

7804R Composite - SMPTE 311M HDTV Cable



For more Information
please call

1-800-Belden1

**General Description:**

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. (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
PVC - Polyvinyl Chloride	0.063	20
PVC - Polyvinyl Chloride	0.050	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/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:	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

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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: 0.362 in.

Mechanical Characteristics (Overall)

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

Bulk Cable Weight: 80 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:	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
MIL Order #39 (China RoHS):	Yes
Other Specification:	SMPTE 311M

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)

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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