



**Product:** [4505ANH](#) 

12 GHz Coax, 4K UHD Precision Video Coax, RG-59, 75 Ohm, 20 AWG Solid, CMG-LS

## Product Description

12 GHz Coax, 4K UHD Precision Video Cable, RG-59, 75 Ohm, 20 AWG solid .032" silver plated copper conductor, gas-injected foam HDPE insulation, Duofoil® bonded to core + tinned copper braid shield (95% coverage), LSZH jacket.

## Technical Specifications

### Product Overview

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

### Construction Details

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

#### Conductor

Size	Stranding	Nom. Diameter	Material
20	Solid	0.032 in	SC - Silvered Copper

#### Insulation

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

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

#### Outer Shield

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

#### Outer Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.236 in

## Electrical Characteristics

#### Return Loss

Frequency	Min. Return Loss
5 MHz - 1600 MHz	23 dB
1600 MHz - 4500 MHz	21 dB
4500 MHz - 12000 MHz	15 dB

#### Attenuation

Frequency	Nom. Attenuation
1 MHz	0.30 dB/100ft
3.58 MHz	0.60 dB/100ft
5 MHz	0.63 dB/100ft
6 MHz	0.69 dB/100ft
7 MHz	0.74 dB/100ft
10 MHz	0.90 dB/100ft
12 MHz	0.91 dB/100ft

25 MHz	1.30 dB/100ft
55 MHz	1.98 dB/100ft
67.5 MHz	2.05 dB/100ft
71.5 MHz	2.1 dB/100ft
88.5 MHz	2.2 dB/100ft
100 MHz	2.3 dB/100ft
135 MHz	2.7 dB/100ft
143 MHz	2.8 dB/100ft
180 MHz	3.1 dB/100ft
270 MHz	3.8 dB/100ft
360 MHz	4.4 dB/100ft
540 MHz	5.5 dB/100ft
720 MHz	6.4 dB/100ft
750 MHz	6.5 dB/100ft
1000 MHz	7.6 dB/100ft
1500 MHz	9.3 dB/100ft
2000 MHz	10.8 dB/100ft
2250 MHz	11.5 dB/100ft
3000 MHz	13.4 dB/100ft
4500 MHz	16.7 dB/100ft
6000 MHz	19.7 dB/100ft
12000 MHz	28.7 dB/100ft

#### Electricals

Nom. Conductor DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
10.2 Ohm/1000ft (33.5 Ohm/km)	16.1 pF/ft (52.8 pF/m)	75 Ohm	83%

#### Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes: Return Loss: Fixed bridge and termination

#### Mechanical Characteristics

#### Temperature

UL Temperature	Operating
75°C	-30°C To +75°C

Max. Pull Tension: 52 lbs (24 kg)

Bulk Cable Weight: 31 lbs/1000ft (46 kg/km)

#### Standards and Compliance

Environmental Suitability:	Indoor/Outdoor - Euroclass Dca, Indoor, UV Resistance, Aerial - Black only, When supported by messenger wire
Flammability / Reaction to Fire:	FT4, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Dca-s1,d1,a1; CPR UKCA Class: Dca-s1,d1,a1
NEC / UL Compliance:	CMG-LS
CEC / C(UL) Compliance:	CMG
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Non-Plenum Number:	4505R

#### Product Notes

Notes: Print legend includes sequential footage marks.

#### History

Update and Revision: Revision Number: 0.167 Revision Date: 09-07-2025

#### Part Numbers

#### Variants

Item #	Color	Putup Type	Length	UPC
--------	-------	------------	--------	-----

4505ANH G751000	Aqua	Reel	1,000 ft	612825437307
4505ANH G751640	Aqua	Reel	1,640 ft	612825437352
4505ANH G753280	Aqua	Reel	3,280 ft	612825437413
4505ANH 0101000	Black	Reel	1,000 ft	612825437345
4505ANH 0101640	Black	Reel	1,640 ft	612825437406
4505ANH 0103280	Black	Reel	3,280 ft	612825437451
4505ANH 0061000	Blue, Light	Reel	1,000 ft	612825437321
4505ANH 0061640	Blue, Light	Reel	1,640 ft	612825437383
4505ANH 0063280	Blue, Light	Reel	3,280 ft	612825437437
4505ANH N3U1000	Mil Green	Reel	1,000 ft	612825437314
4505ANH N3U1640	Mil Green	Reel	1,640 ft	612825437376
4505ANH N3U3280	Mil Green	Reel	3,280 ft	612825437420
4505ANH 0071000	Purple	Reel	1,000 ft	612825437338
4505ANH 0071640	Purple	Reel	1,640 ft	612825437390
4505ANH 0073280	Purple	Reel	3,280 ft	612825437444

© 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.