



Product: [643948](#)

Surveillance CCTV, RG-59 #20 BC, 95% BC Braid, CMP

Product Description

Surveillance & CCTV Cable, RG59, Plenum-CMP, 20 AWG solid bare copper, foam FEP core, 95% bare copper braid, Flamarrest® jacket

Technical Specifications

Product Overview

| | |
|------------------------|------|
| Suitable Applications: | CCTV |
|------------------------|------|

Physical Characteristics (Overall)

| Conductor | | | | |
|------------------|-----------|------------------|------------------|-------------|
| AWG | Stranding | Material | Nominal Diameter | No. of Coax |
| 20 | Solid | BC - Bare Copper | 0.032 in | 1 |
| Conductor Count: | | | 1 | |

| Insulation | | |
|---|---------------------|------------------|
| Material | Material Trade Name | Nominal Diameter |
| FEP - Fluorinated Ethylene Propylene (Foam) | Teflon® | 0.135 in |

| Outer Shield Material | | | |
|-----------------------|-------|------------------|--------------|
| Type | Layer | Material | Coverage [%] |
| Braid | 1 | BC - Bare Copper | 95 % |

| Outer Jacket Material | | |
|---|---------------------|------------------|
| Material | Material Trade Name | Nominal Diameter |
| PVC-LS - Polyvinyl Chloride (Low Smoke) | Flamarrest® | 0.192 in |

Electrical Characteristics

| Conductor DCR | | |
|-----------------------|--------------------------|---------------------|
| Nominal Conductor DCR | Nominal Outer Shield DCR | Outer Conductor DCR |
| 10 Ohm/1000ft | 3.3 Ohm/1000ft | 3.3 Ohm/1000ft |

| Capacitance |
|--------------------------------------|
| Nom. Capacitance Conductor to Shield |
| 16.1 pF/ft |

| Inductance |
|--------------------|
| Nominal Inductance |
| 0.097 µH/ft |

| Impedance |
|----------------------------------|
| Nominal Characteristic Impedance |
| 75 Ohm |

| High Frequency (Nominal/Typical) | |
|----------------------------------|---------------------|
| Frequency [MHz] | Nom. Insertion Loss |

| | |
|----------|---------------|
| 1 MHz | 0.29 dB/100ft |
| 3 MHz | 0.58 dB/100ft |
| 5 MHz | 0.7 dB/100ft |
| 8 MHz | 0.87 dB/100ft |
| 10 MHz | 1.05 dB/100ft |
| 50 MHz | 1.8 dB/100ft |
| 100 MHz | 2.7 dB/100ft |
| 200 MHz | 3.9 dB/100ft |
| 400 MHz | 5.9 dB/100ft |
| 700 MHz | 8.5 dB/100ft |
| 900 MHz | 10 dB/100ft |
| 1000 MHz | 10.7 dB/100ft |

Delay

| Max. Delay Skew | Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|-----------------|---------------|--|
| 84 ns/100m | 1.21 ns/ft | 84 % |

Voltage

| UL Voltage Rating |
|-------------------|
| 300 V RMS |

Temperature Range

| | |
|-----------------------|----------------|
| UL Temp Rating: | 75°C |
| Operating Temp Range: | -20°C To +75°C |

Mechanical Characteristics

| | |
|----------------------------------|---------------|
| Bulk Cable Weight: | 30 lbs/1000ft |
| Max Recommended Pulling Tension: | 52 lbs |
| Min Bend Radius/Minor Axis: | 1.75 in |

Standards

| | |
|--------------------------|-----------|
| NEC Articles: | 800 |
| NEC/(UL) Specification: | CMP |
| CEC/C(UL) Specification: | CMP |
| CPR Euroclass: | Eca |
| RG Type: | 59/U Type |
| Series Type: | Series 59 |

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 2015/863/EU: | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-04-01 |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|-----------------------|-----|
| Suitability - Indoor: | Yes |
|-----------------------|-----|

Flammability, LS0H, Toxicity Testing

| | |
|-----------------------|------------------------------------|
| C(UL) Flammability: | FT6 |
| UL Flammability: | NFPA 262 Plenum Flame Test (UL910) |
| ISO/IEC Flammability: | IEC 60332-1-2 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

| | |
|---------------|-----|
| Plenum (Y/N): | Yes |
|---------------|-----|

Part Number

Variants

| Item # | Color | UPC | Length | Footnote |
|-----------------|---------|--------------|----------|----------|
| 643948 0101000 | Black | 612825176893 | 1,000 ft | C |
| 643948 010U1000 | Black | 612825176879 | 1,000 ft | |
| 643948 010U500 | Black | 612825176886 | 500 ft | |
| 643948 8771000 | Natural | 612825176923 | 1,000 ft | C |
| 643948 877500 | Natural | | | |
| 643948 877U1000 | Natural | 612825176909 | 1,000 ft | |
| 643948 877U500 | Natural | 612825176916 | 500 ft | |

| | |
|-----------|------------------------|
| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|

Product Notes

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| Notes: | Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc. |
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History

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| Update and Revision: | Revision Number: 0.311 Revision Date: 04-08-2020 |
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