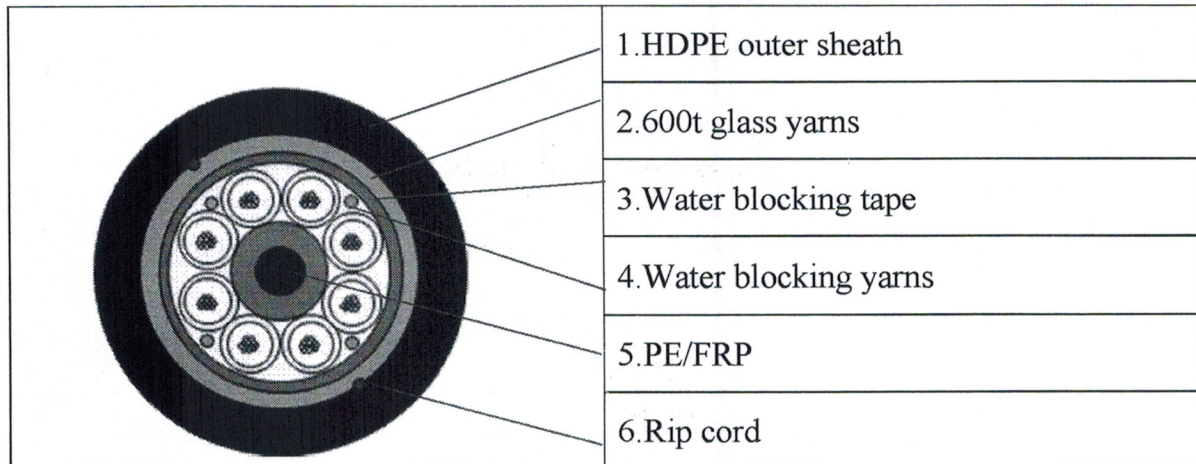


## 1.Cable Drawing (Cable type:GYFHT6Y-48B1.3+48B4)



## 2.Construction And Properties

Physical	Fiber	G652D/G655D
	No.s of loose tube/Filler	8/0
	Fiber No. per tube	12
	Central strength member diameter (mm)	$\geq 2.0$
	Cable OD (mm)	11.4 $\pm$ 5%
	Cable weight (kg/km)	107 $\pm$ 15%
	Transport and storage temperature range	-40 $^{\circ}$ C+70 $^{\circ}$ C
Mechanical	Max tensile load(short term)	1500N
	Crush resistance(short term)	1000N
	Minimal installation bending radius	20xD
	Minimal operation bending radius	10xD

### 3、 Fibers And Tubes Color Code:

Loose tubes	No.	1	2	3	4	5	6
	Color	blue	orange	green	brown	grey	white
	No.	7	8	9	10	11	12
	Color	red	black	yellow	violet	pink	aqua
Fibers	No.	1	2	3	4	5	6
	Color	blue	orange	green	brown	grey	white
	No.	7	8	9	10	11	12
	Color	red	black	yellow	violet	pink	aqua

Note:

(1)13-24 th loose tube shall have single stripe marking,white stripe for black loose tube&rest all with black stripe.

(2)25-36 th loose tube shall have double stripe marking,white stripe for black loose tube&rest all with black stripe.

### 4、 Test Requirements For Optical Fiber Cable

Optical fiber cable shall be accordance with applicable standard of optical fiber cable and requirement of customer. The following test items shall be carried out according to corresponding reference.

Tests of Completed optical fiber cable		
<b>1</b>	Impact tes	IEC-60794
<b>2</b>	Crush test	IEC-60794
<b>3</b>	Water penetration(0.1bar/24h)	≤1m

## 5、Fiber Parameters

### G. 652D Type

The optical fiber shall be made of high pure silica and germanium doped silica. UV curable acrylate material is applied over fiber cladding as optical fiber primary protective coating. The detail data of optical fiber performance are shown in the following table:

Category	Description	Specifications
Optical Characteristics	Attenuation Coefficient: at 1310 nm Max : at 1550 nm Max :	$\leq 0.35$ dB/km $\leq 0.21$ dB/km
	Chromatic Dispersion: at 1310nm at 1550nm	$\leq 3.5$ ps/nm·km $\leq 18$ ps/nm·km
	Attenuation Non-uniformity: at 1310nm at 1550 nm	$\leq 0.03$ dB $\leq 0.03$ dB
	Point Discontinuity: at 1310nm at 1550 nm	$\leq 0.1$ dB $\leq 0.1$ dB
	Polarization Mode Dispersion (PMD)	$\leq 0.2$ ps/√km
	Cable Cutoff Wavelength ( $\lambda_{cc}$ )	$\leq 1260$ nm
	Geometrical Characteristics	Mode Field Diameter : at 1310nm at 1550 nm
Cladding Diameter		$125 \pm 0.7$ μm
Mode field (Core/clad) concentricity error		$\leq 0.5$ μm
Cladding Non-Circularity		$\leq 0.7\%$
Coating Diameter		$245 \pm 5$ μm
Coating / Cladding Concentricity error		$\leq 0.6$ μm
Coating-Cladding Concentricity		$\leq 12$ um
Mechanical Characteristics	Proof Test	$\geq 1.0\%$ , 1 sec. $\geq 0.69$ Gpa (100kpsi)
Environmental Characteristics	Temperature Cycling Induced Attenuation: at 1550nm and 1625 nm (-40°C to +70°C)	0.05dB/km
	Macro bending Loss : at 1550nm and 1625 nm (100 turns; $\Phi$ 60 mm)	$\leq 0.1$ dB

### G. 655D Type

The optical fiber shall be made of high pure silica and germanium doped silica. UV curable acrylate material is applied over fiber cladding as optical fiber primary protective coating.

The detail data of optical fiber performance are shown in the following table:

Category	Description	Specifications
<b>Optical Characteristics</b>	Attenuation Coefficient: at 1550 nm at 1625 nm	$\leq 0.35$ dB/km $\leq 0.4$ dB/km
	Chromatic Dispersion: at 1550 nm at 1625 nm	2.0- 6.0 ps/nm·km 4.5 - 11.2 ps/nm·km
	Polarization Mode Dispersion (PMD)	$\leq 0.2$ ps/√km
	Cable Cut off Wavelength ( $\lambda_{cc}$ )	$\leq 1450$ nm
<b>Geometrical Characteristics</b>	Mode Field Diameter : at 1550 nm	8-11 $\mu\text{m} \pm 0.6\mu\text{m}$
	Cladding Diameter	125 $\pm 1.0\mu\text{m}$
	Mode field (Core/clad) concentricity error	$\leq 0.6$ $\mu\text{m}$
	Cladding Non-Circularity	$\leq 1.0\%$
	Coating Diameter	245 $\pm 10\mu\text{m}$
<b>Mechanical Characteristics</b>	Proof Test	$\geq 1.0\%$ , 1 sec. $\geq 0.69$ Gpa (100kpsi)
<b>Environmental Characteristics</b>	Macro bending Loss : at 1625 nm (100 turns; $\Phi$ 60 mm)	$\leq 0.1$ dB

## 6、 Packing And Drum For Optical Fiber Cable

Optical fiber cable shall be wound on a non-returnable wooden drum or metal drum. Both ends of optical fiber cable shall be securely fastened to drum and sealed with a shrinkable cap. The required marking shall be printed with a weather-proof material on the outsides of drum according to customer's requirement.

