

**Part Number: 7789A**



**VideoFLEX® Snake, Sub-miniature, #23-5 Coax, CMR**

**Product Description**

Digital Coax Snake Cable, Riser-CMR, 5-Sub-miniature 23 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 UHD TV, 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	5

Conductor Count:	5
------------------	---

**Insulation**

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.102 in

**Color Chart**

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

**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	0.159 in

**Outer Jacket Material**

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.539 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

Electrical Characteristics Notes: TDR Impedance: 75 +/- 3 Ohms

## 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:	136 lbs/1000ft
Max Recommended Pulling Tension:	180 lbs
Min Bend Radius/Minor Axis:	5.5 in

## Standards

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
CPR Euroclass:	Eca
RG Type:	Mini 59/U Type

Series Type:	Sub-miniature 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
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

## Plenum/Non-Plenum

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

## Part Number

### Variants

Item #	Color	UPC	Length	Footnote
7789A B591000	Black, Matte	612825357940	1,000 ft	C
7789A B59500	Black, Matte	612825355410	500 ft	C

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

## History

Update and Revision:	Revision Number: 0.261 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.