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1-800-Belden1



## General Description:

Belden's .050" pitch, color-coded FEP 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
10	28	7x36	SPC - Silver Plated Copper

Total Number of Conductors: 10

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

Conductor Spacing Outside Center to Outside Center: .45 +/- .007

### 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

#### 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

### Outer Shield

#### Outer Shield Material:

Outer Shield Material
Unshielded

### Overall Cable

Overall Nominal Thickness: .042 +/- .003

Overall Nominal Width: .50

## Mechanical Characteristics (Overall)

Operating Temperature Range: -70°C To +150°C

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

UL AWM Style:	20468
UL Rating:	150°C, 150 V, VW-1
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):	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
MIL Order #39 (China RoHS):	Yes

**Flame Test**

UL Flame Test:	VW-1
IEEE Flame Test:	383 (70, 000 BTU)

**Plenum/Non-Plenum**

Plenum (Y/N):	No
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**Electrical Characteristics (Overall)**

**Nom. Characteristic Impedance:**

Description	Impedance (Ohm)
(GS)	170
(GSG)	120

**Nom. Inductance:**

Description	Inductance (µH/ft)
@ 1 MHz (GS)	.26
@ 1 MHz (GSG)	.18

**Nom. Capacitance Conductor to Conductor:**

Description	Capacitance (pF/ft)
@ 1 kHz (GS)	7.5
@ 1 kHz (GSG)	10.5
@ 1 MHz (GS)	7.5
@ 1 MHz (GSG)	10.5

**Nominal Velocity of Propagation:**

Description	VP (%)
	78

**Nominal Delay:**

Delay (ns/ft)
1.30 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	1.7
20	2.7
30	3.6
40	4.4
50	5.1
60	5.8
70	6.5
80	7.2
90	8
100	8.5

**Max. Operating Voltage - UL:**

Voltage
150 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	3.8	4.3
10 ft. sample length	5	3.2	2.4
10 ft. sample length	7	3.2	1.4

**Notes (Overall)**

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

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
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