

# Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

## Type RG-174



### PLU030057

For more Information  
please call

1-800-Belden1



### Description:

RG-174 type, 25 AWG solid .018" bare copper conductor, solid polyethylene insulation, Beldfoil® + tinned copper braid shield (90% coverage), PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	25	Solid	BC - Bare Copper	0.4572

#### Insulation

Insulation Material:

Insulation Material Dia. (mm)
PE - Polyethylene 1.5494

#### Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	90

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

#### Overall Cabling

Overall Nominal Diameter: 2.794 mm

### Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +75°C

Non-UL Temperature Rating: 80°C

Bulk Cable Weight: 13.394 Kg/Km

Max. Recommended Pulling Tension: 71.171 N

Min. Bend Radius (Install)/Minor Axis: 6.350 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): 01/01/2004

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:	174/U
Series Type:	RF 100

### Suitability

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

### Plenum/Non-Plenum

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

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)
50

### Nom. Inductance:

Inductance (µH/m)
0.252637

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
102.367

### Nominal Velocity of Propagation:

VP (%)
66

### Nominal Delay:

Delay (ns/m)
5.05274

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
104.992

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
29.8571

### Maximum VSWR:

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

### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
30	12.4678
50	16.0769
150	28.2166
220	34.1224
450	49.8712
900	72.182
1500	94.1647
1800	104.008
2000	109.585
2500	124.022
3000	137.802
3500	148.957
4500	171.596
5800	199.813
6000	203.422

### Nom. Power Rating:

Start Freq. (MHz)	Rating (W)
-------------------	------------

30	216
50	154
150	74
220	57
450	34
900	21
1500	14
1800	13
2000	12
2500	10
3000	9
3500	8
4500	7
5800	5
6000	5

**Max. Operating Voltage - Non-UL:**

Voltage
1100 V RMS

### Notes (Overall)

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

### Related Documents:

No related documents are available for this product

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7805 010100	30 MT	0.771 KG	BLACK	E	RF100 WIRELESS 50 OHM COAX PVC
7805 0101000	305 MT	4.536 KG	BLACK		RF100 WIRELESS 50 OHM COAX PVC
7805 010500	152 MT	2.495 KG	BLACK		RF100 WIRELESS 50 OHM COAX PVC

**Notes:**

E = MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'

Revision Number: 2    Revision Date: 09-30-2009

© 2011 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 herein 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 "AS IS" 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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.