

**Product: [7790A](#)**



VideoFLEX® Snake, Sub-miniature, #23-6 Coax, CMR

**Product Description**

Digital Coax Snake Cable, Riser-CMR, 6-Sub-miniature 23 AWG, solid bare copper conductors, foam HDPE core, Duofoil® +95% tinned copper braid, PVC jacket

**Technical Specifications**

**Product Overview**

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
23	Solid	BC - Bare Copper	0.023 in	6

Conductor Count:	6
------------------	---

**Insulation**

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.102 in

Insulation, Table Note:	Gas Injected
-------------------------	--------------

**Color Chart**

Number	Color
1	Red
2	Green
3	Blue
4	White
5	Yellow
6	Brown

**Inner Shield Material**

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Alum / Poly / Alum	Duofoil®	100 %
Braid	2	TC - Tinned Copper		95 %

**Inner Jacket Material**

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.159 in

**Outer Jacket Material**

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.597 in

**Electrical Characteristics**

**Conductor DCR**

Nominal Conductor DCR	Nominal Conductor DCR	Conductor Resistance	Nominal Inner Shield DCR	Outer Conductor DCR
-----------------------	-----------------------	----------------------	--------------------------	---------------------

20.1 Ohm/1000ft

20.1 Ohm/1000ft

7.6 Ohm/1000ft

7.6 Ohm/1000ft

**Capacitance****Nom. Capacitance Conductor to Shield**

16.5 pF/ft

**Inductance****Nominal Inductance**0.106  $\mu$ 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	0.4 dB/100ft
3.6 MHz	0.8 dB/100ft
10 MHz	1.2 dB/100ft
71.5 MHz	3.1 dB/100ft
135 MHz	3.8 dB/100ft
270 MHz	5.4 dB/100ft
360 MHz	6.2 dB/100ft
540 MHz	7.7 dB/100ft
720 MHz	9.1 dB/100ft
750 MHz	9.5 dB/100ft
1000 MHz	10.5 dB/100ft
1500 MHz	13 dB/100ft
2500 MHz	16.9 dB/100ft
3000 MHz	18.5 dB/100ft
4500 MHz	24.6 dB/100ft
6000 MHz	28.97 dB/100ft

**Delay**

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.24 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:	162 lbs/1000ft
Max Recommended Pulling Tension:	216 lbs
Min Bend Radius/Minor Axis:	6 in

**Standards**

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

## Applicable Environmental and Other Programs

Environmental Space:	Indoor/Outdoor
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
MII Order #39 (China RoHS):	Yes

## Suitability

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

## Flammability, LS0H, 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	Putup Type	Length	UPC
7790A B59500	Black, Matte	Reel	500 ft	612825355397
7790A B591000	Black, Matte	Reel	1,000 ft	612825355403

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

## History

Update and Revision:	Revision Number: 0.268 Revision Date: 04-28-2020
----------------------	--

© 2020 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 "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.

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.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Belden Wire & Cable:](#)

[7790A B591000](#) [7790A B59500](#)