Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

7810WB Coax - RG-8 Type

For more Information
please call

1-800-Belden1

General Description:

RG-8 type, 10 AWG solid .108" bare copper-covered aluminum conductor, gas-injected foam HDPE insulation, Duobond® II + tinned copper braid shield (95% coverage), flooded water-resistant polyethylene jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	10	Solid	BCCA - Bare Copper Covered Aluminum	.108

Total Number of Conductors: 1

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.285

Outer Shield

Outer Shield Material:

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

Outer Shield Flooding Grease: PO - Polyolefin

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

Overall Cable

Overall Nominal Diameter: 0.403 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +75°C
Non-UL Temperature Rating:	80°C
Bulk Cable Weight:	73 lbs/1000 ft.
Max. Recommended Pulling Tension:	150 lbs.
Min. Bend Radius/Minor Axis:	4 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	No
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:	8/U
Series Type:	RF 400

Suitability

Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - When supported by a messenger
Suitability - Burial:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
50

Nom. Inductance:

Inductance (µH/ft)
0.060

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
23.0

Nominal Velocity of Propagation:

VP (%)
86

Nominal Delay:

Delay (ns/ft)
1.17

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
1.34

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
2

Maximum VSWR:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Max. VSWR
		5	6000	1.25:1

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
30	0.7
50	0.9
150	1.5
220	1.8
450	2.7
900	3.8
1500	5.1
1800	5.6
2000	6.0
2500	6.7

3000	7.5
3500	8.2
4500	9.5
5800	11.1
6000	11.4

Max. Power Rating:

Freq. (MHz)	Rating (W)
30	3427
50	2588
150	1428
220	1195
450	817
900	575
1500	437
1800	399
2000	375
2500	334
3000	305
3500	282
4500	247
5800	217
6000	213

Max. Operating Voltage - Non-UL:

Voltage
300 V RMS

Sweep Test

Sweep Testing: 100% Sweep tested to 6 GHz.

Misc. Information (Overall)

Notes (Overall)

Notes: 100% Sweep tested. 6 GHz. Belden® The Wire in Wireless®

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7810WB 0101000	1,000 FT	82.000 LB	BLACK	C	RF400 WIRELESS 50 OHM COAX WB
7810WB 010500	500 FT	40.500 LB	BLACK	C	RF400 WIRELESS 50 OHM COAX WB

Notes:
C = CRATE REEL PUT-UP.

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