



Product: [7916A](#)

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 |

| | |
|------------------|---|
| Conductor Count: | 1 |
|------------------|---|

Insulation

| Material | Nominal Diameter |
|--------------------------|------------------|
| PE - Polyethylene (Foam) | 0.18 in |

| | |
|--------------|--------------|
| Table Notes: | Gas Injected |
|--------------|--------------|

Outer Shield

| Type | Layer | Material | Material Trade Name | Coverage [%] |
|-------|-------|-------------------------------|---------------------|--------------|
| Tape | 1 | Tri-Laminate (Alum+Poly+Alum) | Duobond® II | 100% |
| Braid | 2 | Aluminum | | 60% |
| Tape | 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

75 Ohm

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**

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: | CM |
| 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, LSOH, Toxicity Testing

| | |
|--------------------|-------------------|
| 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 REEL PUT-UP. |
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History

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|----------------------|--|
| Update and Revision: | Revision Number: 0.409 Revision Date: 11-09-2022 |
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