Belden

Product: 4694F

12 GHz Coax, 4K UHD Precision Flexible Video Coax, RG-6/U Type, 75 Ohm, 18 AWG solid SC, CM

Product Description

12 GHz Coax, 4K UHD Precision Flexible Video Cable, RG-6/U Type, 75 Ohm, 18 AWG solid .040" silver plated copper conductor, gas-injected foam HDPE insulation, dual tinned copper braid shield (95% coverage each), CM, PVC 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:	6

Conductor

No. of Elements	Size	Stranding	Nom. Diameter	Material
1	18 AWG	Solid	0.040 in	SC - Silvered Copper

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene (Foam)	0.180 in (4.57 mm)	White

Insulation Table Notes:	Gas Injected

Outer Shield

Layer	Outer Shield Type	Material	Coverage
1	Braid	Tinned Copper (TC)	95%
2	Braid	Tinned Copper (TC)	95%

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.276 in (7.01 mm)

Overall Cable Diameter (Nominal):	0.276 in (7.01 mm)

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	0.19 dB/100ft
3.58 MHz	0.37 dB/100ft
5 MHz	0.45 dB/100ft
6 MHz	0.49 dB/100ft

7 MHz	0.53 dB/100ft
10 MHz	0.63 dB/100ft
12 MHz	0.69 dB/100ft
25 MHz	1.01 dB/100ft
55 MHz	1.52 dB/100ft
67.5 MHz	1.70 dB/100ft
71.5 MHz	1.75 dB/100ft
88.5 MHz	1.96 dB/100ft
100 MHz	2.09 dB/100ft
135 MHz	2.45 dB/100ft
143 MHz	2.52 dB/100ft
180 MHz	2.86 dB/100ft
270 MHz	3.56 dB/100ft
360 MHz	4.17 dB/100ft
540 MHz	5.25 dB/100ft
720 MHz	6.18 dB/100ft
750 MHz	6.32 dB/100ft
1000 MHz	7.44 dB/100ft
1500 MHz	9.39 dB/100ft
2000 MHz	11.09 dB/100ft
2250 MHz	11.87 dB/100ft
3000 MHz	14.09 dB/100ft
4500 MHz	18.04 dB/100ft
6000 MHz	21.71 dB/100ft
12000 MHz	40.53 dB/100ft

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
6.4 Ohm/1000ft (21 Ohm/km)	1.5 Ohm/1000ft (4.9 Ohm/km)	15.9 pF/ft (52.2 pF/m)	75 Ohm	85%

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

Bend Radius

Stationary Min.	Installation Min.
2.75 in (69.9 mm)	2.75 in (69.9 mm)

Max. Pull Tension:	80 lbs (36 kg)
Bulk Cable Weight:	48 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Indoor
Flammability / Reaction to Fire:	UL1685 UL Loading
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 800, CM
CEC / C(UL) Compliance:	CM
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	Print legend includes sequential footage marks.// (1) #Elements@Conductor1: 1 (Previously Blank) (2) Size@Conductor1: 18 AWG (Previously Blank) (3) Nominal Diameter: 0.0427 in (Previously 0.040 in) (4) Color@Color Chart 01: White (Previously Blank) (5) Layer@OuterShield1 1: 1(Previously Blank) (6) Coverage@OuterShield1 2: 94% (Previously 95%) (7) Layer@OuterShield1 2: 1(Previously Blank) (8) Coverage@OuterShield1 2: 93% (Previously 95%) (9) Cable Diameter (Nominal): 0.276 in (Previously Blank) (10) Bulk Cable Weight: 48 lbs/1000ft (Previously 49 lbs/1000ft)

History

Update and Revision:	Revision Number: 0.185 Revision Date: 02-20-2026

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
4694F B591000	Black, Matte	Reel	1,000 ft	612825424895
4694F B595000	Black, Matte	Reel	5,000 ft	612825424970
4694F G7X1000	Blue, Matte	Reel	1,000 ft	612825424925
4694F G7W1000	Green, Matte	Reel	1,000 ft	612825424918
4694F G8L1000	Orange, Matte	Reel	1,000 ft	612825424949
4694F G7V1000	Red, Matte	Reel	1,000 ft	612825424901
4694F Z4B1000	Violet	Reel	1,000 ft	612825424963
4694F G7Y1000	White, Matte	Reel	1,000 ft	612825424932
4694F G8M1000	Yellow, Matte	Reel	1,000 ft	612825424956

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