



For more Information
please call

1-800-Belden1



General Description:

RG-7 Type 16 AWG solid 0.051" bare copper conductor, gas-injected foamed high-density polyethylene insulation, Duofoil® + tinned copper braid shield (95% coverage) plus Beldfoil® with shorting fold, PVC jacket.

Usage (Overall)

Suitable Applications: SMPTE 424M 3 Gb/s HD-SDI 1080p

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	16	Solid	BC - Bare Copper	1.295

Total Number of Conductors: 1

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	5.715

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100.000
2		Braid	TC - Tinned Copper	95.000
3	Beldfoil® with shorting fold	Tape	Polyester Tape-Aluminum Foil	100.000

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 8.128 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +75°C

Bulk Cable Weight: 87.804 Kg/Km

Max. Recommended Pulling Tension: 493.750 N

Min. Bend Radius/Minor Axis: 82.550 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

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): 01/01/2004

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
Series Type:	Series 7

Flame Test

UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4

Suitability

Suitability - Indoor:	Yes
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Plenum/Non-Plenum

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

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (µH/m)
0.299

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
52.824

Nominal Velocity of Propagation:

VP (%)
84.000

Nominal Delay:

Delay (ns/m)
3.970

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
13.124

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
6.234

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1.000	0.558
3.580	0.984
5.000	1.148
6.000	1.247
7.000	1.312
10.000	1.575
12.000	1.706
25.000	2.428
55.000	3.543
67.500	3.937
71.500	4.068
88.500	4.495
100.000	4.790
135.000	5.578
143.000	5.742
180.000	6.464
270.000	7.973
360.000	9.285
540.000	11.484
720.000	13.419
750.000	13.715
1000.000	16.044
1500.000	20.014
2000.000	23.623
2250.000	25.231
3000.000	29.791
4500.000	37.830

Max. Operating Voltage - UL:

METRIC MEASUREMENT VERSION

1794A Coax - Low Loss Serial Digital Coax

Voltage
300 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. 75 +/- 3 Ohms

Other Electrical Characteristic 2: Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, using a 75 Ohm fixed bridge and termination.

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5	1600	23
1600	4500	21

Sweep Test

Sweep Testing: 100% Sweep tested 5 MHz to 4.5 GHz.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1794A N3U1000	1,000 FT	59.000 LB	GREEN, MIL	C	#16 LDPE/GIFHDLDPPE SH FRPVC
1794A 0011000	1,000 FT	59.000 LB	BROWN	C	#16 LDPE/GIFHDLDPPE SH FRPVC
1794A 0021000	1,000 FT	59.000 LB	RED	C	#16 LDPE/GIFHDLDPPE SH FRPVC
1794A 0031000	1,000 FT	59.000 LB	ORANGE	C	#16 LDPE/GIFHDLDPPE SH FRPVC
1794A 0041000	1,000 FT	59.000 LB	YELLOW	C	#16 LDPE/GIFHDLDPPE SH FRPVC
1794A 0061000	1,000 FT	59.000 LB	BLUE, LIGHT	C	#16 LDPE/GIFHDLDPPE SH FRPVC
1794A 0071000	1,000 FT	59.000 LB	VIOLET	C	#16 LDPE/GIFHDLDPPE SH FRPVC
1794A 0081000	1,000 FT	59.000 LB	GRAY	C	#16 LDPE/GIFHDLDPPE SH FRPVC
1794A 0091000	1,000 FT	59.000 LB	WHITE	C	#16 LDPE/GIFHDLDPPE SH FRPVC
1794A 010N1000	1,000 FT	60.000 LB	BLACK		#16 LDPE/GIFHDLDPPE SH FRPVC
1794A 0101000	1,000 FT	59.000 LB	BLACK	C	#16 LDPE/GIFHDLDPPE SH FRPVC

Notes:
C = CRATE REEL PUT-UP.

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