

8281 Coax - Precision Video Cable for Analog and Digital

	<p>For more information please call 1-800-Belden1</p> <p><u>See Put-ups and Colors</u></p>
--	---

Description:

20 AWG solid .031" bare copper conductor, polyethylene insulation, 98% tinned copper double braid shield, polyethylene jacket.

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Coax	1
Total Number of Conductors	1
RG Type	59/U
AWG	20
Stranding	Solid
Conductor Diameter	.031 in.
Conductor Material	BC - Bare Copper

INSULATION:

Insulation Material	PE - Polyethylene
Insulation Diameter	.198 in.

OUTER SHIELD:

Outer Shield Type	Braid/Braid
-------------------	-------------

Outer Shield Material :

Layer Number	Trade Name	Type	Material	% Coverage (%)
1		Braid	TC - Tinned Copper	98
2		Braid	TC - Tinned Copper	98

Outer Shield % Coverage	98 %
-------------------------	------

OUTER JACKET:

Outer Jacket Material	PE - Polyethylene
-----------------------	-------------------

OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.305 in.
--------------------------	----------

MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-55°C To +80°C
Non-UL Temperature Rating	80°C
Bulk Cable Weight	68 lbs/1000 ft.
Max. Recommended Pulling Tension	116 lbs.

8281 Coax - Precision Video Cable for Analog and Digital

Min. Bend Radius (Install)	3 in.
Min. Flexing Radius	6 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

SUITABILITY:

Suitability - Indoor	Yes
Suitability - Outdoor	Yes

PLENUM/NON-PLENUM:

Plenum (Y/N)	N
Plenum Number	88281

ELECTRICAL CHARACTERISTICS:

Nom. Characteristic Impedance	75 +/- 1.5 Ohms
Nom. Inductance	0.131 μ H/ft
Nom. Capacitance Conductor to Shield	21 pF/ft
Nominal Velocity of Propagation	66 %
Nominal Delay	1.54 ns/ft
Nom. Conductor DC Resistance @ 20 Deg. C	9.9 Ohms/1000 ft
Nominal Outer Shield DC Resistance	1.1 Ohms/1000 ft

Minimum Structural Return Loss :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Minimum Structural Return Loss (dB)
		5	216	27
		217	850	23

Nom. Attenuation :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100 ft.)
	1			.3
	3.6			.5
	10.0			.8
	71.5			2.1
	135			3.0
	270			4.3
	360			5.1
	540			6.3
	720			7.4
	750			7.6
	1000			9.2

Max. Operating Voltage - Non-UL	2900 V RMS
---------------------------------	------------

NOTES:

Notes	Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge and termination. Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, using a 75 Ohm fixed bridge and termination. 100% sweep tested. 5 MHz to 850 MHz.
-------	---

8281 Coax - Precision Video Cable for Analog and Digital

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
8281 0021000	75 OHM VIDEO COAX	1000	74	RED	C
8281 002500	75 OHM VIDEO COAX	500	36.5	RED	
8281 0031000	75 OHM VIDEO COAX	1000	74	ORANGE	C
8281 003500	75 OHM VIDEO COAX	500	36.5	ORANGE	
8281 0041000	75 OHM VIDEO COAX	1000	74	YELLOW	C
8281 004500	75 OHM VIDEO COAX	500	36.5	YELLOW	
8281 0051000	75 OHM VIDEO COAX	1000	74	GREEN, DARK	C
8281 005500	75 OHM VIDEO COAX	500	36.5	GREEN, DARK	
8281 0061000	75 OHM VIDEO COAX	1000	74	BLUE, LIGHT	C
8281 006500	75 OHM VIDEO COAX	500	36.5	BLUE, LIGHT	
8281 0091000	75 OHM VIDEO COAX	1000	74	WHITE	C
8281 0101000	75 OHM VIDEO COAX	1000	74	BLACK	C
8281 010500	75 OHM VIDEO COAX	500	36.5	BLACK	

C = CRATE REEL PUT-UP.

Revision Number: 1 Revision Date: 12-30-2003

© 2003 Belden Wire & Cable Company
All Rights Reserved.

Although Belden Electronics Division ("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.