

7804P Composite - SMPTE 311M HDTV Cable



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 (95% 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
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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	95.000

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 +60°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)

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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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