

LAN-OPTIC

Mikro kabel 96xOS2 PE kappe



Anvendelse

Anvendes i datainstallationer ved lange strækninger, hvor der ønskes stor båndbredde over lange afstande.

Specielt egnet til blæsning eller spuling i rør også velegnet til direkte nedgravning.

Kablet afsluttes 3 m indenfor første brandcelle.

Specifikation

Konstruktion: Loose Tube

Antal fiber: 96

Fiberstørrelse: 9 my

Kappe: PE

Farve: Sort

Trækstyrke: 1000N

Standard: G657A1

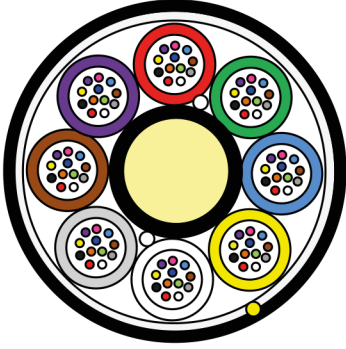
Oplægning: 4000m

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Micro Cable Specification

Cable Design

Buffer Tube Optical Fiber Cable-Non Armored-Dielectric-Dry Core- G.657A1 250 μ m Fiber



- **Central Strain-support Element (CE):** glass fiber reinforced plastic rod (FRP), with PE sheath covering when needed.
- **Buffer Tube:** PBT plastic material, containing 12 fibers and filled with a suitable water tightness compound.
- **Filler Elements:** Nature plastic rods, when needed.
- **Stranding:** loose tubes (and fillers), SZ stranded around the CE.
- **Longitudinal Water Tightness:** dry core with water swellable elements.
- **Ripcord(s):** 1 aramid ripcords under sheath.
- **Outer Sheath:** Black HDPE

Cable Specification

Cable Cores	96
No. of Tubes	8
No. of Fillers	0
Fiber Counts in Tube	12
Tube/Filler- Φ (mm)	1.4
CE- Φ (mm)	2.3
Coating- Φ (mm)	/
Thickness of Outer PE Sheath (mm)	0.5
Nominal Cable Diameter (mm)	6.3 ± 0.3
Cable Weight	33
Tensile Force (N)	1000

Cable Application

Temperature Range		Minimum Bend Radius	
Transportation & Storage	-30~+70 $^{\circ}$ C	Load	20 \times D
Operation	-20~+60 $^{\circ}$ C	Unload	10 \times D

Main Mechanical and Environmental Characteristics

Test	Test Standard	Specified Value	Acceptance Criteria
Tensile	IEC 60794-1-2-E1	Tensile Force, 1min	$\Delta\alpha$ reversible, fiber strain \leq 0.6%
Crush	IEC 60794-1-2-E3	1000N/10cm, 1min	$\Delta\alpha$ reversible, no damage
Impact	IEC 60794-1-2-E4	2J, R=300mm	$\Delta\alpha$ reversible, no damage
Repeated Bending	IEC 60794-1-2-E6	R=20D, 25N, 25cycles	$\Delta\alpha$ reversible, no damage
Bend	IEC 60794-1-2-E11	R=10D, 4turns, 3cycles	$\Delta\alpha$ reversible, no damage
Torsion	IEC 60794-1-2-E7	40N, 5cycles, +/-180 $^{\circ}$	$\Delta\alpha$ reversible, no damage
Temperature Cycling	IEC 60794-1-2-F1	-25~+70 $^{\circ}$ C, 4h	$\Delta\alpha\leq$ 0.10dB/km, no damage
Water Penetration	IEC 60794-1-2-F5	3m cable, 1m water, 24h	No water leakage

Fiber & Tube Color

Color Identification of Fiber (DIN Standard)

Number	1	2	3	4	5	6	7	8	9	10	11	12
Color	Red	Green	Blue	Yellow	White	Grey	Brown	Violet	Aqua	Black	Orange	Pink

Color Identification of Tube (DIN Standard)

Number	1	2	3	4	5	6	7	8
Color	Red	Green	Blue	Yellow	White	Grey	Brown	Violet

* if the color number is more than 12, the tube color code will be repeated again.

Cabled Fiber Performance (G.657A1 250um)

Characteristics		Acceptance Value
Attenuation	@1310nm	≤ 0.35 dB/km
	@1383nm	≤ 0.34 dB/km
	@1550nm	≤ 0.22 dB/km
	@1625nm	≤ 0.23 dB/km
Mode Field Diameter	@1310nm	8.8 ± 0.6 μ m
Dispersion	@1300 +30/-15nm	≤ 3.5 ps/(nm·km)
	@1550nm	≤ 18 ps/(nm·km)
	@1625nm	≤ 22 ps/(nm·km)
Zero-Dispersion Wavelength		1300nm ~ 1324nm
Zero-Dispersion Slope		≤ 0.092 ps/(nm ² ·km)
Cable Cutoff Wavelength λ_{cc} (nm)		≤ 1260 nm
Macrobend loss	15mm radius, 10 turn, @1550	≤ 0.25 dB
	15mm radius, 10 turn, @1625	≤ 1.0 dB
	10mm radius, 1 turn, @1550	≤ 0.75 dB
	10mm radius, 1 turn, @1625	≤ 1.5 dB
Cladding Diameter		125 ± 0.7 μ m
Coating Diameter (Uncolored)		242 ± 15 μ m
Cladding Non-circularity		$\leq 0.7\%$
Core/Cladding Concentricity Error		≤ 0.6 μ m
Proof Test		≥ 0.69 GPa (100kpsi)
Dynamic Fatigue		≥ 20