



Product: [4855R](#)

4K UHD Coax for 12G-SDI, 75 Ohm, Mini RG-59, 23 AWG Solid SC, Foil + 95% TC Braid, PVC Jkt, CMR

Product Description

12 GHz, 4K UHD Precision Video Cable, Mini RG-59, 75 Ohm 23 AWG solid 0.023" silver-plated copper conductor, gas-injected foamed high-density polyethylene insulation, Duofoil® bonded to the core + tinned copper braid shield (95% coverage), PVC Jacket

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
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:	Mini 59
RG Type:	Mini 59

Conductor

Size	Stranding	Nom. Diameter	Material
23 AWG	Solid	0.023 in	SC - Silvered Copper

Conductor

Size	Stranding	Nom. Diameter	Material
23 AWG	Solid	0.023 in	SC - Silvered Copper

Insulation

Material	Nom. Insulation Diameter	Color Code	Notes
PE - Polyethylene (Foam)	0.102 in (2.59 mm)	White	Gas Injected

Insulation

Material	Nom. Insulation Diameter	Color Code	Notes
PE - Polyethylene (Foam)	0.102 in (2.59 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 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	0.159 in (4.04 mm)

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.159 in (4.04 mm)

Overall Cable Diameter (Nominal):	0.159 in (4.04 mm)
Overall Cable Diameter (Nominal):	0.159 in (4.04 mm)

Electrical Characteristics

Return Loss (RL)

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

Return Loss (RL)

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	0.39 dB/100ft
3.58 MHz	0.78 dB/100ft
5 MHz	0.92 dB/100ft
6 MHz	1 dB/100ft
7 MHz	1.08 dB/100ft
10 MHz	1.2 dB/100ft
12 MHz	1.3 dB/100ft
25 MHz	1.8 dB/100ft
55 MHz	2.6 dB/100ft
67.5 MHz	2.83 dB/100ft
71.5 MHz	2.93 dB/100ft
88.5 MHz	3.22 dB/100ft
100 MHz	3.39 dB/100ft
135 MHz	3.84 dB/100ft
143 MHz	4.00 dB/100ft
180 MHz	4.41 dB/100ft
270 MHz	5.44 dB/100ft
360 MHz	6.34 dB/100ft
540 MHz	7.85 dB/100ft
720 MHz	9.09 dB/100ft
750 MHz	9.28 dB/100ft
1000 MHz	10.8 dB/100ft
1500 MHz	13.2 dB/100ft
2000 MHz	15.3 dB/100ft
2250 MHz	16.3 dB/100ft
3000 MHz	19.0 dB/100ft
4500 MHz	23.6 dB/100ft
6000 MHz	27.7 dB/100ft
12000 MHz	41.2 dB/100ft

Attenuation

Frequency	Nom. Attenuation
1 MHz	0.39 dB/100ft
3.58 MHz	0.78 dB/100ft
5 MHz	0.92 dB/100ft
6 MHz	1 dB/100ft
7 MHz	1.08 dB/100ft
10 MHz	1.2 dB/100ft
12 MHz	1.3 dB/100ft
25 MHz	1.8 dB/100ft
55 MHz	2.6 dB/100ft
67.5 MHz	2.83 dB/100ft
71.5 MHz	2.93 dB/100ft

88.5 MHz	3.22 dB/100ft
100 MHz	3.39 dB/100ft
135 MHz	3.84 dB/100ft
143 MHz	4.00 dB/100ft
180 MHz	4.41 dB/100ft
270 MHz	5.44 dB/100ft
360 MHz	6.34 dB/100ft
540 MHz	7.85 dB/100ft
720 MHz	9.09 dB/100ft
750 MHz	9.28 dB/100ft
1000 MHz	10.8 dB/100ft
1500 MHz	13.2 dB/100ft
2000 MHz	15.3 dB/100ft
2250 MHz	16.3 dB/100ft
3000 MHz	19.0 dB/100ft
4500 MHz	23.6 dB/100ft
6000 MHz	27.7 dB/100ft
12000 MHz	41.2 dB/100ft

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
19.7 Ohm/1000ft	3.8 Ohm/1000ft (12 Ohm/km)	16.3 pF/ft (53.5 pF/m)	75 Ohm	82%

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
19.7 Ohm/1000ft	3.8 Ohm/1000ft (12 Ohm/km)	16.3 pF/ft (53.5 pF/m)	75 Ohm	82%

Voltage

UL Voltage Rating
300 V RMS (CMR, CMG)

Voltage

UL Voltage Rating
300 V RMS (CMR, CMG)

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C	-30°C to +75°C

Temperature

UL Temperature	Operating
60°C	-30°C to +75°C

Bend Radius

Installation Min.
1.6 in (41 mm)

Bend Radius

Installation Min.
1.6 in (41 mm)

Max. Pull Tension:	33 lbs (15 kg)
Max. Pull Tension:	33 lbs (15 kg)
Bulk Cable Weight:	17 lbs/1000ft
Bulk Cable Weight:	17 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor - Riser, Indoor, Aerial - Black only, When supported by messenger wire
Environmental Suitability:	Indoor - Riser, Indoor, Aerial - Black only, When supported by messenger wire
Sustainability:	CA Prop 65
Sustainability:	CA Prop 65

Flammability / Reaction to Fire:	UL1666 Vertical Shaft
Flammability / Reaction to Fire:	UL1666 Vertical Shaft
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	CMR
NEC / UL Compliance:	CMR
CEC / C(UL) Compliance:	CMG
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)
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
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Plenum Number:	4855P
Plenum Number:	4855P

History

Update and Revision:	Revision Number: 0.388 Revision Date: 04-26-2023
Update and Revision:	Revision Number: 0.388 Revision Date: 04-26-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
4855R 0101000	Black	Reel	1,000 ft	612825390572	C Z
4855R 0105000	Black	Reel	5,000 ft	612825390589	
4855R 01010000	Black	Reel	10,000 ft	612825436362	
4855R 0061000	Blue, Light	Reel	1,000 ft	612825395362	
4855R 0065000	Blue, Light	Reel	5,000 ft	612825436591	
4855R 00610000	Blue, Light	Reel	10,000 ft	612825436218	
4855R N3U5000	Green, Mil	Reel	5,000 ft	612825436652	
4855R N3U10000	Green, Mil	Reel	10,000 ft	612825436447	
4855R N3U1000	Mil Green	Reel	1,000 ft	612825395355	
4855R 0031000	Orange	Reel	1,000 ft	612825395249	
4855R 0035000	Orange	Reel	5,000 ft	612825436560	
4855R 00310000	Orange	Reel	10,000 ft	612825436195	
4855R 0071000	Purple	Reel	1,000 ft	612825395263	
4855R 0021000	Red	Reel	1,000 ft	612825395232	
4855R 0025000	Red	Reel	5,000 ft	612825436522	
4855R 00210000	Red	Reel	10,000 ft	612825436164	
4855R 0075000	Violet	Reel	5,000 ft	612825436607	
4855R 00710000	Violet	Reel	10,000 ft	612825436225	
4855R 0095000	White	Reel	5,000 ft	612825436645	
4855R 00910000	White	Reel	10,000 ft	612825436461	
4855R 0041000	Yellow	Reel	1,000 ft	612825395256	
4855R 0045000	Yellow	Reel	5,000 ft	612825436584	
4855R 00410000	Yellow	Reel	10,000 ft	612825436201	

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
4855R 0101000	Black	Reel	1,000 ft	612825390572	C Z
4855R 0105000	Black	Reel	5,000 ft	612825390589	
4855R 01010000	Black	Reel	10,000 ft	612825436362	
4855R 0061000	Blue, Light	Reel	1,000 ft	612825395362	
4855R 0065000	Blue, Light	Reel	5,000 ft	612825436591	
4855R 00610000	Blue, Light	Reel	10,000 ft	612825436218	
4855R N3U5000	Green, Mil	Reel	5,000 ft	612825436652	
4855R N3U10000	Green, Mil	Reel	10,000 ft	612825436447	
4855R N3U1000	Mil Green	Reel	1,000 ft	612825395355	

4855R 0031000	Orange	Reel	1,000 ft	612825395249	
4855R 0035000	Orange	Reel	5,000 ft	612825436560	
4855R 00310000	Orange	Reel	10,000 ft	612825436195	
4855R 0071000	Purple	Reel	1,000 ft	612825395263	
4855R 0021000	Red	Reel	1,000 ft	612825395232	
4855R 0025000	Red	Reel	5,000 ft	612825436522	
4855R 00210000	Red	Reel	10,000 ft	612825436164	
4855R 0075000	Violet	Reel	5,000 ft	612825436607	
4855R 00710000	Violet	Reel	10,000 ft	612825436225	
4855R 0095000	White	Reel	5,000 ft	612825436645	
4855R 00910000	White	Reel	10,000 ft	612825436461	
4855R 0041000	Yellow	Reel	1,000 ft	612825395256	
4855R 0045000	Yellow	Reel	5,000 ft	612825436584	
4855R 00410000	Yellow	Reel	10,000 ft	612825436201	

© 2024 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Belden Wire & Cable:](#)

[4855R 0101000](#)