Belden



Product: 82240

50 Ohm Wireless Transmission Coax, RG-58, 20 AWG Solid BC, 95% TC Braid, Flamarrest® Jkt, CMP

Product Description

50 Ohm Wireless Transmission Coax, RG-58, 20 AWG Solid Bare Copper Conductor, FEP Insulation, 95% Tinned Copper Braid Shield, Flamarrest® Jacket, CMP

Technical Specifications

Product Overview

Suitable Applications:	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	0.032 in	BC - Bare Copper

Insulation

Material	Nom. Insulation Diameter	Color Code
FEP - Fluorinated Ethylene Propylene	0.107 in (2.72 mm)	Clear

Outer Shield

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

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.159 in (4.04 mm)

Overall Cable Diameter (Nominal):	0.159 in (4.04 mm)

Electrical Characteristics

Attenuation

Frequency	Nom. Attenuation
1 MHz	0.5 dB/100ft
10 MHz	1.2 dB/100ft
50 MHz	3.0 dB/100ft
100 MHz	4.3 dB/100ft
200 MHz	6.4 dB/100ft
400 MHz	9.7 dB/100ft
700 MHz	13.7 dB/100ft
900 MHz	16.1 dB/100ft
1000 MHz	17.3 dB/100ft

Power Rating

Frequency	Max. Power Rating
1 MHz	4,799 W
10 MHz	1,937 W

50 MHz	782 W
100 MHz	542 W
200 MHz	370 W
400 MHz	248 W
700 MHz	178 W
900 MHz	153 W
1,000 MHz	143 W

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
10.1 Ohm/1000ft	3.8 Ohm/1000ft (12 Ohm/km)	27.4 pF/ft (89.9 pF/m)	53 Ohm	70%

Voltage

UL Voltage Rating
300 V (CMP)

Mechanical Characteristics

Temperature

UL Temperature	Operating
75°C	0°C to +75°C

Bend Radius

Installation Min.
1.6 in (41 mm)

Max. Pull Tension:	47 lbs (21 kg)
Bulk Cable Weight:	30 lbs/1000ft (45 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor - Plenum, Indoor
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	NFPA 262
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	CMP
CEC / C(UL) Compliance:	CMP
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)
Non-Plenum Number:	8240

History

Update and Revision:	Revision Number: 0.458 Revision Date: 09-07-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
82240 010U500	Black	UnReel	500 ft	612825434832	
82240 010Z500	Black	ReelTuff Box	500 ft	612825196440	
82240 010Z1000	Black	ReelTuff Box	1,000 ft	612825434757	
82240 877U500	Natural	UnReel	500 ft	612825434849	
82240 8771000	Natural	Reel	1,000 ft	612825196426	C
82240 877U1000	Natural	UnReel	1,000 ft	612825196433	
82240 877Z1000	Natural	ReelTuff Box	1,000 ft	612825196471	

Footnote:	C - CRATE REEL PUT-UP.

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