# **Detailed Specifications & Technical Data**

## **METRIC MEASUREMENT VERSION**



84142 Coax - 50 Ohm Coax

For more Information please call

1-800-Belden1



# **General Description:**

19 AWG solid .037" silver-coated copper-covered steel conductor, plenum, TFE Teflon® insulation, double silver-coated copper braid shields (95% coverage), FEP jacket.

# **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	19	Solid	SCCCS - Silver-coated Copper-covered Steel	0.940

Total Number of Conductors:

#### Insulation

#### **Insulation Material:**

Insulation Trade Name	Insulation Material	Dia. (mm)
Teflon®	TFE - Tetrafluoroethylene	2.9464

#### **Outer Shield**

#### **Outer Shield Material:**

Layer #	Type	Outer Shield Material	Coverage (%)
1	Braid	Silver-coated Copper	95.000
2	Braid	Silver-coated Copper	95.000

## **Outer Jacket**

## **Outer Jacket Material:**

Outer Jacket Material
FEP - Fluorinated Ethylene Propylene

#### **Overall Cable**

Overall Nominal Diameter: 4.953 mm

# **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-70°C To +200°C
UL Temperature Rating:	200°C
Bulk Cable Weight:	62.504 Kg/Km
Max. Recommended Pulling Tension:	649.437 N
Min. Bend Radius/Minor Axis:	50.800 mm

# **Applicable Specifications and Agency Compliance (Overall)**

## **Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	No
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes

Page 1 of 3 11-08-2019

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	EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
	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
	Military Specification:	MIL-DTL-17, M17/60
	RG Type:	142/U
Fla	ame Test	
	CSA Flame Test:	FT6
Ple	enum/Non-Plenum	
	Plenum (Y/N):	Yes

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:



**Nominal Outer Shield DC Resistance:** 



# Maximum VSWR:

Freq. (MHz)	Max. VSWR
50	1.11
400	1.14
1000	1.17
3000	1.33
8000	1.33

#### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
10	3.6091
50	8.5306
100	12.4678
200	17.7174
400	25.9199
700	35.1067
900	40.3563
1000	42.9811
2000	63.3233

Page 2 of 3 11-08-2019

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3000	79.4002
5000	106.961
8000	141.739

#### Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
50	13.124
100	18.0455
400	38.3877
1000	62.339
3000	114.835
8000	216.546

#### Max. Power Rating:

Freq. (MHz)	Rating (W)
50	3500
100	2400
400	1100
1000	650
3000	330
8000	180

#### Max. Operating Voltage - UL:

Voltage 150 V RMS

## Misc. Information (Overall)

## **Notes (Overall)**

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
84142 001100	100 FT	5.000 LB	BROWN		#18H RG142 COAX
84142 0011000	1,000 FT	44.000 LB	BROWN	CE	#18H RG142 COAX
84142 001500	500 FT	22.500 LB	BROWN	CE	#18H RG142 COAX

#### Notes:

C = CRATE REEL PUT-UP

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

Revision Number: 6 Revision Date: 04-04-2014

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