Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

7916A Coax - Series 6

For more Information please call

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. (mm)
1	18	Solid	BC - Bare Copper	1.016

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 Cabling

Overall Nominal Diameter:	7.569 mm

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:	47.622 Kg/Km
Max. Recommended Pulling Tension:	462.613 N
Min. Bend Radius (Install)/Minor Axis:	50.800 mm

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

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/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.

Related Documents:

No related documents are available for this product

Put Ups and Colors:

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

Notes:
C = CRATE REEL PUT-UP.

Revision Number: 5 Revision Date: 04-25-2008

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