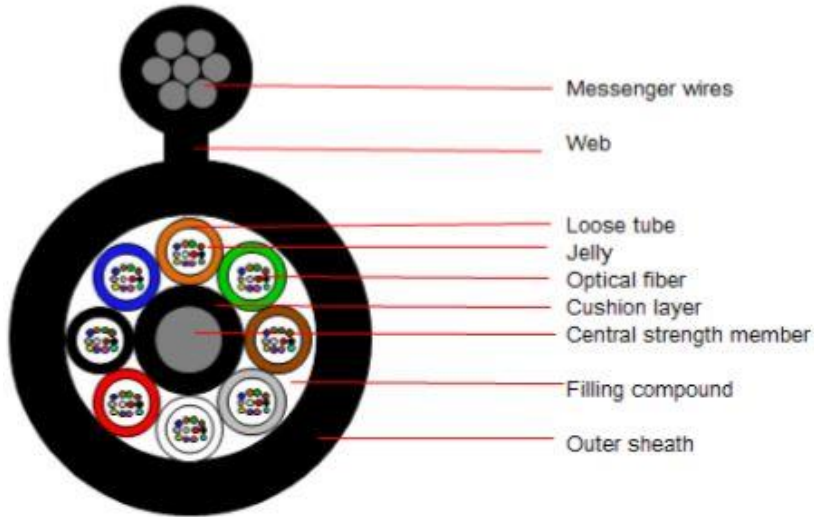


GYFTC8Y



Characteristic of Optical Cable

- Min. bending radius for installation
 - Static: 10 x cable diameter
 - Dynamic: 20 x cable diameter
- Application temperature range
 - Operation: -30°C ~ +60°C
 - Installation: -10°C ~ +50°C
 - Storage/transportation: -30°C ~ +60°C

Cable Specification:

Loose tube construction, tubes jelly filled, elements (tubes and filler rods) laid up around non-metallic central strength member, polyester yarns used to bind the cable core, compound filled in the apertures of the cable core, PE outer sheath with messenger wires combined.

Cable structure and parameter

SN	Item	Unit	Value			
1	No. of fibers	count	96	96	144	144
2	No. of fibers per tube	count	12	12	12	12
3	No. of elements	count	8	8	12	12
4	Messenger wire diameter	mm	7 x 1.2	7 x 1.4	7 x 1.32	7 x 1.57
5	Web size approx.	mm	2.6 x 1.9	2.6 x 1.9	2.6 x 1.9	2.6 x 1.9
6	Cable diameter (±5%)	mm	11.9	11.9	14.9	14.9
7	Cable height (±5%)	mm	19.9	20.5	23.3	24.0
8	Cable weight (±10%)	kg/km	209	235	290	325
9	Short term tension	KN	8	10	9.5	13.6
10	Short term crush	N/100mm		100		
11	Max Span	M	100	150	100	150
12	Ice thickness	mm		0		
13	Wind speed	m/s		30		

Fiber color code and Color codes for loose tube & filler rod

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Gray	White	Red	Black	Yellow	Purple	Pink	Aqua

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.

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 (λ_{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):	$\leq 0.1\text{dB}$
Zero dispersion wavelength:	1300nm-1324nm
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:	$\leq 0.092\text{ps}/(\text{nm}^2\cdot\text{km})$