



Product: [4855ELW](#) 

12 GHz Coax, 4K UHD Precision Video Coax, RG-59 Mini, 75 Ohm, 21.5 AWG Solid

Product Description

12 GHz Coax, 4K UHD Precision Video Cable, RG-59 Mini, 75 Ohm, 21.5 AWG solid 0.65mm silver plated copper conductor, gas-injected foam HDPE insulation, Duofoil® bonded to the core + tinned copper braid shield (95% coverage), LSZH jacket.

Technical Specifications

Product Overview

Suitable Applications:	SMPTE 2082-1 12 Gb/s UHD TV, SMPTE 2081-1 6 Gb/s UHD TV, SMPTE 424M 3 Gb/s HD-SDI 1080P
------------------------	---

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
21.5	Solid	SC - Silvered Copper	0.65 mm	1

Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	2.90 mm

Table Notes:	Gas Injected
--------------	--------------

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	2	Tinned Copper (TC)		95%

Outer Jacket Material

Material	Nominal Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	4.60 mm

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Outer Conductor DCR
55 Ohm/km	13 Ohm/km

Capacitance

Nom. Capacitance Conductor to Shield
53 pF/m

Inductance

Nominal Inductance
0.35 µH/m

Impedance

Nominal Characteristic Impedance
75 Ohm

Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5 MHz - 1600 MHz	23 dB
1600 MHz - 4500 MHz	21 dB
4500 MHz - 12000 MHz	15 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz MHz	1.20 dB/100m
3.58 MHz MHz	2.3 dB/100m
5 MHz MHz	2.7 dB/100m
6 MHz MHz	1.0 dB/100m
7 MHz MHz	3.1 dB/100m
10 MHz MHz	3.7 dB/100m
12 MHz MHz	4.0 dB/100m
25 MHz MHz	5.5 dB/100m
55 MHz MHz	7.8 dB/100m
67.5 MHz MHz	8.5 dB/100m
71.5 MHz MHz	8.7 dB/100m
88.5 MHz MHz	9.5 dB/100m
100 MHz MHz	10.1 dB/100m
135 MHz	11.5 dB/100m
143 MHz	11.8 dB/100m
180 MHz	13.2 dB/100m
270 MHz	16.0 dB/100m
360 MHz	18.5 dB/100m
540 MHz	22.9 dB/100m
720 MHz	26.5 dB/100m
750 MHz	27.1 dB/100m
1000 MHz	31.4 dB/100m
1500 MHz	38.6 dB/100m
2000 MHz	44.8 dB/100m
2250 MHz	47.7 dB/100m
3000 MHz	55.5 dB/100m
4500 MHz	69.3 dB/100m
6000 MHz	81.7 dB/100m
12000 MHz	122.3 dB/100m

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
3.97 ns/m	84%

Voltage

Non-UL Voltage Rating
300 V RMS

Electrical Characteristics Notes:	Return Loss: Fixed bridge and termination
Other Electrical Characteristic 2:	Percent test

Temperature Range

UL Temp Rating:	75°C
Operating Temp Range:	-30°C To +75°C

Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	30 kg/km
Max. Pull Tension:	160 N
Min Bend Radius/Minor Axis:	46mm

Standards

CPR Euroclass:	Cca-s1a,d1,a1
----------------	---------------

RG Type:	Mini 59
----------	---------

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Cca
EU Directive 2000/53/EC (ELV):	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

Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

Plenum/Non-Plenum

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

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
4855ELW G753280	Aqua	Reel	1000 m	612825475958
4855ELW G751000	Aqua	Reel	305 m	612825476009
4855ELW G751640	Aqua	Reel	500 m	612825475903
4855ELW 0103280	Black	Reel	1000 m	612825475996
4855ELW 0101000	Black	Reel	305 m	612825475880
4855ELW 0101640	Black	Reel	500 m	612825475941
4855ELW 0063280	Blue	Reel	1000 m	612825475972
4855ELW 0061000	Blue	Reel	305 m	612825476016
4855ELW 0061640	Blue	Reel	500 m	612825475927
4855ELW N3U3280	Green	Reel	1000 m	612825475965
4855ELW N3U1000	Green	Reel	305 m	612825475859
4855ELW N3U1640	Green	Reel	500 m	612825476023
4855ELW 0071000	Purple	Reel	305 m	612825475873
4855ELW 0071640	Purple	Reel	500 m	612825475934

Product Notes

Notes:	Print legend includes sequential footage marks.
--------	---

History

Update and Revision:	Revision Number: 0.71-tvr Revision Date: 11-03-2020
----------------------	---

© 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 "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.