

4694P Coax - 4K Ultra-High-Definition Coax Cable for 12G-SDI



For more Information
please call

1-800-Belden1



General Description:

12 GHz, 4K UHD Precision Video Coax, Plenum-CMP, 75 Ohm RG6 18 AWG solid silver plated copper conductor, foam FEP core, Duofoil® bonded to core+95% tinned copper braid, Flamarrest® jacket

Usage (Overall)

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

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	18	Solid	SPC - Silver Plated Copper	1.016

Total Number of Conductors: 1

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (mm)
Teflon®	FFEP - Foam Fluorinated Ethylene Propylene	4.318

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)	Description
1	Bonded Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100.000	Bonded to Insulation
2		Braid	TC - Tinned Copper	95.000	

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 5.817 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +75°C

Bulk Cable Weight: 61.016 Kg/Km

Max. Recommended Pulling Tension: 306.926 N

Min. Bend Radius/Minor Axis: 58.420 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

EU Directive 2011/65/EU (ROHS II): Yes

EU CE Mark: No

4694P Coax - 4K Ultra-High-Definition Coax Cable for 12G-SDI

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	08/16/2017
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
RG Type:	6/U

Flame Test

UL Flame Test:	NFPA 262
CSA Flame Test:	FT6

Suitability

Suitability - Indoor:	Yes
-----------------------	-----

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	4694R

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (µH/m)
0.337943

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
52.8241

Nominal Velocity of Propagation:

VP (%)
83.000

Nominal Delay:

Delay (ns/m)
4.003

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
20.670

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
9.515

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1.000	0.755
3.580	1.509
5.000	1.772
6.000	1.903
7.000	2.067
10.000	2.395
12.000	2.625
25.000	3.642
55.000	5.151
67.500	5.676

METRIC MEASUREMENT VERSION

4694P Coax - 4K Ultra-High-Definition Coax Cable for 12G-SDI

71.500	5.807
88.500	6.300
100.000	6.792
135.000	7.842
143.000	8.071
180.000	9.056
270.000	11.221
360.000	13.190
540.000	16.667
720.000	19.719
750.000	20.178
1000.000	23.918
1500.000	30.415
2000.000	36.157
2250.000	38.847
3000.000	46.328
4500.000	59.681
6000.000	70.640
12000.000	108.339

Max. Operating Voltage - UL:

Voltage
300 V RMS

Other Electrical Characteristic 1:

Return Loss: Fixed bridge and termination

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5.000	1600.000	23.000
1600.000	4500.000	21.000
4500.000	12000.000	15.000

Sweep Test

Sweep Testing:

Sweep tested 5 MHz to 12 GHz.

Notes (Overall)

Notes: Teflon® is a registered trademark of Chemours and Co. used under license by Belden, Inc. Print legend includes sequential footage marks. Print legend includes sequential footage marks.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
4694P N3U1000	1,000 FT	38.000 LB	GREEN, MIL	C	#18 FFEP SH FLRST
4694P 0021000	1,000 FT	38.000 LB	RED	C	#18 FFEP SH FLRST
4694P 0031000	1,000 FT	38.000 LB	ORANGE	C	#18 FFEP SH FLRST
4694P 0061000	1,000 FT	38.000 LB	BLUE, LIGHT	C	#18 FFEP SH FLRST
4694P 0071000	1,000 FT	38.000 LB	VIOLET	C	#18 FFEP SH FLRST
4694P 0101000	1,000 FT	38.000 LB	BLACK	C	#18 FFEP SH FLRST
4694P 0105000	5,000 FT	190.000 LB	BLACK	C	#18 FFEP SH FLRST

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 0 Revision Date: 08-16-2017

© 2020 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 herein 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 "AS IS" 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.

4694P Coax - 4K Ultra-High-Definition Coax Cable for 12G-SDI

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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.