# **Detailed Specifications & Technical Data**

**ENGLISH MEASUREMENT VERSION** 



#### 9R28026 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	ductors AWG S		Conductor Material	
26	28	7x36	TC - Tinned Copper	

Conductor Spacing Center to Center

.050 +/- .005

Conductor Spacing Outside Center to Outside Center 1.25 +/- .011

#### Insulation:

Insulation Material

Ins Material		Wall Thickness (in.)		
	PVC - Polyvinyl Chloride	0.010		

Substrate Thickness and Material

.010" Clear PVC

Insulation Resistance

>10, 000 Mega Ohms

#### Insulation Color Code Chart

Number	Color	
1	Brown	
2	Red	
3	Orange	
4	Yellow	
5	Green	
6	Blue	
7	Purple	
8	Gray	
9	White	
10	Black	
Over 10 conductors	Repeat as required	

#### **Outer Shield:**

Outer Shield Material

Outer Shield Material
Unshielded

## **Overall Cabling:**

Overall Nominal Thickness .042 +/- .003

Overall Nominal Width 1.30

## **Mechanical Characteristics (Overall):**

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

## Applicable Specifications and Agency Compliance (Overall):

## **Applicable Standards:**

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UL AWM Style	2884
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 (Overall):**

Nom. Characteristic Impedance

Description	Impedance (Ohm)		
(GS)	150.000		
(GSG)	105.000		

Nom. Inductance

Description	Inductance (µH/ft)		
@ 1 MHz (GS)	0.290		
@ 1 MHz (GSG)	0.200		

Nom. Capacitance Conductor to Conductor

Description	Capacitance (pF/ft)
@ 1 kHz (GSG)	18.000
@ 1 MHz (GS)	10.000
@ 1 MHz (GSG)	15.000

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

Description	Freq. (MHz)	Attenuation (dB/100 ft.)
	10.000	2.800
	20.000	4.800
	30.000	6.500
	40.000	8.300
	50.000	9.800
	60.000	12.000
	70.000	13.000
	80.000	14.000
	90.000	15.800
	100.000	17.000

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

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## Typical Unbalanced Crosstalk

Description	Pulse Rise Time (NS) (MHz)	Near End % (MHz)	Far End % (MHz)	Crosstalk (dB)
10 ft. sample length	3.000	4.800	7.000	
10 ft. sample length	5.000	3.500	4.700	
10 ft. sample length	7.000	3.000	3.000	

#### Notes (Overall):

Notes GS=Ground-Signal Mode; GSG=Ground-Signal-Ground Mode

#### **PUT UPS AND COLORS:**

Item #	Putup	Ship Weight	Jacket Color	Notes	Item Desc
9R28026 000100	100 FT	2.900 LB	NONE		26 #28 PVC RAINBOW NONE

#### Notes:

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

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