

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

7804C Composite - SMPTE 311M HDTV Cable

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
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.
---------------------------	-----------

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 & 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
---------------	----

Electrical Characteristics (Overall)

7804C Composite - SMPTE 311M HDTV Cable

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.

Revision Number: 1 Revision Date: 08-02-2012

© 2014 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.