



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

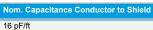
Material	Nominal Diameter
CPE - Chlorinated Polyethylene	0.401 in

# **Electrical Characteristics**

### Conductor DCR

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

# Capacitance



# Inductance



# Impedance



### 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         3.40 dB/100ft           750 MHz         3.45 dB/100ft           1000 MHz         4.12 dB/100ft           1500 MHz         5.10 dB/100ft           2000 MHz         6.04 dB/100ft           3000 MHz         7.63 dB/100ft           4500 MHz         9.56 dB/100ft           6000 MHz         11.53 dB/100ft	riigii requeiicy (Nominarrypicar)		
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4500 MHz 9.56 dB/100ft	2250 MHz	6.43 dB/100ft	
	3000 MHz	7.63 dB/100ft	
6000 MHz 11.53 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 Temp 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, LS0H, 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: 0.139 Revision Date: 12-15-2021
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