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1-800-Belden1



## 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. (in.)
1	18	Solid	BC - Bare Copper	.040

### Insulation

**Insulation Material:**

Insulation Material	Dia. (in.)
Gas-injected FPE - Foam Polyethylene	.180

### 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:** 0.298 in.

## Mechanical Characteristics (Overall)

**Storage Temperature Range:** -40°C To +80°C

**Installation Temperature Range:** -30°C To +80°C

**Operating Temperature Range:** -40°C To +80°C

**Bulk Cable Weight:** 32 lbs/1000 ft.

**Max. Recommended Pulling Tension:** 104 lbs.

**Min. Bend Radius (Install)/Minor Axis:** 3 in.

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

**NEC/(UL) Specification:** CATV, CM

**CEC/C(UL) Specification:** CM

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
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### Plenum/Non-Plenum

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

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)	Tolerance (Ohms)
75	± 3

### Nom. Inductance:

Inductance (µH/ft)
.097

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.2

### Nominal Velocity of Propagation:

VP (%)
83

### Nominal Delay:

Delay (ns/ft)
1.2

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
6.4

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.8

### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
5	0.5
55	1.4
211	2.6
500	4.1
750	5.1
862	5.5
1000	6.0
1450	7.8
1800	8.6
2250	9.8
3000	11.3

### Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
5	0.67
55	1.60
211	2.87
500	4.48
750	5.59
862	5.98
1000	6.54
1450	8.00
1800	8.80
2250	10.0
3000	11.9

**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.

**Related Documents:**

No related documents are available for this product

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7916A 009U1000	1,000 FT	36.000 LB	WHITE		#18 LDPE/GIFHDLDPPE DBSH FRPVC
7916A 009U500	500 FT	18.500 LB	WHITE		#18 LDPE/GIFHDLDPPE DBSH FRPVC
7916A 0091000	1,000 FT	35.000 LB	WHITE	C	#18 LDPE/GIFHDLDPPE DBSH FRPVC
7916A 009500	500 FT	19.500 LB	WHITE	C	#18 LDPE/GIFHDLDPPE DBSH FRPVC
7916A 010U1000	1,000 FT	36.000 LB	BLACK		#18 LDPE/GIFHDLDPPE DBSH FRPVC
7916A 010U500	500 FT	18.500 LB	BLACK		#18 LDPE/GIFHDLDPPE DBSH FRPVC
7916A 0101000	1,000 FT	35.000 LB	BLACK	C	#18 LDPE/GIFHDLDPPE DBSH FRPVC
7916A 010500	500 FT	19.500 LB	BLACK	C	#18 LDPE/GIFHDLDPPE DBSH FRPVC

**Notes:**

C = CRATE REEL PUT-UP.

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