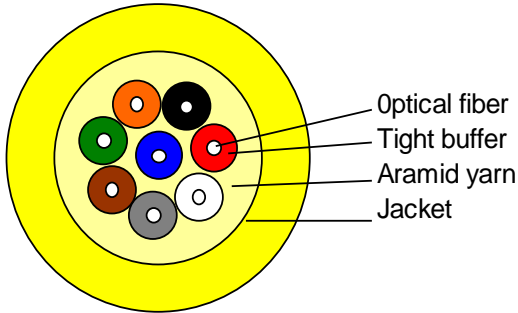


EVI-GJPFJH-4/8

1. Cable cross-section



2. Cable Specification

2.1 Introduction

Multi fiber distribution cable use several tight buffer fibers as optical communication medium, the tight buffer fiber wrapped with a layer of aramid yarn as strength member units, and the cable is completed with LSZH(low smoke, Zero halogen, Flame-retardant) jacket.

2.2 Tight buffer color code

Fiber color in each tube starts from No. 1 Blue.

NO.	1	2	3	4	5	6	7	8
Tight buffer color	Blue	Orange	Green	Brown	Gray	White	Red	Black

2.3 Optical fiber type and properties

Item	Unit	Specification	
		G. 652D	
Mode field diameter	1310nm	μm	9.2 ± 0.4
	1550nm	μm	10.4 ± 0.8
Cladding diameter	μm	125.0 ± 0.7	
Cladding non-circularity	%	≤ 1.0	
Core concentricity error	μm	≤ 0.5	
Coating diameter	μm	245 ± 5	
Coating/cladding concentricity error	μm	≤ 12	
Cable cut-off wavelength	nm	≤ 1260	
Attenuation Coefficient	1310nm	dB/km	≤ 0.35
	1550nm	dB/km	≤ 0.21
Proof stress level	kpsi	≥ 100	

Other parameters meet standard ITU-T G.652

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2.4 Cable structure and parameter

Item		Parameters	
No. of fibers	count	4	8
Tight buffer fiber	Diameter	0.9±0.05mm	
	Material	LSZH	
Strength member	Material	Aramid yarn	
Outer jacket	Diameter	4.7±0.2mm	5.8±0.2mm
	Material	LSZH	
	Color	Yellow	
	Thickness	0.8±0.1mm	0.9±0.1mm
Tensile performance	Short term	440N	
	Long term	200N	
Crush	Short term	1000N/100mm	
	Long term	500N/100mm	
Cable attenuation		≦ 0.4dB/km at 1310nm, ≦ 0.3 dB/km at 1550nm	
Cable weight (Approx.)		20.0 kg/km	30.0 kg/km

3. Characteristic of Optical Cable

3.1 Min. bending radius for installation

Static: 10 x cable diameter

Dynamic: 20 x cable diameter

3.2 Application temperature range

Operation: -20°C ~ +70°C

Installation: -20°C ~ +70°C

Storage/transportation: -20°C ~ +70°C

3.3 Main mechanical & environmental performance test

	Test Method	Acceptance Condition
Tensile Strength IEC 60794-1-2-E1	- Load: Short term tension - Length of cable: ≥ 50m - Load time: 5min	- Fiber strain ≤ 0.5% - No fiber breakage and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load: Short term crush - Load time: 1min	- No fiber breakage and no sheath damage.
Impact Test IEC 60794-1-2-E4	- Points of impact: 3 - Times of per point: 1 - Impact energy: 1J	- No fiber breakage and no sheath damage.
Repeated Bending IEC 60794-1-2-E6	- Bending radius: 20 x OD - No. of cycle: 100	- No fiber breakage and no sheath damage.
Torsion	- Length: 1m	- No fiber breakage and no sheath damage.

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IEC 60794-1-2-E7	- Twist angle: $\pm 180^\circ$ - No. of cycle: 10	
Cable bend IEC 60794-1-2-E11	-Diameter of mandrel: 20 x OD -Number of turns: 6 -Number of cycles: 10	- No fiber breakage and no sheath damage.
Temperature Cycling IEC 60794-1-2-F1	- Temperature: $-20^\circ\text{C} \sim +70^\circ\text{C}$ - Time of each step: 8h - Number of cycle: 2	-Fiber additional attenuation should be $\leq 0.6\text{dB/km}$; -There shall be no damage to the cable elements under visual inspection.

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