8.3
50	9.8
60	12
70	13
80	14

# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



### 9R28010 Flat - Rainbow 9R280XX Series

90	15.8
100	17

#### Max. Operating Voltage - UL:

Voltage 300 V RMS

### Max. Recommended Current:

Current 1 Amp per conductor @ 20°C

**Dielectric Withstand Voltage:** 2,000 V RMS

### Typical Unbalanced Crosstalk:

Description	Pulse Rise Time (NS) (MHz)	Near End % (MHz)	Far End % (MHz)
10 ft. sample length	3	4.8	7
10 ft. sample length	5	3.5	4.7
10 ft. sample length	7	3	3

### **Notes (Overall)**

Notes: 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
9R28010 000100	100 FT	6.500 LB	NONE		10 #28 PVC RAINBOW

Revision Number: 2 Revision Date: 09-11-2009

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