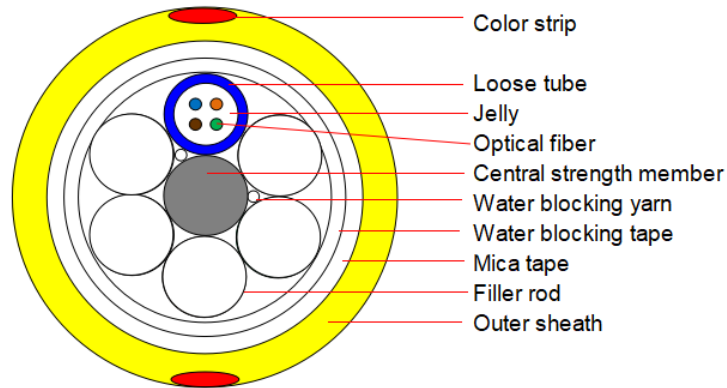


## Specifications of 4-C Single mode fiber cable Model Type: GYFZY

### 1. Cable cross-section



### 2. Cable Specification

#### 2.1 Introduction

Loose tube construction, tubes jelly filled, elements (tubes and filler rods) and water blocking yarns laid up around non-metallic central strength member, polyester yarns used to bind the cable core, water blocking tape and mica tape, dry core, then LSZH outer sheath with two red strips.

#### 2.2 Fiber color code

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

1	2	3	4	5	6
Blue	Orange	Green	Brown	Grey	White

#### 2.3 Color codes for loose tube & filler rod. Tube color starts from No. 1 Blue.

1	2
Blue	Orange

#### 2.4 Cable structure and parameter

SN	Item	Unit	Value	
			GYFZY-4B1	GYFZY-12B1
		Model:	GYFZY-4B1	GYFZY-12B1
1	No. of fibers	count	4	12
2	No. of fibers per tube	count	4	6
3	No. of elements	count	6	
4	Tube material		PBT	
5	Cable diameter( $\pm 5\%$ )	mm	10.5	
6	Cable weight( $\pm 10\%$ )	kg/km	109	
7	Short term tension	N	2000	
8	Short term crush	N/100mm	1000	

### 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: -40°C ~ +70°C

Installation: -5°C ~ +60°C

Storage/transportation: - 40°C ~ +70°C

#### 3.3 Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 60794-1-2-E1	- Load: Short term tension - Length of cable: about 50m - Load time: 1min	- Fiber strain $\leq 0.6\%$ - No fiber break and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load: Short term crush - Load time: 1min	- Loss change $\leq 0.1\text{dB}@1550\text{nm}$ - No fiber break and no sheath damage.

### 4. Characteristic of Optical Fiber

#### *G652D fiber information*

Mode field diameter (1310nm):	9.2 $\mu\text{m}\pm 0.4\mu\text{m}$
Mode field diameter (1550nm):	10.4 $\mu\text{m}\pm 0.8\mu\text{m}$
Cut off wavelength of cabled fiber ( $\lambda_{cc}$ ):	$\leq 1260\text{nm}$
Attenuation at 1310nm:	$\leq 0.36\text{dB/km}$
Attenuation at 1550nm:	$\leq 0.22\text{dB/km}$
Bending loss at 1550nm (100 turns, 30mm radius):	$\leq 0.05\text{dB}$
Dispersion in the range 1288 to 1339nm:	$\leq 3.5\text{ps}/(\text{nm}\cdot\text{km})$
Dispersion at 1550nm:	$\leq 18\text{ps}/(\text{nm}\cdot\text{km})$
Dispersion slope at zero dispersion wavelength:	$\leq 0.092\text{ps}/(\text{nm}^2\cdot\text{km})$