

1794A Coax - Low Loss Serial Digital Coax



For more Information
please call

1-800-Belden1



Description:

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

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 Cabling

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 (Install)/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 CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

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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

Plenum/Non-Plenum

Plenum (Y/N): No

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

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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:

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	305 MT	28.576 KG	GREEN, MIL	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0011000	305 MT	28.576 KG	BROWN	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0021000	305 MT	28.576 KG	RED	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0031000	305 MT	28.576 KG	ORANGE	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0041000	305 MT	28.576 KG	YELLOW	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0061000	305 MT	28.576 KG	BLUE, LIGHT	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0071000	305 MT	28.576 KG	VIOLET	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0081000	305 MT	28.576 KG	GRAY	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0091000	305 MT	28.576 KG	WHITE	C	#16 LDPE/GIFHDLDP SH FRPVC
1794A 0101000	305 MT	28.576 KG	BLACK	C	#16 LDPE/GIFHDLDP SH FRPVC

Notes:
C = CRATE REEL PUT-UP.

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