

## 7804C Composite - SMPTE 311M HDTV Cable



For more Information  
please call

1-800-Belden1

**General Description:**

2 power conductors, SM fiber w/24 AWG and 16 AWG stranded (7x32 and 65x34) TC conductors, PVC insulation, TC braid shield (95% coverage), Belflex® jacket.

**Usage (Overall)**

Suitable Applications: SMPTE 311M HDTV Cable

**Multi Conductor****Physical Characteristics****Conductor**

AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (in.)
2	16	65x34	TC - Tinned Copper	0.059
2	24	7x32	TC - Tinned Copper	0.024

**Insulation**

Insulation Material:

Insulation Material	Dia. (in.)	AWG
PVC - Polyvinyl Chloride	0.050	24
PVC - Polyvinyl Chloride	0.093	16

Insulation Color Code Chart:

Number	Color	Description
1	Red	24 AWG
2	Gray	24 AWG
3	Black	16 AWG
4	White	16 AWG

**Electrical Characteristics**

Nom. Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/1000 ft)
24 AWG	23.300
16 AWG	4.300

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
2.800

**Fiber****Physical Characteristics**

Number of Fibers:	2
Mode Field Diameter @ 1310nm:	9.5 microns
Clad Diameter:	125 microns
Breakout Element Diameter:	.079 in.
Core-clad Concentricity Error:	< To 1 Micron
Primary Coating Material:	Acrylate
Buffer Tube Diameter:	900 microns
Breakout Element Material:	PVC - Polyvinyl Chloride
Buffer Tube Material:	PVC - Polyvinyl Chloride

Buffer Tube Color Code Chart:

Number	Color
1	Blue
2	Yellow

**Strength Member**

Strength Member Material: Aramid Yarn

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## Optical Characteristics

Maximum Attenuation @ 1310nm:	0.8 dB/km
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## 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:	.070
Strength Member Material:	302 Stainless Steel
Strength Member Insulation Material:	PVC - Polyvinyl Chloride

## Overall Cable

Overall Nominal Diameter:	0.362 in.
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## Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +60°C
Bulk Cable Weight:	81.300 lbs/1000 ft.
Max. Recommended Pulling Tension:	450 lbs.
Min. Bend Radius/Minor Axis:	2.500 in.
Flex Cycle Rating:	UL 1581, 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 &amp; 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 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
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## Electrical Characteristics (Overall)

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### Other Electrical Characteristic 1:

Auxiliary Conductors: DC Loop Resistance - 27.9 Ohms/km nom. (8.5 Ohms/1000 ft.) Min. Insulation Resistance - 10, 000 Megaohms x km Dielectric Strength - 1750 V RMS to shield. Signal Conductors: DC Loop Resistance - 150 Ohms/km nom. (45.7 Ohms/1000 ft.) Insulation Resistance - 10, 000 Megaohms x km Dielectric Strength - 1750 V RMS min. to shield

### Notes (Overall)

**Notes:** Plenum version and other conductor counts/diameters available by special order.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7804C B591000	1,000 FT	99.000 LB	BLACK, MATTE	C	COMPOSITE CAMERA CABLE
7804C B591640	1,640 FT	157.440 LB	BLACK, MATTE	C	COMPOSITE CAMERA CABLE
7804C B593280	3,280 FT	324.720 LB	BLACK, MATTE	C	COMPOSITE CAMERA CABLE

### Notes:

C = CRATE REEL PUT-UP.

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