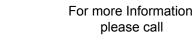
Detailed Specifications & Technical Data



9R28020 Flat - Rainbow 9R280XX Series





1-800-Belden1



General Description:

ENGLISH MEASUREMENT VERSION

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.

Conductor AWG: # Conductors AWG Stranding Conductor Material 20 28 Total Number of Conductors: 20 Conductor Spacing Center to Center: .050 Insulation .050 Insulation Material:	Physical Characte	ristics (Overall)	
#Conductors AWG Stranding Conductor Material 20 28 736 Total Number of Conductors: 20 Conductor Spacing Center to Center: .050 Insulation Material:	Conductor		
20 28 7x36 TC - Tinned Copper Total Number of Conductors: 20 Conductor Spacing Center to Center: .050 Insulation Material: Insulation Material: Insulation Resistance: >10.000 Mega Ohms Insulation Color Code Chart: >10.000 Mega Ohms Insulation Color Code Chart: >10.000 Mega Ohms Insulation Toolor Code Chart: Number Color 1 Brown 2 2 Red 3 3 Orange 4 4 Yellow 5 5 Green 9 9 Blue 7 7 Purple 8 8 Gray 9 9 White 10 10 Black Outer Shield Material: Outer Shield Material: 0 Unshielded 1.00 Overall Cable .036 Overall Nominal Width: 1.00 Vechanical Characteristics (Overall) .20°C To +105°C Buluk Cable Wei		Stranding Conductor Ma	terial
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7 Purple 8 Gray 9 White 10 Black Over 10 conductors Repeat as required Outer Shield Material: Outer Shield Material: Unshielded Overall Cable Overall Nominal Thickness: .036 Overall Nominal Width: 1.00 Itechanical Characteristics (Overall) Operating Temperature Range: -20°C To +105°C Bulk Cable Weight: 24 lbs/1000 ft.			
8 Gray 9 White 10 Black Over 10 conductors Repeat as required Outer Shield Material: Outer Shield Material Unshielded Overall Cable .036 Overall Nominal Thickness: .036 Overall Nominal Width: 1.00 Mechanical Characteristics (Overall) Operating Temperature Range: -20°C To +105°C Bulk Cable Weight: 24 lbs/1000 ft. 24 lbs/1000 ft.			
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Overall Nominal Width: 1.00 Iechanical Characteristics (Overall) Operating Temperature Range: -20°C To +105°C Bulk Cable Weight: 24 lbs/1000 ft.	Overall Cable		
Operating Temperature Range: -20°C To +105°C Bulk Cable Weight: 24 lbs/1000 ft.	Overall Nominal Thickness:		.036
Operating Temperature Range:-20°C To +105°CBulk Cable Weight:24 lbs/1000 ft.	Overall Nominal Width:		1.00
Bulk Cable Weight: 24 lbs/1000 ft.	lechanical Chara	cteristics (Overall)	
	Operating Temperature Range:		-20°C To +105°C
Min. Bend Radius/Minor Axis: 0.500 in.	Bulk Cable Weight:		24 lbs/1000 ft.
	Min. Bend Radius	/Minor Axis:	0.500 in.

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9R28020 Flat - Rainbow 9R280XX Series

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			
MII Order #39 (China RoHS):	Yes			
ame Test				
UL Flame Test:	VW-1			
enum/Non-Plenum				
Plenum (Y/N):	No			

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

DescriptionImpedance (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



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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

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9R28020 000100	100 FT	2.600 LB	NONE		20 #28 PVC RAINBOW

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

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