



For more Information  
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. (in.)
2	24	7x32	TC - Tinned Copper	0.024
4	20	19x32	TC - Tinned Copper	0.037

#### Insulation

Insulation Material:

Insulation Material	Dia. (in.)	AWG
FEP	0.054	20
FEP	0.038	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/1000 ft)
24 AWG	23.300
20 AWG	8.800

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
3.500

### 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
--------	-------

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: 0.259 in.

### Mechanical Characteristics (Overall)

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

Bulk Cable Weight: 62 lbs/1000 ft.

Max. Recommended Pulling Tension: 450 lbs.

Min. Bend Radius/Minor Axis: 2.500 in.

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)

## 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 0043280	3,280 FT	203.360 LB	YELLOW		COMPOSITE CAMERA CABLE PVC
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

Revision Number: 2    Revision Date: 09-09-2015

© 2017 Belden, Inc.  
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability. Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein. All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.