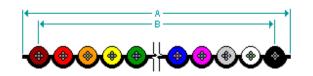
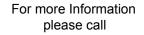
# **Detailed Specifications & Technical Data**

ENGLISH MEASUREMENT VERSION



## 9R28050 Flat - Rainbow 9R280XX Series





1-800-Belden1



# **Description:**

Belden<sup>s</sup> .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.

2	-				
hysical Characte	eristics (Overall)				
Conductor AWG:					
_	G Stranding Conductor Material				
50 28 7x36 TC - Tinned Copper					
Total Number of Conductors:		50			
		50			
Conductor Spacing Center to Center:		.050 +/005			
Conductor Spacing Outside Center to Outside Center:		2.45 +/011			
nsulation Insulation Material:					
Insulation Material	Wall Thickness (in.)				
PVC - Polyvinyl Chlo	oride 0.005				
Insulation Resist	ance.	>10, 000 Mega Ohms			
Insulation Color Co					
Number	Color				
1	Brown				
2	Red				
3	Orange				
4	Yellow				
5	Green				
6	Blue				
7	Purple				
8	Gray				
9	White				
10 Over 10 conductors	Black				
Over 10 conductors	Repeat as required				
Outer Shield					
Outer Shield Mater	ial:				
Outer Shield Mater	ial				
Unshielded					
Overall Cable					
Overall Nominal Thickness:		.036 +/002			
Overall Nominal Width:		2.50			
echanical Chara	cteristics (Overall)				
Operating Tempe		-20°C To +105°C			
Bulk Cable Weigh		64 lbs/1000 ft.			
Baik Gable Weigi					

# **Detailed Specifications & Technical Data**

ENGLISH MEASUREMENT VERSION



## 9R28050 Flat - Rainbow 9R280XX Series

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	
lame Test		
UL Flame Test:	VW-1	
lenum/Non-Plenum		
Plenum (Y/N):	No	

## 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
90	15.8
100	17

# **Detailed Specifications & Technical Data**



## ENGLISH MEASUREMENT VERSION

## 9R28050 Flat - Rainbow 9R280XX Series

### 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

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9R28050 000100	100 FT	5.600 LB	NONE		50 #28 PVC RAINBOW

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

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