



CCTV Composite cable Fire Resistant 4xFO, Power 3x2.5mm², SHF2-MUD, Screened and Armoured



Standards of reference

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| IEC 60092-370 | Electrical installations in ships: Guidance on the selection of cables for telecommunication and data. |
| IEC 60092-360 | Electrical installations in ships: Insulating and sheating materials for shipboard and offshore units. |

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|---------------|--|
| CEI EN 50289 | Communication cables - Specifications for test methods |
| EN 50290-2-23 | Insulation materials for telecommunication cables |
| IEC 60811 | Insulating and sheathing materials of electric cables - Test method |
| IEC 60793 | General specifications for both multimode and single-mode optical fibres |
| IEC 60794 | General specifications for optical fibre cables |

Installation Features

Store at -40 to +70 °C

Install at -10 to +50 °C, **bend minimum** 20 times O.D.

Operate at : -40 to +90 °C, **bend minimum** : 20 times O.D.

Pull maximum : 1000N

Design

Fiber Optic, 4 cores

Fiber: 125/250µm SM or MM (see Fiber Characteristics datasheets)

Buffer: PBTP tube nominal diam 1.8mm filled with jelly, colour natural

Fire barrier: mica tape

Colour code: 1.Blue 2.Orange 3.Green 4.Brown

Protection: Glass yarns (alternatively aramide yarns)

Jacket: LSZH Orange, nominal thickness 0.7mm, nominal outer Ø 4.1mm

Power 3 conductors 2.5mm²

Conductor : stranded tinned copper 2.5mm²

Fire barrier: mica tape

Insulation : XLPE, nominal Ø 3.5mm, colour coded (1.Blue, 2.Brown, 3.Green/Yellow)

Conductor resistance @ 20°C : ≤ 8.21 Ω/km

insulation resistance @ 20°C : ≥ 1GΩ x km

Test Voltage : 2000V AC x 1 minute

Operating Voltage : 300/500V

Assembling

Cable core : power and fiber elements stranded together around a central filler and wrapped by synthetic tape

Shield : Aluminium /Polyester tape + stranded tinned copper wire 7×0,30 (cov. 80%)

Inner jacket : non-corrosive thermoplastic LSZH compound, black colour, nom. Ø 12.0mm

Armour : galvanised steel, tinned copper or bronze braid, coverage ≥80%

Outer jacket : non-corrosive compound LSZH SHF-MUD, black colour, nom. Ø 15.0mm

Marking

APS Finland - ww/yy - ARMOURED COMPOSITE CABLE 4x... + 3×2.5mm² - P/N - LSZH MUD NEK606 IEC60331 IEC60332-3-22

Cat.A - lot - CE + meter

Environmental properties and Fire Performances

Degree of acidity of gases : IEC 60754-1, IEC 60754-2 (pH value $\geq 4,3$ and Conductivity $\leq 10\mu\text{S}/\text{mm}$)

Halogen acid gas : IEC 60754-1, IEC 60754-2 (Halogen acid gas emission $\leq 0.5\%$)

Smoke Emission : IEC 61034-2, EN 50268-2 (Transmittance) $\geq 60\%$)

Toxicity of evolved gas : EN50305 9.2

Flame retardant : IEC 60332-1-2

Fire retardant : IEC 60332-3-22 Cat.A

Fire resistant: IEC 60331

Ozone resistant : IEC60811-2-1, DIN VDE 0472 part 805 B

LSZH SHF2 : IEC 60092-360

Oil resistant : IEC60811, IRM 903

MUD resistant : NEK606:2009, IEC60092-360

Water absorption : IEC60811-1-3

UV resistant : IEC60811-2-1, ASTM-D-2565-92A

Cold bend & impact : CSA C22.2

Ordering and delivery information

| Cable type | P/N | O.D [mm] | Weight [kg/km] | Packaging |
|------------------------|--------------|----------|----------------|--------------------------|
| Armoured GSWB | OCX3254xxHFU | 20.8 | 590 | 500m/1640ft drum (+/-5%) |
| Armoured GSWA | OCX3254xxHAU | 20.8 | 590 | 500m/1640ft drum (+/-5%) |
| Armoured Bronze | OCX3254xxHBU | 20.8 | 580 | 500m/1640ft drum (+/-5%) |
| Armoured Tinned Copper | OCX3254xxHTU | 20.8 | 550 | 500m/1640ft drum (+/-5%) |

XX = fiber type = OS2 = S2, OM1=M1, OM2=M2, OM3=M3, OM4=M4, OM5=M5.

Engineered by APS Team

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