

Part Number: 7794A

VideoFLEX® Snake, RG59, #20-3 Coax, CMR



Product Description

Digital Coax Snake Cable, Riser-CMR, 3-RG59 20 AWG, solid bare copper conductors, foam HDPE core, Duofoil® +95% tinned copper braid, PVC jacket

Technical Specifications

Product Overview

| | |
|------------------------|--|
| Environmental Space: | Indoor/Outdoor |
| Suitable Applications: | SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080p, SDI/HDTV Digital Video, High Definition (HD), Standard Definition (SDI) |

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | Nominal Diameter | No. of Coax |
|-----|-----------|------------------|------------------|-------------|
| 20 | Solid | BC - Bare Copper | 0.032 in | 3 |

| | |
|------------------|---|
| Conductor Count: | 3 |
|------------------|---|

Insulation

| Material | Nominal Diameter |
|---|------------------|
| Gas-injected FHDPE - Foam High Density Polyethylene | 0.145 in |

Color Chart

| Number | Color |
|--------|-------|
| 1 | Red |
| 2 | Green |
| 3 | Blue |

Inner Shield Material

| Type | Layer | Material | Material Trade Name | Coverage [%] |
|-------|-------|--|---------------------|--------------|
| Tape | 1 | Aluminum Foil-Polyester Tape-Aluminum Foil | Duofoil® | 100 % |
| Braid | 2 | TC - Tinned Copper | | 95 % |

Inner Jacket Material

| Material | Nominal Diameter |
|--------------------------|------------------|
| PVC - Polyvinyl Chloride | 0.235 in |

Outer Jacket Material

| Material | Nominal Diameter |
|--------------------------|------------------|
| PVC - Polyvinyl Chloride | 0.631 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Conductor DCR | Conductor Resistance | Nominal Inner Shield DCR | Outer Conductor DCR |
|-----------------------|-----------------------|----------------------|--------------------------|---------------------|
| 10 Ohm/1000ft | 10 Ohm/1000ft | | 3.8 Ohm/1000ft | 3.8 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Shield |
|--------------------------------------|
| |

16.2 pF/ft

Inductance

Nominal Inductance

0.107 μ H/ft

Impedance

Nominal Characteristic Impedance

75 Ohm

Return Loss (RL)

| Frequency [MHz] | Minimum Return (RL) |
|-----------------|---------------------|
| 5-1600 MHz | 23 dB |
| 1600-4500 MHz | 21 dB |
| 4500-6000 MHz | 15 dB |

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz | 0.3 dB/100ft |
| 3.6 MHz | 0.6 dB/100ft |
| 10 MHz | 0.9 dB/100ft |
| 71.5 MHz | 2.1 dB/100ft |
| 135 MHz | 2.7 dB/100ft |
| 270 MHz | 3.8 dB/100ft |
| 360 MHz | 4.4 dB/100ft |
| 540 MHz | 5.5 dB/100ft |
| 720 MHz | 6.4 dB/100ft |
| 750 MHz | 6.5 dB/100ft |
| 1000 MHz | 7.6 dB/100ft |
| 1500 MHz | 9.4 dB/100ft |
| 2500 MHz | 12.4 dB/100ft |
| 3000 MHz | 13.8 dB/100ft |
| 4500 MHz | 18 dB/100ft |
| 6000 MHz | 21.1 dB/100ft |

Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|--|
| 1.22 ns/ft | 83 % |

Voltage

UL Voltage Rating

300 V RMS

Temperature Range

| | |
|-----------------------|----------------|
| Non-UL Temp Rating: | 75°C |
| UL Temp Rating: | 60°C |
| Operating Temp Range: | -35°C To +75°C |

Mechanical Characteristics

| | |
|----------------------------------|----------------|
| Bulk Cable Weight: | 171 lbs/1000ft |
| Max Recommended Pulling Tension: | 216 lbs |
| Min Bend Radius/Minor Axis: | 6.5 in |

Standards

| | |
|--------------------------|-----------|
| NEC/(UL) Specification: | CMR |
| CEC/C(UL) Specification: | CMG |
| RG Type: | 59/U Type |
| Series Type: | Series 59 |

Applicable Environmental and Other Programs

| | |
|--------------------------------|-----|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |

| | |
|---------------------------------------|-------------------------------|
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2004-01-01 |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|------------------------|------------------|
| Suitability - Burial: | No |
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | Yes - Black only |

Flammability, LSOH, Toxicity Testing

| | |
|--------------------|-----------------------|
| UL Flammability: | UL1666 Vertical Shaft |
| CSA Flammability: | FT4 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Part Number

Variants

| Item # | Color | UPC | Length | Footnote |
|---------------|--------------|--------------|----------|----------|
| 7794A B591000 | Black, Matte | 612825355366 | 1,000 ft | C |
| 7794A B59500 | Black, Matte | 612825355359 | 500 ft | C |

| | |
|-----------|------------------------|
| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|

History

| | |
|----------------------|--|
| Update and Revision: | Revision Number: 0.255 Revision Date: 08-22-2019 |
|----------------------|--|

© 2019 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 here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information 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. The 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.