



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



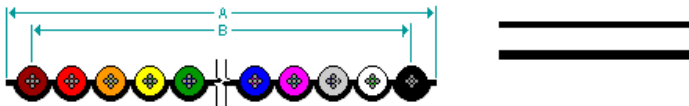
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## General Description:

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	Conductor Material
16	28	7x36	TC - Tinned Copper

Total Number of Conductors: 16

Conductor Spacing Center to Center: .050

### Insulation

Insulation Material:

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

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

### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
Clear PVC

### Overall Cable

Overall Nominal Thickness: .036

Overall Nominal Width: .80

## Mechanical Characteristics (Overall)

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

Bulk Cable Weight: 19 lbs/1000 ft.

Min. Bend Radius/Minor Axis: 0.500 in.

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

UL Rating: AWM 20932

EU Directive 2011/65/EU (ROHS II): Yes

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
MIL Order #39 (China RoHS):	Yes

**Flame Test**

UL Flame Test:	VW-1
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**Plenum/Non-Plenum**

Plenum (Y/N):	No
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**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
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

# Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

9R28016 Flat - Rainbow 9R280XX Series

## Notes (Overall)

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

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9R28016 000100	100 FT	2.100 LB	NONE		16 #28 PVC RAINBOW

Revision Number: 3 Revision Date: 10-02-2012

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