Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



7804WB Composite - SMPTE 311M HDTV Cable



For more Information please call

1-800-Belden1



General Description:

Industry Standard SMPTE 311M Cable Waterblocked, 4 power conductors, 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

Twisted Pair

Physical Characteristics

Individual Shield

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
PVC - Polyvinyl Chloride	1.600	20
PVC - Polyvinyl Chloride	1.270	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/km)
24 AWG	76.447
20 AWG	28.873

Nominal Outer Shield DC Resistance:

DCR	@	20°C	(Ohm/km)
11 48	24		

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:		

Page 1 of 3 11-05-2015

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



7804WB Composite - SMPTE 311M HDTV Cable

Number	Color
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 Shield Separator Material: Water-blocking Tape

Outer Jacket

Outer Jacket Material:

Outer Jacket Material PE - Polyethylene

Strength Member

Overall Strength Member Diameter: .089 Strength Member Material: 302 Stainless Steel

Overall Cable

Overall Nominal Diameter: 9.195 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +60°C **Bulk Cable Weight:** 116.080 Kg/Km 2001.690 N Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: 88.900 mm Compression, FOTP-41: 397 lbs. **Crush Resistance:** FOTP-25: 20 Cycles @ 1.32 lbs. Impact Resistance:

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 RoHS Compliance Date (mm/dd/yyyy):	8/02/2011		
	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		
Sui	tability			
	Suitability - Indoor:	Yes		
	Suitability - Outdoor:	Yes		
	Suitability - Burial:	Yes		
	Sunlight Resistance:	Yes		
	Suggested Connectors:	SMPTE 304M Connectors		
Ple	Plenum/Non-Plenum			

No

Electrical Characteristics (Overall)

Other Electrical Characteristic 1:

Plenum (Y/N):

Auxillary Conductors: DC Loop Resistance - 30 Ohms/km nom. (9.1 Ohms/1000ft.) Min. Insullation 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

Page 2 of 3 11-05-2015

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



7804WB Composite - SMPTE 311M HDTV Cable

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
7804WB 0101000	1,000 FT	85.000 LB	BLACK		COMPOSITE CAMERA CABLE PO

Revision Number: 2 Revision Date: 03-27-2015

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Page 3 of 3 11-05-2015