



**Product:** [1694WB](#)

Serial Digital Coax, RG6, #18 Solid BC, Foil + 95% TC braid, Waterblocked

Product Description

Low Loss Serial Digital Coax, RG6 18 AWG solid bare copper conductor, foam HDPE core, Duofoil®+95% tinned copper braid, waterblocking grease, PE jacket

Technical Specifications

Product Overview

Suitable Applications:	SMPTE 424M 3 Gb/s HD-SDI 1080p
------------------------	--------------------------------

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
18	Solid	BC - Bare Copper	0.04 in	1

Conductor Count:	1
------------------	---

Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.18 in

Table Notes:	Gas Injected
--------------	--------------

Outer Shield

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	2	Tinned Copper (TC)		95%

Table Notes:	Outer Shield Flooding Grease
--------------	------------------------------

Outer Jacket

Material	Nominal Diameter
PE - Polyethylene	0.274 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
6.4 Ohm/1000ft	2.8 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
16.2 pF/ft

Inductance

Nominal Inductance
0.106 µH/ft

Impedance

Nominal Characteristic Impedance
----------------------------------

75 Ohm
--------

Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5 MHz - 1600 MHz	23 dB
1600 MHz - 4500 MHz	21 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.24 dB/100ft
3.58 MHz	0.44 dB/100ft
5 MHz	0.52 dB/100ft
6 MHz	0.57 dB/100ft
7 MHz	0.61 dB/100ft
10 MHz	0.71 dB/100ft
12 MHz	0.78 dB/100ft
25 MHz	1.08 dB/100ft
67.5 MHz	1.65 dB/100ft
71.5 MHz	1.69 dB/100ft
88.5 MHz	1.86 dB/100ft
100 MHz	1.95 dB/100ft
135 MHz	2.24 dB/100ft
143 MHz	2.3 dB/100ft
180 MHz	2.57 dB/100ft
270 MHz	3.17 dB/100ft
360 MHz	3.69 dB/100ft
540 MHz	4.5 dB/100ft
720 MHz	5.3 dB/100ft
750 MHz	5.4 dB/100ft
1000 MHz	6.3 dB/100ft
1500 MHz	7.8 dB/100ft
2000 MHz	9.2 dB/100ft
2250 MHz	9.8 dB/100ft
3000 MHz	11.5 dB/100ft
4500 MHz	14.5 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.24 ns/ft	82%

Electrical Characteristics Notes:	Return Loss: Fixed bridge and termination
-----------------------------------	---

Temperature Range

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

Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	36 lbs/1000ft
Max. Pull Tension:	69 lbs
Min. Bend Radius/Minor Axis:	2.75 in

Standards

RG Type:	6
----------	---

Applicable Environmental and Other Programs

Environmental Space:	Outdoor - Water Exposure
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No

MII Order #39 (China RoHS):	Yes
-----------------------------	-----

Suitability

Suitability - Aerial:	Yes - When supported by messenger wire
Suitability - Burial:	Yes
Suitability - Hazardous Locations:	No
Suitability - Indoor:	No
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	No

Plenum/Non-Plenum

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

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
1694WB 0101000	Black	Reel	1,000 ft	612825358602
1694WB 0102500	Black	Reel	2,500 ft	612825357483
1694WB 0105000	Black	Reel	5,000 ft	612825357490
1694WB 01010000	Black	Reel	10,000 ft	612825443018
1694WB 0061000	Blue, Light	Reel	1,000 ft	612825358596
1694WB 0062500	Blue, Light	Reel	2,500 ft	612825357469
1694WB 0065000	Blue, Light	Reel	5,000 ft	612825357476

Footnote:	C - CRATE REEL PUT-UP.
-----------	------------------------

Product Notes

Notes:	Flooding grease between jacket and braid. Print legend includes sequential footage marks.
--------	---

History

Update and Revision:	Revision Number: 0.380 Revision Date: 04-29-2024
----------------------	--

© 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.