



**Product:** [8240](#)

50 Ohm Wireless Transmission Coax, RG-58, 20 AWG Solid BC, 95% TC Braid, PVC Jkt, CMX

### Product Description

50 Ohm Wireless Transmission Coax, RG-58, 20 AWG Solid Bare Copper Conductor , PE Insulation, 95% Tinned Copper Braid Shield, PVC Jacket, CMX

### Technical Specifications

#### Product Overview

Suitable Applications:	Point-to-point and point-to-multipoint wireless antenna communication; Wireless microphones, Two-Way Radios, Amateur (Ham) Radio, Low Power FM, GPS, RFID (Radio Frequency Identification)
------------------------	--

#### Construction Details

RG Type:	58
----------	----

#### Conductor

Size	Stranding	Nom. Diameter	Material
20 AWG	Solid	0.033 in	BC - Bare Copper

#### Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	0.116 in (2.95 mm)	White

#### Outer Shield

Outer Shield Type	Material	Coverage
Braid	Tinned Copper (TC)	95%

#### Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.193 in (4.90 mm)

Overall Cable Diameter (Nominal):	0.193 in (4.90 mm)
-----------------------------------	--------------------

#### Electrical Characteristics

##### Attenuation

Frequency	Nom. Attenuation
1 MHz	0.3 dB/100ft
10 MHz	1.1 dB/100ft
50 MHz	2.5 dB/100ft
100 MHz	3.8 dB/100ft
200 MHz	5.6 dB/100ft
400 MHz	8.4 dB/100ft
700 MHz	11.7 dB/100ft
900 MHz	13.7 dB/100ft
1000 MHz	14.5 dB/100ft

##### Power Rating

Frequency	Max. Power Rating
50 MHz	530 W

100 MHz	350 W
400 MHz	160 W
1,000 MHz	90 W

#### Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
9.4 Ohm/1000ft	4.1 Ohm/1000ft (13 Ohm/km)	28.5 pF/ft (93.5 pF/m)	52 Ohm	66%

#### Voltage

UL Voltage Rating	Voltage Rating
300 V (CMX), 30 V (UL AWM 1354)	1900 V

Electrical Characteristics Notes: Actual Impedance specification is 51.5 +/- 1.5 ohms.

## Mechanical Characteristics

#### Temperature

UL Temperature	Operating
60°C (UL AWM 1354)	-40°C to +75°C

#### Bend Radius

Installation Min.
1.9 in (48 mm)

Max. Pull Tension: 47 lbs (21 kg)

Bulk Cable Weight: 26 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Outdoor - Aerial, Indoor, Aerial - Black only, When supported by messenger wire
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL1581
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	CMX
AWM Compliance:	AWM 1354
CEC / C(UL) Compliance:	CMX
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Plenum Number:	88240, 82240

## History

Update and Revision: Revision Number: 0.537 Revision Date: 04-13-2023

## Part Numbers

#### Variants

Item #	Color	Putup Type	Length	UPC
8240 010100	Black	Reel	100 ft	612825196761
8240 010500	Black	Reel	500 ft	612825196785
8240 010U500	Black	UnReel	500 ft	612825358664
8240 0101000	Black	Reel	1,000 ft	612825196778
8240 010U1000	Black	UnReel	1,000 ft	612825196747
8240 0105000	Black	Reel	5,000 ft	612825196730

© 2023 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 here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information 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. The 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.