



Part Number:8104E

CATV Video, RG6, #18 BCCS, Foil + 60% Braid, CM

Product Description

Series 6, 18 AWG solid .040" bare copper-covered steel conductor, gas-injected foam polyethylene insulation, Duobond® II, aluminum braid shield (60% coverage), PVC jacket.

Technical Specifications

Product Overview

Environmental Space:	Indoor (Not Riser or Plenum)
Suitable Applications:	CATV, Broadband

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
18	Solid	BCCS - Bare Copper Covered Steel	0.04 in	1

Conductor Count:	1
Conductor Size:	18 AWG

Insulation

Material	Nominal Diameter
Gas-injected FPE - Foam Polyethylene	0.18 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Bonded Duofoil® (Bonded to Dielectric)	100 %
Braid	2	AL - Aluminum		60 %

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.27 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
28 Ohm/1000ft	9 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
16.2 pF/ft

Inductance

Nominal Inductance
0.097 µH/ft

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance
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75 Ohm	± 3 Ohm
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Return Loss (RL)

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

Delay

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

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)
5 MHz	0.58 dB/100ft
55 MHz	1.60 dB/100ft
211 MHz	3.05 dB/100ft
250 MHz	3.30 dB/100ft
270 MHz	3.37 dB/100ft
300 MHz	3.55 dB/100ft
330 MHz	3.74 dB/100ft
350 MHz	3.85 dB/100ft
400 MHz	4.15 dB/100ft
450 MHz	4.40 dB/100ft
500 MHz	4.66 dB/100ft
550 MHz	4.90 dB/100ft
600 MHz	5.10 dB/100ft
750 MHz	5.65 dB/100ft
870 MHz	6.11 dB/100ft
1000 MHz	6.55 dB/100ft

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Operating Temp Range:	-40°C To +80°C
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Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	27 lbs/1000ft
Max Recommended Pulling Tension:	126 lbs
Min Bend Radius/Minor Axis:	2.75 in

Standards

NEC/(UL) Specification:	CATV, CM
CEC/C(UL) Specification:	CM
CPR Euroclass:	Eca
Series Type:	Series 6

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
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Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1581 Vertical Flame
CSA Flammability:	FT1
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	9116P

Part Number

Variants

Item #	Color	Putup Type	Length	Footnote
8104E 290U1000	Beige, Light	UnReel	1,000 ft	
8104E-0101000	Black	Reel	305 m	
8104E-K101000	Black	Reel	305 m	
8104E 010500	Black	Reel	500 ft	
8104E 010U500	Black	UnReel	500 ft	
8104E 010S700	Black	Reel	700 ft	
8104E 0101000	Black	Reel	1,000 ft	C
8104E 010U1000	Black	UnReel	1,000 ft	
8104E 010N1000	Black	Reel w/Small Barrel	1,000 ft	C
8104E 009500	White	Reel	500 ft	
8104E 0091000	White	Reel	1,000 ft	
8104E 009U1000	White	UnReel	1,000 ft	
8104E 009N1000	White	Reel w/Small Barrel	1,000 ft	C

Footnote:	C - CRATE REEL PUT
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Product Notes

Notes:	Print legend includes s
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