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please call

1-800-Belden1



General Description:

Industry Standard SMPTE 311M Cable, 4 power conductors, 2 SM fibers w/24 and 20 AWG stranded (7x32 and 19x32) TC conductors, PVC insulation, TC braid shield (95% coverage), Belflex® jacket.

Usage (Overall)

Suitable Applications: SMPTE 311M Camera Cable

Multi Conductor

Physical Characteristics

Conductor

AWG:

| # Conductors | AWG | Stranding | Conductor Material | Dia. (mm) |
|--------------|-----|-----------|--------------------|-----------|
| 2 | 24 | 7x32 | TC - Tinned Copper | 0.610 |
| 4 | 20 | 19x32 | TC - Tinned Copper | 0.940 |

Insulation

Insulation Material:

| Insulation Material | Dia. (mm) | AWG |
|--------------------------|-----------|-----|
| PVC - Polyvinyl Chloride | 1.600 | 20 |
| PVC - Polyvinyl Chloride | 1.270 | 24 |

Insulation Color Code Chart:

| Number | Color | Description |
|--------|-------------|-------------|
| 1 | Red | 24 AWG |
| 2 | Gray | 24 AWG |
| 3 | White | 20 AWG |
| 4 | Black | 20 AWG |
| 5 | White/Black | 20 AWG |
| 6 | Black/White | 20 AWG |

Electrical Characteristics

Nom. Conductor DC Resistance:

| Description | DCR @ 20°C (Ohm/km) |
|-------------|---------------------|
| 24 AWG | 76.447 |
| 20 AWG | 28.873 |

Nominal Outer Shield DC Resistance:

| DCR @ 20°C (Ohm/km) |
|---------------------|
| 11.484 |

Fiber

Physical Characteristics

| | |
|--------------------------------|--|
| Fiber Type: | Non-Dispersion Shifted, Single Mode/125/900 Micron |
| Number of Fibers: | 2 |
| Mode Field Diameter @ 1310nm: | 9.5 +/-1 microns |
| Clad Diameter: | 125 microns |
| Core-clad Concentricity Error: | < to 1 micron |
| Primary Coating Material: | Acrylate |
| Buffer Tube Diameter: | 900 microns |
| Buffer Tube Material: | PVC - Polyvinyl Chloride |

Buffer Tube Color Code Chart:

| Number | Color |
|--------|--------|
| 1 | Blue |
| 2 | Yellow |

Optical Characteristics

Maximum Attenuation @ 1310nm: 0.8 dB/km

Physical Characteristics (Overall)

Conductor

Outer Shield

Outer Shield Material:

| Type | Outer Shield Material | Coverage (%) |
|-------|-----------------------|--------------|
| Braid | TC - Tinned Copper | 95.000 |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Trade Name | Outer Jacket Material |
|-------------------------|--------------------------------------|
| Belflex® | PVC Blend - Polyvinyl Chloride Blend |

Strength Member

Overall Strength Member Diameter: .089

Strength Member Material: 302 Stainless Steel

Overall Cable

Overall Nominal Diameter: 9.195 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +75°C

Bulk Cable Weight: 119.056 Kg/Km

Max. Recommended Pulling Tension: 2001.690 N

Min. Bend Radius/Minor Axis: 63.500 mm

Flex Cycle Rating: UL1581, Sec. 1582: 15,000 Cycles @ 3.6

Crush Resistance: Compression, FOTP-41: 397 lbs.

Impact Resistance: FOTP-25: 20 Cycles @ 1.32 lbs.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

EU Directive 2011/65/EU (ROHS II): Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 07/01/2005

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

Other Specification: SMPTE 311

Flame Test

UL Flame Test: UL1666 Vertical Shaft

CSA Flame Test: FT4

IEEE Flame Test: 1202

Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes

Suggested Connectors: SMPTE 304M Connectors

Plenum/Non-Plenum

Plenum (Y/N): No

Plenum Number: 7804P

Electrical Characteristics (Overall)

METRIC MEASUREMENT VERSION

7804R Composite - SMPTE 311M HDTV Cable

Other Electrical Characteristic 1:

Auxiliary Conductors: DC Loop Resistance - 30 Ohms/km nom. (9.1 Ohms/1000ft.) Min. Insulation Resistance - 10,000 Megaohms x km Dielectric Strength - 1750 V RMS. Signal Conductors: DC Loop Resistance - 150 Ohms/km nom. (45.7 Ohms/1000 ft.) Insulation Resistance - 10,000 Megaohms/1000 ft. Dielectric Strength: 1750 V RMS

Notes (Overall)

Notes: Bend Radius is based upon (FOTP-37) @ 20°C. Plenum version and other conductor counts/diameters available by special order.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|--------------|-------|------------------------|
| 7804R B591000 | 1,000 FT | 96.000 LB | BLACK, MATTE | C | COMPOSITE CAMERA CABLE |
| 7804R B591640 | 1,640 FT | 152.520 LB | BLACK, MATTE | C | COMPOSITE CAMERA CABLE |
| 7804R B593280 | 3,280 FT | 314.880 LB | BLACK, MATTE | C | COMPOSITE CAMERA CABLE |
| 7804R B59500 | 500 FT | 47.500 LB | BLACK, MATTE | C | COMPOSITE CAMERA CABLE |

Notes:

C = CRATE REEL PUT-UP.

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