

Fiber Optic Cable round 2J single-mode OS2 FTTx - 9/125 LSOH colour: black 1000m

Part no.: **FOK-W2J-SM-B-C-1**
Manufacture: **ALANTEC**
EAN code: **5901738555099**

Version: **20220810**
Lang.: **EN**



Description

The universal round fiber optic cable is used in external and internal FTTx cabling systems. Lightweight design with small diameter of 3mm, high flexibility and drag resistance, UV-resistant LSOH outer sheath, reinforced with aramid fibers.

The specially designed construction provides a very good fiber cover and in addition allows easy running and fixing of the cable directly to the walls. The G.657.A or G.652.D fibers used in addition allow for a small radius of bending. The cables are intended for open air installations and cable ducts.

FEATURES

- reinforcement with aramid fibers
- single-mode fiber optic fibers in the G.657.A standard
- LSOH flame retardant sheath
- coating resistant to UV rays

Technical Specifications

TECHNICAL DATA	
Number of fibres	2
Fiber type	G.657.A
Outer diameter	3mm
Weight	8,5 kg/km
Attenuation 1310 nm	
Attenuation 1550 nm	
Fiber coating	250 µm
Max. pulling force	800 N
Impact resistance	10 impacts, 2 Nm
Bending resistance	6 cycles (15xD)
Multiple bending resistance	10 cycles (20xD)
Bending resistance (after installation)	
Max. crush strength	500 N / 100 mm
Resistance to water penetration	3 m for 24h
Temperature after installation	-40°C up to 60°C
Temperature during installation	-10°C up to 60°C
Colour	black
Euroclass	Eca

Optical Characteristics	
Attenuation 1310nm	≤0.35 [db/km]

Optical Characteristics	
Attenuation 1383 (after H2-aging)	≤0.35 [db/km]
Attenuation 1460nm	≤0.25 [db/km]
Attenuation 1550nm	≤0.21 [db/km]
Attenuation 1625nm	≤0.23 [db/km]
Attenuation vs.Wavelength Max. a difference 1625nm 1285-1330nm, in reference to 1310nm	≤0.03 [db/km]
Attenuation vs.Wavelength Max. a difference 1525-1575nm, in reference to 1550nm	≤0.02 [db/km]
Dispersion Coefficient1285-1340nm	-3.5 to 3.5 [ps/(nm*m)]
Dispersion Coefficient	≤18 [ps/(nm*m)]
Dispersion Coefficient	≤22 [ps/(nm*m)]
Zero Dispersion Wavelength Zero Dispersion Slope (λ_0)	1300-1324 [nm]
Zero Dispersion Wavelength Zero Dispersion Slope (S_0)	≤0.092 [ps/(nm ² *km)]
Typical Value	0.086 [ps/(nm ² *km)]
PMD Maximum Individual Fibre	≤0.1 [ps/√km]
PMD Link Design Value (M=20,Q=0.01%)	≤0.06 [ps/√km]
PMD Typical Value	0.04 [nm]
Cable Cutoff Wavelength (λ_{cc})	≤1260 [μm]
Mode Field Diameter (MFD) 1310nm	8.4-9.2 [μm]
Mode Field Diameter (MFD) 1550nm	9.3-10.3
Effective Group Index of Refraction (Neff) 1310nm	1.466
Effective Group Index of Refraction (Neff) 1550nm	1.467
Point Discontinuities 1310nm	≤0.05 [dB]
Point Discontinuities 1550nm	≤0.05 [dB]

Geometrical Characteristics	
Cladding Diameter	125.0±0.7 [μm]
Cladding Non-Circularity	≤0.7 [%]
Coating Diameter	235-245 [μm]
Coating Cladding Concentricity Error	≤12.0 [μm]
Coating Non-Circularity	≤6.0 [%]
Core-Cladding Concentricity Error	≤0.5 [μm]
Curl(radius)	≥4 [m]
Delivery Length	Up to 50.4 [km/reel]

Environmental Characteristics (1310nm, 1550nm & 1625nm)	
Temperature Dependence Induced Attenuation -60°C to +85°C	≤0.05 [db/km]
Temperature-Humidity Cycling Induced Attenuation ≤0.05 -10°C to +85°C, 98% RH	≤0.05 [db/km]

Environmental Characteristics (1310nm, 1550nm & 1625nm)	
Watersoak Dependence Induced Attenuation 23°C, for 30 days	≤0.05 [db/km]
Damp Heat Dependence Induced Attenuation 85°C and 85% RH, for 30 days	≤0.05 [db/km]
Dry Heat Aging 85°C, for 30 days	≤0.05 [db/km]

Mechanical Specifications	
Proof Test	≥9.0 [N]
Proof Test	≥1.0 [%]
Proof Test	≥100 [kpsi]
Macro bend Induced Loss (10 Turns Around a Mandrel of 15 mm Radius)1550nm	≤0.25 [dB]
Macro bend Induced Loss (10 Turns Around a Mandrel of 15 mm Radius)1625nm	≤1.0 [dB]
Macro bend Induced Loss (1 Turn Around a Mandrel of 10 mm Radius)1550nm	≤0.75 [dB]
Macro bend Induced Loss (1 Turn Around a Mandrel of 10 mm Radius)1625nm	≤1.5 [dB]
Coating Strip Forcetypical average force	1.5 [N]
Coating Strip Forcepeak force	1.3-8.9 [N]
Dynamic Fatigue Parameter (nd)	≥20

Gallery / Certificates



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Standards

- PN-EN 50173
- ISO/IEC 11801

