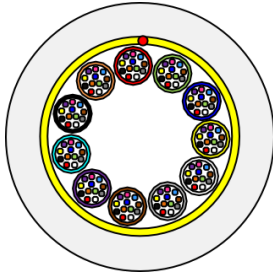


Indoor Riser Cable

Cable Design

Optical Fiber Cable-Dielectric-Single Sheath-G.657A1 Fiber



- **Subunit:** thermoplastic material, containing 12 fibers.
- **Aramid yarns:** reinforcement members
- **Ripcord:** 1 ripcord under outer sheath.
- **Outer Sheath:** White HFFR.

Cable Specification

Cable Cores		12	24	36	48	72	96	144
No. of Subunit		1	2	3	4	6	8	12
Fibers per Subunit		12						
Subunit- Φ	mm	1.4						
The Diameter of outer sheath	mm	1.2						
Max. Cable Diameter	mm	5.8	6.3	6.8	7.3	8.0	8.6	9.7
Nominal Cable Weight	Kg/km	30		40		60	65	75

Cable Application

Temperature Range		Minimum Bend Radius	
Transportation & Storage	-20~+70°C	Load	20×D
Operation	-5~+60°C	Unload	10×D

Main Mechanical and Environmental Characteristic

Test	Test Standard	Specified Value	Acceptance Criteria
Tensile	IEC 60794-1-2-E1	700N, 5min	$\Delta\alpha$ reversible, fiber strain \leq 0.33%
Crush	IEC 60794-1-2-E3	800N, 1min, 3times	$\Delta\alpha$ reversible, no damage
Impact	IEC 60794-1-2-E4	3J, R=300mm, 3times	$\Delta\alpha$ reversible, no damage
Repeated Bending	IEC 60794-1-2-E6	R=20D, 100N, 100cycles	$\Delta\alpha$ reversible, no damage
Torsion	IEC 60794-1-2-E7	100N, 5cycles, +/-180°	$\Delta\alpha$ reversible, no damage
Temperature Cycling	IEC 60794-1-2-F1	-5~+60°C, 2cyces, 8h	$\Delta\alpha$ reversible, no damage

Indoor Riser Cable

Cabled Fiber Performance (G.657A1)

Characteristics		Acceptance Value
Attenuation	@1310nm	≤0.35dB/km
	@1383nm	≤0.34dB/km
	@1550nm	≤0.21dB/km
	@1625nm	≤0.23dB/km
Mode Field Diameter	@1310nm	8.8±0.4μm
Dispersion	@1300 +30/-15nm	≤3.5ps/(nm·km)
	@1550nm	≤18ps/(nm·km)
	@1625nm	≤22ps/(nm·km)
Zero-Dispersion Wavelength		1300nm~1324nm
Zero-Dispersion Slope		≤0.092ps/(nm ² ·km)
Cable Cutoff Wavelength λ _{cc} (nm)		≤1260nm
Cladding Diameter		125±0.7μm
Macrobend loss	30mm radius, 10 turn, @1550	≤0.25dB
	30mm radius, 10 turn, @1625	≤0.10dB
	20mm radius, 1 turn, @1550	≤0.75dB
	20mm radius, 1 turn, @1625	≤1.5dB
Cladding Non-circularity		≤0.7%
Core/Cladding Concentricity Error		≤0.5μm
Proof Test		≥0.69GPa (100kpsi)
Dynamic Fatigue		≥20

Fiber & Tube Color

Color Identification of Fiber

No	1	2	3	4	5	6	7	8	9	10	11	12
Color	Red	Green	Yellow	Blue	Brown	White	Grey	Violet	Black	Orange	Aqua	Pink

Color Identification of Tube

No	1	2	3	4	5	6	7	8	9	10	11	12
Color	Red	Green	Yellow	Blue	Brown	White	Grey	Violet	Black	Orange	Aqua	Pink

Sheath Marking

The outer sheath is marked in 1 meter intervals as follows:

In Accordance with Custom's Requirement

Delivery Length

Standard delivery length will be 1 or 2km.