

7916A Coax - Series 6
 For more Information
 please call

1-800-Belden1

**General 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).

Usage (Overall)

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

Physical Characteristics (Overall)**Conductor****AWG:**

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	18	Solid	BC - Bare Copper	1.016

Total Number of Conductors: 1

Insulation**Insulation Material:**

Insulation Material	Dia. (mm)
Gas-injected FPE - Foam Polyethylene	4.572

Outer Shield**Outer Shield Material:**

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	AL - Aluminum	60
3	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
4		Braid	AL - Aluminum	40

Outer Jacket**Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 7.569 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +80°C
Bulk Cable Weight:	49.111 Kg/Km
Max. Recommended Pulling Tension:	462.613 N
Min. Bend Radius/Minor Axis:	76.200 mm

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CATV, CM
CEC/C(UL) Specification:	CM
EU Directive 2011/65/EU (ROHS II):	Yes

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2004

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

Series Type: Series 6

Flame Test

UL Flame Test: UL1685 UL Loading

Plenum/Non-Plenum

Plenum (Y/N): No

Plenum Number: 7916AP

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

75.000

Nom. Inductance:

Inductance (μH/m)

0.318257

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

53.1522

Nominal Velocity of Propagation:

VP (%)

83

Nominal Delay:

Delay (ns/m)

3.9372

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

20.9984

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

15.7488

Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100m)

5	1.6405
55	4.5934
211	8.5306
500	13.4521
750	16.7331
862	18.0455
1000	19.686
1450	25.5918
1800	28.2166
2250	32.1538
3000	37.0753

Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
5	2.19827
55	5.2496
211	9.41647
500	14.6989
750	18.3408
862	19.6204
1000	21.4577
1450	26.248
1800	28.8728
2250	32.81
3000	39.0439

Max. Operating Voltage - UL:

Voltage
300 V RMS

Shield Effectiveness:

Start Freq. (MHz)	Stop Freq. (MHz)	Effectiveness (dB)
5	50	105
50	1000	110

Typical Structural Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Typical SRL (dB)
5	1000	30
1000	3000	24

Minimum Structural Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
5	1000	20
1000	2250	15
2250	3000	10

Sweep Test

Sweep Testing: 5 MHz - 3 GHz

Notes (Overall)

Notes: Shielding effectiveness determined from screening attenuation measurement when tested in accordance with IEC 61196-1.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7916A 009U1000	305 MT	16.329 KG	WHITE		#18 LDPE/GIFHDLPE DBSH FRPVC
7916A 009U500	152 MT	8.391 KG	WHITE		#18 LDPE/GIFHDLPE DBSH FRPVC
7916A 0091000	305 MT	15.876 KG	WHITE	C	#18 LDPE/GIFHDLPE DBSH FRPVC
7916A 009500	152 MT	8.845 KG	WHITE	C	#18 LDPE/GIFHDLPE DBSH FRPVC
7916A 010U1000	305 MT	16.329 KG	BLACK		#18 LDPE/GIFHDLPE DBSH FRPVC
7916A 010U500	152 MT	8.391 KG	BLACK		#18 LDPE/GIFHDLPE DBSH FRPVC
7916A 0101000	305 MT	15.876 KG	BLACK	C	#18 LDPE/GIFHDLPE DBSH FRPVC
7916A 010500	152 MT	8.845 KG	BLACK	C	#18 LDPE/GIFHDLPE DBSH FRPVC
7916A 0105000	1,524 MT	86.183 KG	BLACK	C	#18 LDPE/GIFHDLPE DBSH FRPVC

Notes:

C = CRATE REEL PUT-UP.

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