

Fibre Hybrid HDTV Camera Cable - SMPTE 311 M

Event[®] **studio**

Event[®] **tour**



Application

When carrying HD-SDI video many venues and large facilities need longer distances. SMPTE 311 M is the solution that fills that requirement. Designed for high-definition (HD) cameras, this composite cable can carry multiplex audio signals, video signals and deliver power.

Cable Design

Element 1Auxillary Conductor (4x0,6mm²)
 Conductor.....Stranded tinned copper wire (19x0,20mm) 20awg
 Insulation.....High Density Polyethylene (HDPE) Ø 1,60 mm
 Core identification.....Blue, White, Black/White, White/Black

Element 2Signal Conductors (2x0,22mm²)
 Conductor.....Stranded tinned copper wire (7x0,20mm) 24awg
 Insulation.....High Density Polyethylene (HDPE) Ø 1,20 mm
 Core identification.....Red / Grey

Element 3Fibre Optic (2x9/125µm) Tight Buffered
 Fibre TypeSingle Mode 9/125µm
 Concentricity error.....≤ 1 µm
 Coating Material.....UV cross-linked Acrylate, 245 µm
 Buffer Material.....PA +silicone layer, Ø 0,9µm
 Identification.....Blue, Yellow



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Lay up and Construction

Central Element.....HDPE sheathed 19x0,30mm Steel stranded wire Ø 2,15mm
 Cable CoreElements 1, 2 and 3 around Central element Ø 5,50 mm
 Tape.....Woven Non Woven tape
 Braid.....Tinned copper wire braid, 0,10 mm. coverage 80 % (nom.)
 Outer JacketPolyurethane (PUR)

Electrical Data

Element 1 Auxiliary Conductor (4x0,6mm ²)	DC Resistance	≤	35,3	Ohm/km
	Loop Resistance	≤	43	Ohm/km
	Insulation Resistance	≥	104	MOhm *km
	Test Voltage		1750	V AC rms
	Operating Voltage	≤	300	V AC rms
Element 2 Signal Conductors (2x0,22mm ²)	DC Resistance	≤	97,5	Ohm/km
	Loop Resistance	≤	184	Ohm/km
	Insulation Resistance	≥	104	MOhm *km
	Test Voltage		1750	V AC rms
	Operating Voltage	≤	300	V AC rms
Element 3 Fibre Optic (2x9/125μ)	Braid DC Resistance	≤	20	Ohm/km
	Cut-off Wavelength		1100 - 1350	nm
	Attenuation at 1310 nm (max.)		0,42	dB/km
	Attenuation at 1550 nm (max.)		0,28	dB/km

Mechanical & Thermal Characteristics

Temperature Range	storage	-40 °C up to +75 °C
Temperature Range	operation	-30 °C up to +60 °C
Temperature Range	Installation	-30 °C up to +60 °C
Min. Bending Radius	Dynamic	15 x Ø
Min. Bending Radius	Static	10 x Ø
Tensile Strength (approx.)		750 N
Weight (approx.)		116 kg/km

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Specification

Part Number	Type
806311 M	Fibre Hybrid HDTV Camera Cable - SMPTE 311 M Polyurethane (PUR)