

## 8281F Coax - Double Braided RG-59/U Type



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call

**1-800-Belden1**

See Put-ups and Colors

### Description:

22 AWG stranded (7x29) .031" bare compacted copper conductor, polyethylene insulation, tinned copper double braid shield (98% coverage), PVC jacket.

### PHYSICAL CHARACTERISTICS:

#### CONDUCTOR:

Number of Coax	1
Total Number of Conductors	1
RG Type	59/U
AWG	22
Stranding	7x29
Conductor Diameter	.031 in.
Conductor Material	BCC - Bare Compacted Copper

#### INSULATION:

Insulation Material	PE - Polyethylene
Insulation Diameter	.198 in.

#### OUTER SHIELD:

Outer Shield Type	Braid/Braid
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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 %
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#### OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride
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#### OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.305 in.
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#### MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-20°C To +60°C
Non-UL Temperature Rating	60°C
Bulk Cable Weight	60 lbs/1000 ft.

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Max. Recommended Pulling Tension	168 lbs.
Min. Bend Radius (Install)	3 in.
Min. Flexing Radius	4.5 in.

### APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

#### APPLICABLE STANDARDS:

EU CE Mark (Y/N)	No
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004

#### SWEEP TEST:

Sweep Testing	100% sweep tested. 5 MHz to 850 MHz.
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#### SUITABILITY:

Suitability - Indoor	Yes
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#### PLENUM/NON-PLENUM:

Plenum (Y/N)	N
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#### ELECTRICAL CHARACTERISTICS:

Nom. Characteristic Impedance	75 Ohms
Nom. Inductance	0.118 $\mu$ 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	12.2 Ohms/1000 ft
Nominal Outer Shield DC Resistance @ 20°C	1.7 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	830	23

Nom. Attenuation :

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Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100 ft.)
	1			.3
	3.6			.5
	10.0			.9
	71.5			2.5
	135			3.6
	270			5.1
	360			6.0
	540			7.4
	720			8.7
	750			8.9
	1000			10.5

Max. Operating Voltage - Non-UL

2900 V RMS

Other Electrical Characteristic 1

Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge and termination.

Other Electrical Characteristic 2

Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, using a 75 Ohm fixed bridge and termination.

### NOTES:

Notes

Compacted copper combines the Impedance uniformity of solid conductors and the "nick-resistance" of stranded conductors.

### PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
8281F G7V1000	#21H PE DBLB PVC	1000	67	RED, MATTE	C
8281F G7W1000	#21H PE DBLB PVC	1000	67	GREEN, MATTE	C
8281F G7X1000	#21H PE DBLB PVC	1000	67	BLUE, MATTE	C
8281F J5C1000	#21H PE DBLB PVC	1000	67	BLACK, VIVID MATTE	C
8281F J5C500	#21H PE DBLB PVC	500	34.5	BLACK, VIVID MATTE	
8281F U901000	#21H PE DBLB PVC	1000	67	GRAY, MATTE	C

C = CRATE REEL PUT-UP.

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