



**Product:** [1855EN3](#)

75 Ohm SDI 3 Coax, Mini RG-59, 22 AWG Solid BC, Foil + 90% TC Braid, LSZH Jkt

## Product Description

75 Ohm SDI 3 Coax, Mini RG-59, 22 AWG Solid Bare Copper Conductor, PE Insulation, Foil + 90% Tinned Copper Braid Shield, LSZH Jacket.

## Technical Specifications

### Product Overview

Suitable Applications:	Digital Video, 6 Gb/s UHD TV, HD-SDI 1080p; Cable is UV-resistant and suitable for indoor and outdoor use
------------------------	---

### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
22	Solid	BC - Bare Copper	0.65 mm	0.02 mm	3

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

#### Insulation

Type	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	PE - Polyethylene (Foam)	2.9 mm	0.15 mm

#### Color Chart

Number	Color
1	Red
2	Green
3	Blue

#### Inner Shield

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

#### Inner Jacket

Material	Nominal Diameter	Diameter +/- Tolerance
LSZH - Low Smoke Zero Halogen (Flame Retardant)	4.45 mm	0.2 mm

Table Notes:	Matte Finish
--------------	--------------

#### Outer Jacket

Material	Nominal Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	12.1 mm

## Construction and Dimensions

### Cabling

Description	Filler
3 coax bundled around a filler covered with nonwoven foil	Filler (1x)

## Electrical Characteristics

**Conductor DCR**

Max. Conductor DCR	Max. Shield DCR
55 Ohm/km	17 Ohm/km

**Capacitance**

Nom. Capacitance Conductor to Shield
53 pF/m

**Inductance**

Nominal Inductance
0.35 $\mu$ H/m

**Impedance**

Nominal Characteristic Impedance	Nominal Characteristic Tolerance
75 Ohm	3 Ohm

**High Frequency (Nominal/Typical)**

Frequency [MHz]	Nom. Insertion Loss
1 MHz	1.7 dB/100m
3.6 MHz	2.5 dB/100m
5 MHz	2.8 dB/100m
6 MHz	3 dB/100m
7 MHz	3.2 dB/100m
10 MHz	3.7 dB/100m
12 MHz	4 dB/100m
25 MHz	5.4 dB/100m
67.5 MHz	8.3 dB/100m
71.5 MHz	8.6 dB/100m
88.5 MHz	9.5 dB/100m
100 MHz	10 dB/100m
135 MHz	11.5 dB/100m
143 MHz	11.9 dB/100m
180 MHz	13.2 dB/100m
270 MHz	16.1 dB/100m
360 MHz	18.6 dB/100m
540 MHz	22.8 dB/100m
720 MHz	26.4 dB/100m
750 MHz	26.9 dB/100m
1000 MHz	31.3 dB/100m
1500 MHz	38.7 dB/100m
2000 MHz	45 dB/100m
2250 MHz	48 dB/100m
2500 MHz	50.8 dB/100m
3000 MHz	56.1 dB/100m
4000 MHz	65.7 dB/100m
4500 MHz	70.2 dB/100m

**Delay**

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
400 ns/ft	84%

**High Frequency**

Frequency [MHz]	Min. RL (Return Loss) [dB]
5 - 1600 MHz	23 dB
1600 - 4500 MHz	21 dB

**Screening**

Frequency [MHz]	Min. Screening Attenuation After Flexing
30 - 1000 MHz	85 dB
1000 - 2000 MHz	85 dB
2000 - 3000 MHz	85 dB
3000 - 4500 MHz	80 dB

Screening Class:	B
------------------	---

#### Transfer Impedance

Frequency [MHz]	Transfer Impedance
5-30 MHz	Max. 15 mOhm/m

#### Temperature Range

Installation Temperature Range:	-5°C To +50°C
Storage Temperature Range:	-30°C To +70°C
Operating Temperature Range:	-30°C To +70°C

#### Mechanical Characteristics

Min Bend Radius (W/o Pulling Strength):	120 mm
Crush Resistance:	Max. 1% (load of 700N) N

#### Standards

CPR Euroclass:	Eca
RG Type:	Mini 59

#### Applicable Environmental and Other Programs

Environmental Space:	Indoor
----------------------	--------

#### Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
IEC 60754-1 - Halogen Amount:	Zero

#### Related Part Numbers

#### Variants

Item #	Color	Put-Up Type	Length	EAN
1855EN3.00250	Black	Reel	250 m	8719605128478
1855EN3.00500	Black	Reel	500 m	8719605124722

#### History

Update and Revision:	Revision Number: 0.210 Revision Date: 02-03-2025
----------------------	--

© 2025 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.