Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



7796A Coax - RG-59/U

For more Information please call

1-800-Belden1



General Description:

RG-59/U type, 20 AWG solid .032" bare copper conductors, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), overall PVC jacket.

+ timed copper braid shield (95% coverage), or	linned copper braid shield (95% coverage), overall PVC jacket.					
Physical Characteristics (Overall)						
Conductor AWG:						
# Coax AWG Stranding Conductor Material Dia. (mm)						
5 20 Solid BC - Bare Copper 0.8128						
Total Number of Conductors:	5					
Insulation Insulation Material:						
Insulation Material Dia	ı. (mm)					
Gas-injected FHDPE - Foam High Density Polyethylene 3.68	83					
Inner Shield Inner Shield Material:						
Layer # Inner Shield Trade Name Type Inner Shield Mate	erial Coverage (%)					
	Divester Tape-Aluminum Foil 100					
2 Braid TC - Tinned Copp	per 95					
Inner Jacket Inner Jacket Material:						
Inner Jacket Material Nom. Dia. (mm)						
PVC - Polyvinyl Chloride 5.918						
Inner Jacket Color Code Chart:						
Number Color						
1 Red						
2 Green						
3 Blue						
4 White 5 Yellow						
Outer Jacket						
Outer Jacket Material:						
Outer Jacket Material PVC - Polyvinyl Chloride						
Overall Cable						
Overall Nominal Diameter:	20.066 mm					
Mechanical Characteristics (Overall)						
Operating Temperature Range:	-35°C To +75°C					
UL Temperature Rating:	60°C					
Non-UL Temperature Rating:	75°C					
Bulk Cable Weight:	407.767 Kg/Km					
Max. Recommended Pulling Tension:	1601.350 N					

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Min. Bend Radius/Minor Axis:	203.200 mm
Applicable Specifications and Agency Co	ompliance (Overall)
Applicable Standards & Environmental Prog	rams
NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
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:	59/U
Flame Test	
UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4
Suitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No
Electrical Characteristics (Overall)	
Nom. Characteristic Impedance:	
Impedance (Ohm) 75	
Nom. Inductance:	
Inductance (μΗ/m) 0.351067	
Nom. Capacitance Conductor to Shield:	
Capacitance (pF/m) 53.1522	
Nominal Velocity of Propagation:	
VP (%) 83	
Nominal Delay:	
Delay (ns/m) 4.00282	
Nom. Conductor DC Resistance:	
DCR @ 20°C (Ohm/km) 32.81	
Nom. Inner Shield DC Resistance:	
DCR @ 20°C (Ohm/km) 12.4678	
Nom. Attenuation:	
Freq. (MHz) Attenuation (dB/100m)	

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1	0.9843
3.6	1.9686
10	2.9529
71.5	6.8901
135	8.8587
270	12.4678
360	14.4364
540	18.0455
720	20.9984
750	21.3265
1000	24.9356
1500	30.8414
2500	40.6844
3000	45.2778

Max. Operating Voltage - UL:

Voltage

300 V RMS

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. Return Loss Tested in Accordance With ASTM D-4566 Paragraph 45.3. Using

Other Electrical Characteristic 2:

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5	560	23
560	645	15
645	850	23
851	3000	15

Sweep tested 5 MHz to 3 GHz.

a 75 Ohm Fixed Bridge and Termination.

Put Ups and Colors:

Sweep Testing:

Sweep Test

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7796A B591000	305 MT	135.625 KG	BLACK, MATTE	С	5 #20 PE/GIFHDPE SH FRPVC PVC
7796A B59500	152 MT	70.761 KG	BLACK, MATTE	С	5 #20 PE/GIFHDPE SH FRPVC PVC

Notes:

C = CRATE REEL PUT-UP.

Test Reports

a) UL

i) UL Test Reports are available on-line through the UL Client Document Access web portal.

ii) UL Inspection Reports are also available through the UL Client Document Access web portal.

b) CŚA

i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.

ií) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

* other test data may be available if requested at time of order.

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