Detailed Specifications & Technical Data

ENGLISH 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

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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

Individual Shield

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:			

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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

Su

Overall Nominal Diameter: 0.362 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +60°C

Bulk Cable Weight: 78 lbs/1000 ft.

Max. Recommended Pulling Tension: 450 lbs.

Min. Bend Radius/Minor Axis: 3.500 in.

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

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

No

Electrical Characteristics (Overall)

Plenum/Non-Plenum
Plenum (Y/N):

Other Electrical Characteristic 1:

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

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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
7804WB 0101000	1,000 FT	85.000 LB	BLACK		COMPOSITE CAMERA CABLE PO
7804WB 0102500	2,500 FT	205.000 LB	BLACK		COMPOSITE CAMERA CABLE PO

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

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