

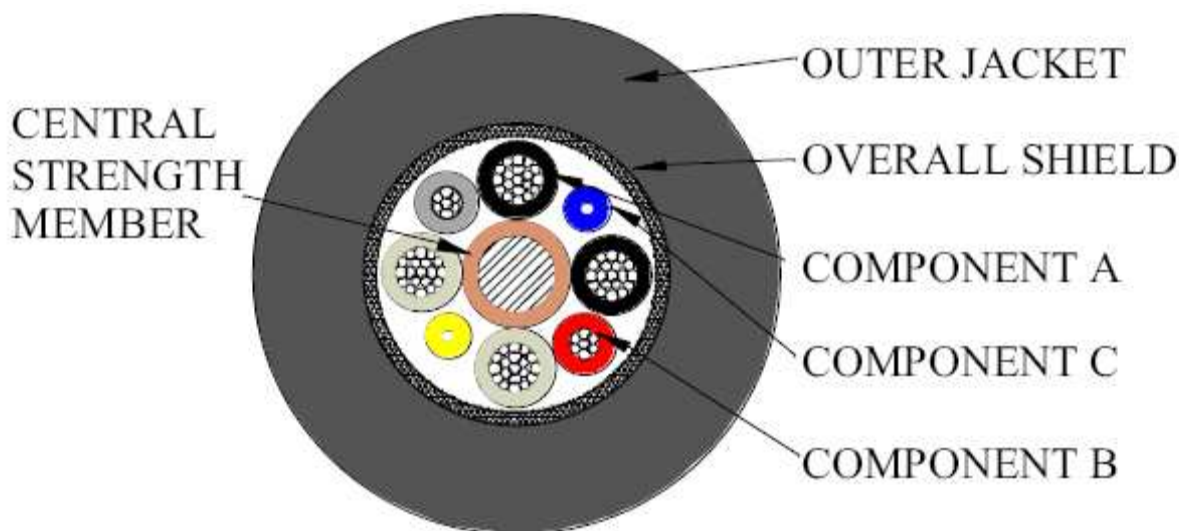
Application

- These hybrid optical fibre cables are designed to meet the SMPTE311M standard for HD television cameras and used in studio and field applications.

Benefits and Features

- SMPTE311M compliant
- Heat resistant.
- Indoor and mobile use
- Available with special put-up for easy connectorization on the drum.
- Bend Insensitive Optical Fibers acc. to ITU G.657A
- Strength member for extra durability
- Black Brilliance® outer jacket is UV-resistant
- The halogenfree versions 7804ENH complies with Flame test IEC 60332-1 and 7804ECH with IEC 60332-3-24 and IEC 60754-2 Smoke Corrosivity (pH ≥ 3.5 – Conductivity ≤ 100 µS/cm).

Construction & dimensions



1. Component A (4 Power Conductors)

Conductor: AWG 20 (19x32) Tinned copper.
Insulation: HDPE
Nominal diameter: 1.57 mm
Colours: Black, White, Black/White and White/Black

2. Component B (2 Signal Conductors)

Conductor: AWG 24 (7x32) Tinned copper.
Insulation: HDPE
Nominal diameter: 1.22 mm
Colours: Red and Grey

3. Component C (2 Tight buffered fibres)

Fiber: Single mode (9/125 – ITU G.657A).
Insulation: Thermoplastic

Diameter: 0.9 ± 0.1 mm.
Colours: Blue and Yellow

4. Central Strength Member:

Up jacketed stranded steel member
Conductor: AWG 14 Stainless steel
Insulation: HDPE
Nominal diameter: 2.16 mm
Colours: Violet

5. Cable Assembly:

All of the above components cabled to make round

6. Barrier:

Non woven foil 25% overlap

7. Shield:

Overall tinned copper braid shield
80 % min. coverage

8. Jacket:

Material: Polyurethane, FRNC/LSNH or PVC
Nom. wall: 1.50 mm
Nom. diameter: 9.2 mm.
Colours: Black

Printlegend:

PVC version:

"VIDEO BRILLIANCE(R) BY BELDEN-NL 7804E SMPTE311M COMPOSITE SINGLE MODE FIBER OPTIC CAMERA CABLE 2F9UM 2C24 4C20 SHIELDED PVC MMY" + meter marking
MM= month, YY=year

FRNC/LSNH version:

"VIDEO BRILLIANCE(R) BY BELDEN-NL 7804ENH SMPTE311M COMPOSITE SINGLE MODE FIBER OPTIC CAMERA CABLE 2F9UM 2C24 4C20 SHIELDED FRNC/LSNH IEC 60332-1 MMY"+ meter marking
MM= month, YY=year

FRNC/LSNH version IEC 60332-3-24:

TEKST:"VIDEO BRILLIANCE(R) BY BELDEN 7804ECH
SMPTE311M COMPOSITE SINGLE MODE FIBER OPTIC CAMERA
CABLE 2F9UM 2C24 4C20 SHIELDED FRNC/LSNH IEC
60332-3-24 MMY" "+ meter marking MM= month, YY=year

PUR version:

VIDEO BRILLIANCE(R) BY BELDEN-NL 7804EPU SMPTE311M COMPOSITE SINGLE MODE FIBER OPTIC CAMERA CABLE 2F9UM 2C24 4C20 SHIELDED PUR MMY"+ meter marking
MM= month, YY=year

Optical, Electrical and Mechanical specifications

Optical attenuation @ 1310 nm	Tight Average/max (dB/km) 0.35/ 0.5
Component A (20 AWG) DCR:	< 36 Ω/km
Component B (24 AWG) DCR:	< 92 Ω/km
Max. Pulling tension	750 N
Flame retardancy	7804ENH Halogen free version according to IEC 60332-1 (CEI 20-35/1) 7804ECH Halogen free version according to IEC 60332-3-24 (CEI 20-22/3)
Halogen content 7804ENH and 7804ECH	IEC 60754-1 (CEI 20-37/1)
Corrosivity of fire gasses 7804ENH, 7804ECH	IEC 60754-2 (CEI 20-37/2)
Conductivity	≤ 100 μS/cm
pH value	≥ 3,5
Smoke emission 7804ENH and 7804ECH	EN 61034 (CEI 20-37/3)
Operating temperature	-40°C to 75°C
Min. Bending radii for fibres	25mm
Installation/operation :	Max. increase 0.02 dB/turn @ 1550nm with 32 mm Max. increase 0.20 dB/turn @ 1550nm with 20 mm
Min. Bending radii cable	7xØ

Belden European Part Numbers

Type	7804ENH / 7804ECH	7804EPU	7804E
	Halogen-free	Heavy-duty	Flexible
	Studio applications	Field applications	Studio applications
	PE insulation Black FRNC/LSNH jacket	PE insulation Black PUR jacket	PE insulation Black PVC jacket
Std. delivery length	305 / 500 / 1000 m		
Cable weight	135 kg / 1000 m		

Updates

Revised:

Revision number	Description	Date	Initials
01	Introduction	21/12/07	HB
02	Add IEC 60754-2	06/06/08	SN
03	Introduce Bend Insensitive G.657A fibers	25/11/09	SN
04	Add 7804ECH version	20/09/10	HB
05	Halogen material properties and CEI added	26/04/13	RvN

Belden CDT believes this product to be in compliance with the environmental regulations EU RoHS (Directive 2002/95/EC, 27 January 2003); this is valid for all material produced after the RoHS compliant date for this product.

