




Product: [7731RW](#) 

Serial Digital Coax, RG11, #14 Solid BC, Duofoil® + 95% TC braid, Water Blocking Grease, CPE Jacket, CMR

Product Description

Low Loss Serial Digital Coax, Riser-CMR, RG11, 14 AWG solid bare copper conductor, foam HDPE core, Duofoil®+95% tinned copper braid, water blocking grease, CPE jacket

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
14	Solid	BC - Bare Copper	0.064 in	1

Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.280 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%

Outer Jacket

Material	Nominal Diameter
CPE - Chlorinated Polyethylene	0.401 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Outer Conductor DCR
2.5 Ohm/1000ft	1.5 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
16 pF/ft

Inductance

Nominal Inductance
0.097 μ H/ft

Impedance

Nominal Characteristic Impedance
75 Ohm

Return Loss (RL)

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

4500-6000 MHz	15 dB
---------------	-------

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.16 dB/100ft
3.58 MHz	0.29 dB/100ft
5 MHz	0.34 dB/100ft
7 MHz	0.39 dB/100ft
10 MHz	0.46 dB/100ft
67.5 MHz	1.05 dB/100ft
71.5 MHz	1.09 dB/100ft
88.5 MHz	1.21 dB/100ft
100 MHz	1.28 dB/100ft
135 MHz	1.47 dB/100ft
143 MHz	1.51 dB/100ft
180 MHz	1.69 dB/100ft
270 MHz	1.97 dB/100ft
360 MHz	2.31 dB/100ft
540 MHz	2.87 dB/100ft
720 MHz	3.40 dB/100ft
750 MHz	3.45 dB/100ft
1000 MHz	3.60 dB/100ft
1000 MHz	4.12 dB/100ft
1500 MHz	5.10 dB/100ft
2000 MHz	6.04 dB/100ft
2250 MHz	6.43 dB/100ft
3000 MHz	7.63 dB/100ft
4500 MHz	9.56 dB/100ft
6000 MHz	11.53 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.21 ns/ft	85%

Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes:	TDR Impedance: 75 +/- 3 Ohms
Other Electrical Characteristic 2:	Return Loss: Fixed bridge and termination

Temperature Range

UL Temp Rating:	75°C
Operating Temperature Range:	-30°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	85 lbs/1000ft
Max. Pull Tension:	145 lbs
Min. Bend Radius/Minor Axis:	4 in

Standards

NEC/(UL) Compliance:	CMR
RG Type:	11

Applicable Environmental and Other Programs

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

Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL 1666 Vertical Shaft
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

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

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
7731RW 0101000	Black	Reel	1,000 ft	612825408697
7731RW 0104000	Black	Reel	4,000 ft	612825188759

Product Notes

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

History

Update and Revision:	Revision Number: 0.140 Revision Date: 04-08-2022
----------------------	--

© 2022 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.