

7818A Composite - SMPTE 311M HDTV Cable

For more Information
please call

1-800-Belden1

**General Description:**

Harsh Environment SMPTE 311M Cable, 4 power conductors, SM fibers w/24 and 20 AWG stranded (7x32 and 19x32) TC conductors, PO insulation, TC braid shield (84% coverage), Polyurethane jacket.

Usage (Overall)

Suitable Applications: SMPTE 311M Camera Cable

Multi Conductor**Physical Characteristics****Conductor****AWG:**

# Conductors	AWG	Stranding	Conductor Material	Dia. (mm)
2	24	7x32	TC - Tinned Copper	0.610
4	20	19x32	TC - Tinned Copper	0.940

Insulation**Insulation Material:**

Insulation Material	Dia. (mm)	AWG
PO - Polyolefin	1.575	20
PO - Polyolefin	1.219	24

Insulation Color Code Chart:

Number	Color	Description
1	Red	24 AWG
2	Gray	24 AWG
3	White	20 AWG
4	White	20 AWG
5	Black	20 AWG
6	Black	20 AWG

Individual Shield**Electrical Characteristics****Nom. Conductor DC Resistance:**

Description	DCR @ 20°C (Ohm/km)
24 AWG	76.447
20 AWG	28.873

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
11.484

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

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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
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Physical Characteristics (Overall)

Conductor

Outer Shield

Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Braid	TC - Tinned Copper	85.000

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PU - Polyurethane

Strength Member

Overall Strength Member Diameter:	.085
Strength Member Material:	302 Stainless Steel

Overall Cable

Overall Nominal Diameter:	9.068 mm
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Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +75°C
Bulk Cable Weight:	102.686 Kg/Km
Max. Recommended Pulling Tension:	2001.690 N
Min. Bend Radius/Minor Axis:	63.500 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
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

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Sunlight Resistance:	Yes
Suggested Connectors:	SMPTE 304M Connectors

Plenum/Non-Plenum

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Plenum (Y/N):	No
Plenum Number:	7804P
Non-Plenum Number:	7804C, 7804R, 7804WB

Electrical Characteristics (Overall)

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
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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
7818A 0101000	1,000 FT	77.000 LB	BLACK	C	COMPOSITE-SMPTE311M HDTV CABLE
7818A 0103280	3,280 FT	242.720 LB	BLACK		COMPOSITE-SMPTE311M HDTV CABLE

Notes:

C = CRATE REEL PUT-UP.

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