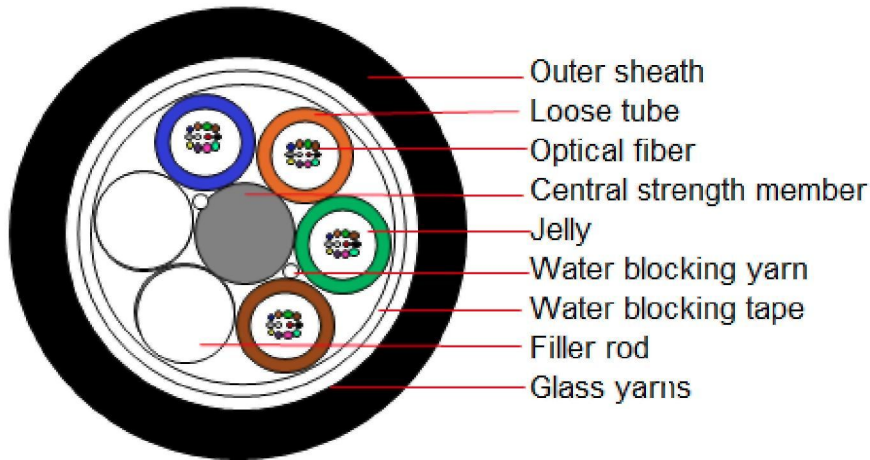


GYFY LTC-RP 2,5KN

1. Cable cross-section



2. Cable Specification

2.1 Introduction:

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, water blocking tape wrapped the cable core, glass yarn reinforced and PE outer sheath.

2.2 Fiber color code

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

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

2.3 Color codes for loose tube & filler rod:

Tube color starts from No. 1 Blue. If there are fillers, the color is nature.

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

2.4 Cable structure and parameter:

SN	Item	Unit	Value	
1	No. of fibers	count	6/12/24	48
2	No. of fibers per tube (MAX.)	count	4	12
3	No. of elements	count	6	6
4	Cable diameter	mm	10.9	12.4
5	Cable weight	kg/km	93	112
6	Short term tension	N	2500	
7	Short term crush	N/100mm	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

Application temperature range:

Operation: -40°C ~ +60°C
 Installation: -10°C ~ +60°C
 Storage/transportation: -40°C ~ +60°C

3.2 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 $\leq 0.33\%$ - 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.
Impact Test IEC 60794-1-2-E4	- Points of impact: 3 - Times of per point: 1 - Impact energy: 3J	- Loss change $\leq 0.1\text{dB}@1550\text{nm}$ - No fiber break and no sheath damage.
Repeated Bending IEC 60794-1-2-E6	- Bending radius: 20 x OD - No. of cycle: 25	- Loss change $\leq 0.1\text{dB}@1550\text{nm}$ - No fiber break and no sheath damage.
Torsion IEC 60794-1-2-E7	- Length: 1m - Twist angle: $\pm 180^\circ$ - No. of cycle: 10	- 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 μm \pm 0.4 μm
Mode field diameter (1550nm):	10.4 μm \pm 0.8 μm
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):	$\leq 0.05\text{dB}$
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:	$\leq 0.092\text{ps}/(\text{nm}^2\cdot\text{km})$

G657A fiber information

Mode field diameter (1310nm):	8.4~8.8 μm \pm 0.4 μm
Mode field diameter (1550nm):	10.4 μm \pm 0.8 μm
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 (1 turns, 10mm radius):	$\leq 0.75\text{dB}$
Dispersion in the range 1288 to 1339nm:	$\leq 3.5\text{ps}/(\text{nm}\cdot\text{km})$
Dispersion at 1550nm:	$\leq 18\text{ps}/(\text{nm}\cdot\text{km})$
Zero dispersion wavelength:	1300~1324nm
Dispersion slope at zero dispersion wavelength:	$\leq 0.092\text{ps}/(\text{nm}^2\cdot\text{km})$