



**Product:** [70081CH](#) 

70081CH - 75 Ohm SDI Coax, RG-59, 20 AWG Solid BC, Foil + 80% TC Braid, LSZH-C Jkt

## Product Description

75 Ohm SDI Coax, RG-59, 20 AWG Solid Bare Copper Conductor, PE Insulation, Foil + 80% Tinned Copper Braid Shield, LSZH Jacket, Dca. IEC 60332-3-24.

## Technical Specifications

### Product Overview

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

### Construction Details

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

#### Conductor

Number of Element	Size	Stranding	Nom. Diameter	Material
1	20 AWG	Solid	0.81 mm	BC - Bare Copper

#### Insulation

Element	Material	Nom. Insulation Diameter
Insulated Conductor	PE - Polyethylene (Foam)	3.68 mm (0.145 in)

#### Outer Shield

Layer	Outer Shield Type	Material	Coverage
1	Tape	Tri-Laminate (Alum+Poly+Alum)	100%
2	Braid	Tinned Copper (TC)	80%

#### Outer Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	5.92 mm

### Electrical Characteristics

#### Return Loss (RL)

Frequency	Min. Return Loss
5 - 1600 MHz	23 dB
1600 - 4500 MHz	21 dB

#### Attenuation

Frequency	Nom. Attenuation
1 MHz	1 dB/100m
3.6 MHz	2 dB/100m
10 MHz	3 dB/100m
71.5 MHz	6.9 dB/100m
135 MHz	8.9 dB/100m
270 MHz	12.5 dB/100m
360 MHz	14.4 dB/100m
540 MHz	18.1 dB/100m
720 MHz	21 dB/100m
750 MHz	21.3 dB/100m

1000 MHz	24.9 dB/100m
1500 MHz	30.5 dB/100m
2250 MHz	38 dB/100m
3000 MHz	44 dB/100m
4500 MHz	53.8 dB/100m

Table Notes: Max. attenuation 10% higher

#### Electricals

Max. Conductor DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
32 Ohm/km (9.8 Ohm/1000ft)	53 pF/m (16 pF/ft)	75 Ohm	83%

#### Mechanical Characteristics

##### Temperature

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

##### Bend Radius

Stationary Min.
60 mm (2.4 in)

Max. Pull Tension: 200 N (45 lbf)

#### Standards and Compliance

Environmental Suitability:	Indoor/Outdoor - Euroclass Dca
Flammability / Reaction to Fire:	IEC 60332-1-2 and IEC 60332-3-24
CPR Compliance:	CPR Euroclass: Dca-s1,d1,a1
ISO/IEC Compliance:	IEC 61034-2 - Smoke Density Min Transmittance = 60%
CENELEC Compliance:	EN 50117-1 and EN 50290-2-20
European Halogen Free Standards:	IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 2.5 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3
European Directive Compliance:	EU CE Mark
Other Standard Compliance(s):	SDTV/HDTV

#### History

Update and Revision: Revision Number: 0.217 Revision Date: 04-08-2022

#### Part Numbers

##### Variants

Item #	Color	Putup Type	Length	EAN
70081CH.00100	Green	Reel	100 m	8719605011107
70081CH.00500	Green	Reel	500 m	8719605011114
70081CH.01305	Purple	Reel	305 m	8719605011121
70081CH.03100	Yellow	Reel	100 m	8719605011138
70081CH.03500	Yellow	Reel	500 m	8719605011145

© 2022 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.