

## 1694WB Coax - Flooded RG-6/U Type Precision Low-Loss Serial Digital Video Coax



For more Information  
please call

1-800-Belden1



### General Description:

18 AWG solid .040" bare copper conductor, gas-injected foamed high-density polyethylene insulation, Duofoil® plus tinned copper braid shield (95% coverage), flooding compound, PE jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	18	Solid	BC - Bare Copper	1.016

Total Number of Conductors: 1

#### Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foamed High-Density Polyethylene	4.572

#### Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

Outer Shield Flooding Grease: Yes

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

#### Overall Cable

Overall Nominal Diameter: 6.960 mm

### Mechanical Characteristics (Overall)

Operating Temperature Range: -55°C To +80°C

Bulk Cable Weight: 53.575 Kg/Km

Max. Recommended Pulling Tension: 306.926 N

Min. Bend Radius/Minor Axis: 69.850 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

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

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2004

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

Series Type: Series 6

#### Suitability

Suitability - Outdoor: Yes

## METRIC MEASUREMENT VERSION

### 1694WB Coax - Flooded RG-6/U Type Precision Low-Loss Serial Digital Video Coax

Suitability - Burial:	Yes
Sunlight Resistance:	Yes

#### Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

#### Surface Printing (Overall)

Surface Printing:	VIDEO BRILLIANCE(R) BY BELDEN - 1694WB FLOODED HD-SDI PRECISION VIDEO CABLE 4.5 GHZ (DATE CODE) ROHS (2 FT, 7 DIGIT SEQUENTIAL NUMBER) FEET
-------------------	---

#### Electrical Characteristics (Overall)

##### Nom. Characteristic Impedance:

Impedance (Ohm)
75

##### Nom. Inductance:

Inductance (µH/m)
0.347786

##### Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
53.1522

##### Nominal Velocity of Propagation:

VP (%)
82

##### Nominal Delay:

Delay (ns/m)
4.06844

##### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
20.9984

##### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
9.1868

##### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1.000	0.787
3.580	1.444
5.000	1.706
6.000	1.870
7.000	2.001
10.000	2.330
12.000	2.559
25.000	3.543
67.500	5.414
71.500	5.545
88.500	6.103
100.000	6.398
135.000	7.349
143.000	7.546
180.000	8.432
270.000	10.401
360.000	12.107
540.000	14.765
720.000	17.389
750.000	17.717
1000.000	20.670
1500.000	25.592
2000.000	30.185
2250.000	32.154
3000.000	37.732
4500.000	47.575

##### Other Electrical Characteristic 1:

Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge and termination. 75 +/- 1.5 Ohms

##### Other Electrical Characteristic 2:

Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, using a 75 Ohm fixed bridge and termination.

## METRIC MEASUREMENT VERSION

### 1694WB Coax - Flooded RG-6/U Type Precision Low-Loss Serial Digital Video Coax

#### Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5	1600	23
1600	4500	21

#### Sweep Test

Sweep Testing: 100&#37; Sweep tested 5 MHz to 4.5 GHz.

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1694WB 0061000	1,000 FT	40.000 LB	BLUE, LIGHT		#18 PO/GIFHDPE SH PO
1694WB 0062500	2,500 FT	97.500 LB	BLUE, LIGHT	C	#18 PO/GIFHDPE SH PO
1694WB 0065000	5,000 FT	190.000 LB	BLUE, LIGHT	C	#18 PO/GIFHDPE SH PO
1694WB 0101000	1,000 FT	40.000 LB	BLACK		#18 PO/GIFHDPE SH PO
1694WB 0102500	2,500 FT	97.500 LB	BLACK	C	#18 PO/GIFHDPE SH PO
1694WB 0105000	5,000 FT	190.000 LB	BLACK	C	#18 PO/GIFHDPE SH PO

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 3 Revision Date: 06-17-2016

© 2017 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. 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. Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).