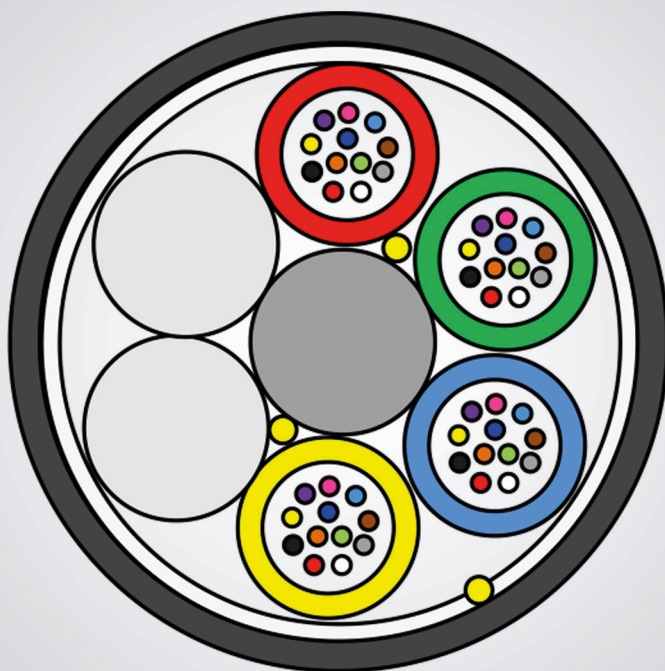


LAN-OPTIC

Mikro kabel 48xOS2 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: 48

Fiberstørrelse: 9 my

Kappe: PE

Farve: Sort

Trækstyrke: 1000N

Standard: G657A1

Oplægning: 4000m

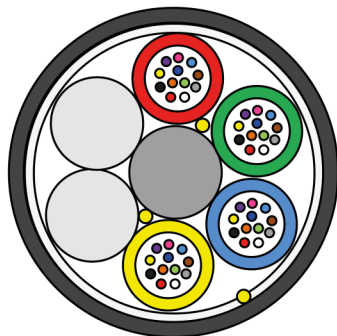
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LAN-OPTIC

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	48
No. of Tubes	4
No. of Fillers	2
Fiber Counts in Tube	12
Tube/Filler- Φ (mm)	1.4
CE- Φ (mm)	1.5
Coating- Φ (mm)	/
Thickness of Outer PE Sheath (mm)	0.5
Nominal Cable Diameter (mm)	5.4 ± 0.3
Cable Weight	26
Tensile Force (N)	500

Cable Application

Temperature Range		Minimum Bend Radius	
Transportation & Storage	-30~+70°C	Load	20×D
Operation	-20~+60°C	Unload	10×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°	$\Delta\alpha$ reversible, no damage
Temperature Cycling	IEC 60794-1-2-F1	-25~+70°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
Color	Red	Green	Blue	Yellow

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