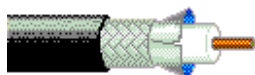


7976WB Coax - Low Loss 50 Ohm Wireless RF Transmission Cable



For more Information
please call

1-800-Belden1

**General Description:**

7 AWG solid .142" bare copper-covered aluminum conductor, foam HDPE insulation, Duobond® II (100% coverage) plus a tinned copper braid shield (90% coverage), flooded water-resistant polyethylene jacket.

Physical Characteristics (Overall)**Conductor****AWG:**

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	7	Solid	BCCA - Bare Copper Covered Aluminum	3.6068

Total Number of Conductors: 1

Insulation**Insulation Material:**

Insulation Material	Dia. (mm)
FHDPE - Foam High Density Polyethylene	9.398

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	90

Outer Shield Flooding Grease: PO - Polyolefin

Outer Jacket**Outer Jacket Material:**

Outer Jacket Material
PE - Polyethylene

Overall Cable

Overall Nominal Diameter: 12.700 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +80°C

Non-UL Temperature Rating: 80°C

Bulk Cable Weight: 178.584 Kg/Km

Max. Recommended Pulling Tension: 1045.330 N

Min. Bend Radius/Minor Axis: 127 mm

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

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): 01/01/2005

EU Directive 2002/96/EC (WEEE): Yes

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EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

MII Order #39 (China RoHS): Yes

Series Type: RF 500

Suitability

Suitability - Outdoor: Yes

Suitability - Aerial: Yes - when supported by a messenger wire

Suitability - Burial: Yes

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

50

Nom. Inductance:

Inductance (μH/m)

0.19686

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

82.3531

Nominal Velocity of Propagation:

VP (%)

84

Nominal Delay:

Delay (ns/m)

3.97001

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

2.69042

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

5.2496

Maximum VSWR:

Start Freq. (MHz)	Stop Freq. (MHz)	Max. VSWR
5.000	2690.000	1.25:1
2690.000	3290.000	2.00:1
3290.000	6000.000	1.43:1

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
30	1.80455
50	2.39513
150	3.9372
220	4.9215
450	7.2182
900	10.4992
1500	13.7802
1800	15.4207
2000	16.405
2500	18.7017
3000	20.6703
3500	22.6389
4500	26.248

METRIC MEASUREMENT VERSION

7976WB Coax - Low Loss 50 Ohm Wireless RF Transmission Cable

5800	30.5133
6000	31.1695

Max. Power Rating:

Freq. (MHz)	Rating (W)
30	4187
50	3168
150	1947
220	1602
450	1086
900	741
1500	558
1800	504
2000	474
2500	418
3000	376
3500	345
4500	299
5800	258
6000	252

Max. Operating Voltage - Non-UL:

Voltage
300 V RMS

Notes (Overall)

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

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7976WB 0101000	305 MT	50.803 KG	BLACK	C	#7 GIFPE SH LDPE
7976WB 010500	152 MT	27.216 KG	BLACK	C	#7 GIFPE SH LDPE

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) CSA

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

Revision Number: 3 Revision Date: 10-02-2009

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