Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9R28034 Flat - Rainbow 9R280XX Series



For more Information please call

1-800-Belden1



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.

>10,000 Mega Ohms

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
34	28	7x36	TC - Tinned Copper

Total Number of Conductors: 34

Conductor Spacing Center to Center: .050

Insulation

Insulation Material:

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

Insulation Resistance:

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:



Overall Cable

Overall Nominal I nickness:	.036
Overall Nominal Width:	1.70

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +105°C
Bulk Cable Weight:	39 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, 105°C, 300 V RMS, 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):	10/01/2005

Page 1 of 3 08-26-2016

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9R28034 Flat - Rainbow 9R280XX Series

	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
Fla	me Test	
	UL Flame Test:	VW-1
Ple	num/Non-Plenum	
	Plenum (Y/N):	No

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:

iii. 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

Notes (Overall)

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

Put Ups and Colors:

Page 2 of 3 08-26-2016

Detailed Specifications & Technical Data





9R28034 Flat - Rainbow 9R280XX Series

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9R28034 000100	100 FT	4.300 LB	NONE		34 #28 PVC RAINBOW

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

© 2016 Belden, Inc All Rights Reserved

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its bublication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.