



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

4K UHD Coax for 12G-SDI, 75 Ohm, RG-59, 20 AWG Solid SC, Foil + 95% TC Braid, PVC Jkt, CMR

## Product Description

75 Ohm SDI Coax, RG-59, 20 AWG Solid Silvered Copper Conductor, PE Insulation, Foil + 95% Tinned Copper Braid Shield, PVC Jacket, CMR

## Technical Specifications

### Product Overview

Suitable Applications:	Ultra-High Definition Digital Video, 4K Single-link 12 Gb/s UHDTV, 4K D-Cinema, 8K Quad-link UHDTV, HD-SDI 1080p
------------------------	--

### Construction Details

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

#### Conductor

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

#### Insulation

Material	Nom. Insulation Diameter	Color Code	Notes
PE - Polyethylene (Foam)	0.145 in (3.68 mm)	White	Gas Injected

#### Outer Shield

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

#### Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.233 in (5.92 mm)

Overall Cable Diameter (Nominal):	0.233 in (5.92 mm)
-----------------------------------	--------------------

### Electrical Characteristics

#### Return Loss

Frequency	Min. Return Loss
5 - 1600 MHz	23 dB
1600 - 4500 MHz	21 dB
4500 - 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. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
10.1 Ohm/1000ft	3.4 Ohm/1000ft (11 Ohm/km)	16.1 pF/ft (52.8 pF/m)	75 Ohm	83%

Voltage

UL Voltage Rating
300 V (CMR, CMG)

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C	-20°C to +75°C

Bend Radius

Installation Min.
2.3 in (58 mm)

Max. Pull Tension:	52 lbs (24 kg)
Bulk Cable Weight:	30 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor - Riser, Indoor, Aerial - Black only, When supported by messenger wire
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL1666 Vertical Shaft
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	CMR
CEC / C(UL) Compliance:	CMG
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, 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)
Plenum Number:	4505P

History

Update and Revision:	Revision Number: 0.445 Revision Date: 09-07-2025
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
4505R 0101000	Black	Reel	1,000 ft	612825396895

4505R 0105000	Black	Reel	5,000 ft	612825396901
4505R 01010000	Black	Reel	10,000 ft	612825436157
4505R 0061000	Blue, Light	Reel	1,000 ft	612825396871
4505R 0065000	Blue, Light	Reel	5,000 ft	612825436621
4505R 00610000	Blue, Light	Reel	10,000 ft	612825436546
4505R N3U1000	Mil Green	Reel	1,000 ft	612825396840
4505R 0031000	Orange	Reel	1,000 ft	612825396864
4505R 0071000	Purple	Reel	1,000 ft	612825396888
4505R 0021000	Red	Reel	1,000 ft	612825396857
4505R 0025000	Red	Reel	5,000 ft	612825436614
4505R 00210000	Red	Reel	10,000 ft	612825436539
4505R 0075000	Violet	Reel	5,000 ft	612825436638
4505R 00710000	Violet	Reel	10,000 ft	612825436553
4505R 0091000	White	Reel	1,000 ft	612825413257

© 2026 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.