

Part Number: 8240

Distributed Antenna Systems (DAS) 52 Ohm, RG58, 20 AWG, CMX



Product Description

Distributed Antenna Systems (DAS) Cable, RG-58A/U type, 20 AWG solid .033" bare copper conductor, polyethylene insulation, tinned copper braid shield (95% coverage), PVC jacket.

Technical Specifications

Product Overview

Environmental Space:	Outdoor - Aerial
----------------------	------------------

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
20	Solid	BC - Bare Copper	0.033 in	1

Conductor Count:	1
Conductor Size:	20 AWG

Insulation

Material	Nominal Diameter
PE - Polyethylene	0.116 in

Outer Shield Material

Type	Material	Coverage [%]
Braid	TC - Tinned Copper	95 %

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.193 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
10 Ohm/1000ft	4.1 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
28.5 pF/ft

Shielding:	Braid(s)
------------	----------

Inductance

Nominal Inductance
0.08 μ H/ft

Impedance

Nominal Characteristic Impedance
52 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
-----------------	---------------------

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

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.54 ns/ft	66 %

Power Rating

Frequency [MHz]	Max. Power Rating [W]
50 MHz	530 W
100 MHz	350 W
400 MHz	160 W
1,000 MHz	90 W

Voltage

Non-UL Voltage Rating	UL Voltage Rating
1400 V RMS	300 V RMS (CMX), 30 V RMS (UL AWM Style 1354)
	30 V RMS (UL AWM Style 1354)

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

Temperature Range

UL Temp Rating:	80°C (UL AWM Style 1354)
Operating Temp Range:	-40°C To +75°C

Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	26 lbs/1000ft
Max Recommended Pulling Tension:	47 lbs
Min Bend Radius/Minor Axis:	2 in

Standards

NEC/(UL) Specification:	CMX
CEC/C(UL) Specification:	CMX
UL AWM Style:	UL Style 1354
CPR Euroclass:	Eca
RG Type:	58A/U Type
RG / Series Type:	58A/U Type

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

Flammability, LSOH, Toxicity Testing

UL Flammability:	VW-1
UL voltage rating:	300 V RMS (CMX), 30 V RMS (UL AWM Style 1354)

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	88240, 82240

Part Number

Variants

Item #	Color	Footnote
8240 010100	Black	
8240 0101000	Black	C
8240 010500	Black	C
8240 0105000	Black	C
8240 010U1000	Black	
8240 010U500	Black	

Footnote:	C - CRATE REEL PUT-UP.
-----------	------------------------

© 2018 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.