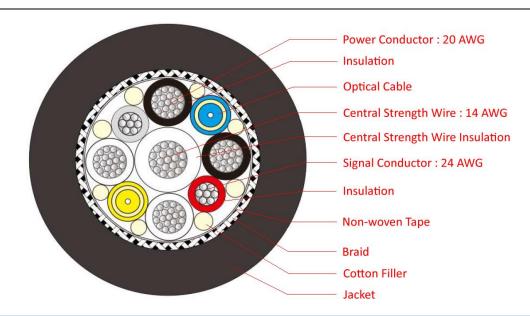


CANFORD SMPTE311 FIBRE HDTV CABLE



36-621 CANFORD SMPTE311-F FIBRE HDTV CAMERA CABLE, TPE, Flexible

DESCRIPTION

A hybrid cable containing single-mode fibre optic and copper cores, meeting the SMPTE311M standard for HDTV camera connections. The cable handles video, audio and control signals plus power between camera and base units. It is suitable for use with hybrid connectors produced by manufacturers such as Canare and Lemo. The robust thermoplastic elastomer (TPE) outer sheath is suitable for applications where added flexibility is required above that offered by polyurethane jacketed cables.

SPECIFICATIONS

Power Conductors x 4

Conductor 19/0.2mm (AWG 20), tinned copper

Diameter 1.50mm +/- 0.10mm

Insulation LDPE (Low Density Polyethylene)

Insulation

thickness Nominal 0.25mm

Colours 2x Black

2x White

Signal Conductors x 2

Conductor 7/0.2mm (AWG 24), tinned copper

Diameter 1.10mm +/- 0.05mm

Insulation LDPE (Low Density Polyethylene)

Insulation

thickness Nominal 0.20mm

Colours Red

Grey

Single Mode Fibre x 2

Fibre 9/125 – ITU G.657A Insulation Thermoplastic

Diameter 1.8 ± 0.1 mm

Colours Yellow

Blue

Central Strength Wire x 1

Conductor 19/0.30mm (AWG 16), steel

Insulation TPE

Diameter 2.10mm +/- 0.10mm

Colour White



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PaperTape

Non-woven tape Wrap \geq 25% overlap Diameter (over tape) 5.80mm +/- 0.20mm

Braid

Material tinned copper

Coverage ≥ 95%

Diameter (over braid) 6.30mm +/- 0.20mm

Jacket

Material Thermoplastic elastomer
Diameter 9.20mm +/- 0.15mm
Insulation thickness Nominal 1.40mm

Colour Black

Cable Performance Characteristics:

Mechanical

Max. Pulling tension 800 N

Min. Bend radius for fibres 25 mm (installation & operation)

Max. increase 0.02 dB/turn @1550nm (32mm)
Max. increase 0.20 dB/turn @1550nm (20mm)

Min. Bend radius for cable 65mm (7 x \emptyset of cable)

Electrical

Conductor DC resistance @ 20°C 20 AWG Power Conductors ≤35.3 Ω/km

24 AWG Signal Conductors ≤97.5 Ω /km

Overall screen DC resistance @ 20° C $\leq 20 \Omega/\text{km}$ Insulation resistance $\geq 104 \text{M}\Omega/\text{km}$ Test voltage AC/1750V/5s Operating voltage $\leq 300 \text{V}$

Optical

Optical attenuation @ 1310nm Average: 0.35 dB/km

Max: 0.50 dB/km