

EventSeries®

Fibre Hybrid HDTV Camera Cable - SMPTE 311M



Application

When carrying HD-SDI video many venues and large facilities need longer distances. SMPTE 311M 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 1	Auxiliary Conductor (4x0,6mm ²)
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 2	Signal Conductors (2x0,22mm ²)
Conductor	Stranded tinned copper wire (7x0,20mm) 24awg
Insulation	High Density Polyethylene (HDPE) Ø 1,20 mm
Core identification	Red / Grey
Element 3	Fibre Optic (2x9/125µm) Tight Buffered
Fibre Type	Single 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
Lay up and Construction	
Central Element	HDPE sheathed 19x0,30mm Steel stranded wire Ø 2,15mm
Cable Core	Elements 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 Jacket	- Polyurethane (PUR)



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Electrical Data

Element 1 Auxillary 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
	operation	-30°C up to +60°C
	Installation	-30°C up to +60°C
Min. Bending Radius	Dynamic	15 x Ø
	Static	10 x Ø
Tensile Strength (approx.)		750N
Weight (approx.)		116kg/km

Specification

Part Number	Type
806311M	Polyurethane (PUR)

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