

### Product: <u>7916A</u> 2

DBS Cable, RG6, 18 AWG BC, Quad Shield, CM

#### **Product Description**

Series 6, 18 AWG solid .040" bare copper conductor, gas-injected foam polyethylene insulation, Duobond®; aluminum braid shields (60% and 40% coverage), PVC jacket (black or white).

#### **Technical Specifications**

#### **Product Overview**

Suitable Applications:	HDTV, DBS, Broadband CATV, Cable Modem
------------------------	--

**Physical Characteristics (Overall)** 

#### Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
18	Solid	BC - Bare Copper	0.04 in	1
Condu	ctor Count:		1	

Insulation

#### Outer Shield

Туре	Layer	Material	Material Trade Name	Coverage [%]
Таре	1	Tri-Laminate (Alum+Poly+Alum)	Duobond® II	100%
Braid	2	Aluminum		60%
Таре	3	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	4	Aluminum		40%

#### Outer Jacket

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.298 in

#### **Electrical Characteristics**

Conductor DCR				
Nominal Conductor DCR	Nominal Outer Shield DCR	Outer Conductor DCR		
6.4 Ohm/1000ft	4.8 Ohm/1000ft	4.8 Ohm/1000ft		

#### Capacitance

Nom. Capacitance Conductor to Shield 16.2 pF/ft

#### Inductance

Nominal Inductance 0.097 µH/ft

Impedance

# Nominal Characteristic Impedance

\_\_\_\_\_

### Return Loss (RL)

Frequency [MHz]	Min. Structural Return Loss (SRL)
5-1000 MHz	20 dB
1000-2250 MHz	15 dB
2250-3000 MHz	10 dB

#### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss	Nom. Structural Return Loss (SRL)
5 MHz	0.5 dB/100ft	30 dB
55 MHz	1.4 dB/100ft	24 dB
211 MHz	2.6 dB/100ft	
500 MHz	4.1 dB/100ft	
750 MHz	5.1 dB/100ft	
862 MHz	5.5 dB/100ft	
1000 MHz	6 dB/100ft	
1450 MHz	7.8 dB/100ft	
1800 MHz	8.6 dB/100ft	
2250 MHz	9.8 dB/100ft	
3000 MHz	11.3 dB/100ft	

#### Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.2 ns/ft	83%

#### High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)
5 MHz	0.58 dB/100ft
55 MHz	1.6 dB/100ft
211 MHz	3.05 dB/100ft
500 MHz	4.66 dB/100ft
750 MHz	5.65 dB/100ft
862 MHz	6.1 dB/100ft
1000 MHz	6.55 dB/100ft
1450 MHz	8 dB/100ft
1800 MHz	8.8 dB/100ft
2250 MHz	10 dB/100ft
3000 MHz	11.9 dB/100ft

#### Screening

Frequency [MHz]	Shield Effectiveness
5 MHz	
50 MHz	110 dB
50 MHz	
1000 MHz	

#### Voltage

UL Voltage Rating	9
300 V RMS	

### **Temperature Range**

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

#### **Mechanical Characteristics**

Bulk Cable Weight:	33 lbs/1000ft	
Max. Pull Tension:	104 lbs	
Min. Bend Radius/Minor Axis:	3 in	

#### Standards

NEC/(UL) Compliance:	CATV, CM

CEC/C(UL) Compliance:	СМ
CPR Euroclass:	Eca
RG Type:	6
Series Type:	6

#### Applicable Environmental and Other Programs

Environmental Space:	Indoor (Not Riser or Plenum)
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

#### Suitability

Suitability - Indoor:	Yes

#### Flammability, LS0H, Toxicity Testing

UL voltage rating: 300 V RMS	UL Flammability:	UL1685 UL Loading
	UL voltage rating:	300 V RMS

#### Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	7916AP

#### **Related Part Numbers**

#### Variants

item #	Color	Put-Up Type	Length	UPC
7916A 010500	Black	Reel	500 ft	612825191124
7916A 010U500	Black	UnReel	500 ft	612825191148
7916A 0101000	Black	Reel	1,000 ft	612825191117
7916A 010U1000	Black	UnReel	1,000 ft	612825191094
7916A 0105000	Black	Reel	5,000 ft	612825191087
7916A 009500	White	Reel	500 ft	612825191049
7916A 009U500	White	UnReel	500 ft	612825191100
7916A 0091000	White	Reel	1,000 ft	612825191070
7916A 009U1000	White	UnReel	1,000 ft	612825191056
Footnote:				C - CRATE REE

#### **History**

Update and Revision:

Revision Number: 0.466 Revision Date: 04-29-2024

© 2024 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.

# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Belden Wire & Cable:

7916A 0101000
7916A 009U1000
7916A 009U500
7916A 010500
7916A 010U1000
7916A 0091000
7916A

009500
7916A 010U500
7916A 0105000
791