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please call

1-800-Belden1



### General Description:

Industry Standard SMPTE 311M Cable, 4 power conductors, SM fibers w/24 and 20 AWG stranded (7x32 and 19x32) TC conductors, PVC insulation, TC braid shield (80% coverage), Flamarrest® jacket.

### Usage (Overall)

Suitable Applications: Camera Cable compliant with SMPTE 311M

### Twisted Pair

Physical Characteristics  
Individual Shield

### 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
FEP	1.372	20
FEP	0.965	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

### Individual Shield

### 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:	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
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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	80.000

**Outer Jacket**

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	PVC

**Strength Member**

Overall Strength Member Diameter: .079

Strength Member Material: 302 Stainless Steel

**Overall Cable**

Overall Nominal Diameter: 6.579 mm

**Mechanical Characteristics (Overall)**

Operating Temperature Range: -20°C To +75°C

Bulk Cable Weight: 92.268 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: CMP

CEC/(UL) Specification: CMP

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): 09/23/2011

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: UL910 Steiner Tunnel

CSA Flame Test: FT6

**Suitability**

Suitability - Indoor: Yes

Suggested Connectors: SMPTE 304M Connectors

**Plenum/Non-Plenum**

Plenum (Y/N): Yes

Non-Plenum Number: 7804C, 7804R

**Electrical Characteristics (Overall)**

## METRIC MEASUREMENT VERSION

## 7804P 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. Other conductor counts/diameters available by special order.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7804P 0101000	1,000 FT	63.000 LB	BLACK		COMPOSITE CAMERA CABLE PVC
7804P 0101640	1,640 FT	101.680 LB	BLACK		COMPOSITE CAMERA CABLE PVC
7804P 0103280	3,280 FT	203.360 LB	BLACK		COMPOSITE CAMERA CABLE PVC
7804P 010500	500 FT	33.000 LB	BLACK		COMPOSITE CAMERA CABLE PVC

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