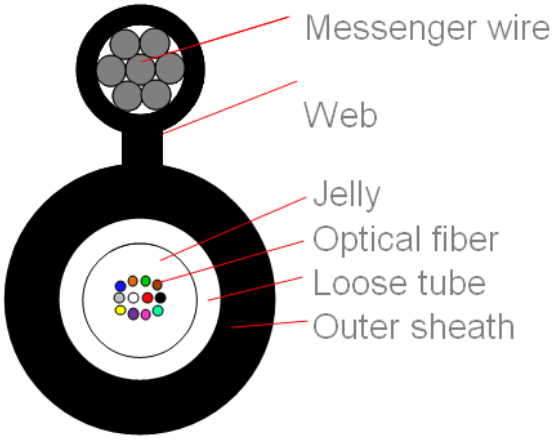
GYXTC8Y

1. Cable cross-section



2. Cable Specification

2.1 Introduction

Central single loose tube construction, jelly compound filled, and PE outer sheath with steel messenger wires combined.

2.2 Color code

The tube color is natural. Fiber color in the tube starts from No. 1 Blue.

No.	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	Gray	White
No.	7	8	9	10	11	12
Color	Red	Black	Yellow	Purple	Pink	Aqua
No.	13	14	15	16	17	18
Color	S100+Blue	S100+Orange	S100+Green	S100+Brown	S100+Slate	S100+White
No.	19	20	21	22	23	24
Color	S100+Red	S100+Natural	S100+Yellow	S100+Violet	S100+Pink	S100+Aqua

Note: “S100” means Ring Mark and interval 100 mm black circles.

2.3 Cable structure and parameter

SN	Item	Unit	Value	
1	No. of fibers	count	2～12	16/24
2	Messenger wire	mm	7*1.0	7*1.0
3	Cable diameter（±5%）	mm	5.1	5.7
4	Cable height	Mm	11.7	12.3
5	Cable weight（±10%）	kg/km	80	86
6	Short term tension	N	2000	2000
7	Short term crush	N/100mm	1000	1000

Note: Mechanical sizes are nominal values.

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℃ ~ +60℃

Installation: -10℃ ~ +60℃

Storage/transportation: - 40℃ ~ +60℃

3.3 Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 794-1-2-E1	- Load: Short term tension - Length of cable: about 50m	- Fiber strain ≤ 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 ≤ 0.1dB@1550nm - No fiber break and no sheath damage.
Impact Test IEC 60794-1-2-E4	- Points of impact: 3 - Times of per point: 1 - Impact energy: 10J - Striking surface radius: 300mm	- Loss change ≤ 0.1dB@1550nm - No fiber break and no sheath damage.
Repeated Bending IEC 60794-1-2-E6	- Bending radius: 20 x OD - No. of cycle: 30	- Loss change ≤ 0.1dB@1550nm - No fiber break and no sheath damage.
Torsion IEC 60794-1-2-E7	- Length: 1m - Twist angle: ±180° - No. of cycle: 10	- Loss change ≤ 0.1dB@1550nm - No fiber break and no sheath damage.
Cable bend IEC 60794-1-2-E11	- Diameter of mandrel:20 x OD - Number of turns:4 - Number of cycles:3	- Loss change ≤ 0.1dB@1550nm - No fiber break and no sheath damage.
Water Penetration IEC 60794-1-2-F5B	- Height of water: 1m - Sample length: 3m - Time: 24h	- No water leak from the cable core of the opposite end
Temperature Cycling IEC 60794-1-2-F1	- Temperature: -40°C~+60°C - Time of each step: 12h - Number of cycle: 2	- Loss change ≤ 0.05dB/km@1550nm - No fiber break and no sheath damage.

4. Characteristic of Optical Fiber

G652D fiber information

Mode field diameter (1310nm):	9.2μm±0.4μm
Mode field diameter (1550nm):	10.4μm±0.8μm
Cut off wavelength of cabled fiber (λ_{cc}):	≤1260nm
Attenuation at 1310nm:	≤0.36dB/km
Attenuation at 1383nm:	≤0.35dB/km
Attenuation at 1550nm:	≤0.22dB/km
Bending loss at 1550nm (100 turns, 30mm radius):	≤0.05dB

Dispersion in the range 1288 to 1339nm:	≤3.5ps/ (nm•km)
Dispersion at 1550nm:	≤18ps/ (nm•km)
Dispersion slope at zero dispersion wavelength:	≤0.092ps/ (nm^2•km)
Polarization mode dispersion link value:	≤0.2ps/√km