

GYXTC8Y – Mini Figure 8



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 ~ +70°C
 - Installation: -10°C ~ +60°C
 - Storage/transportation: -40°C ~ +70°C

Cable Specification:

Central single loose tube construction, jelly compound filled, aramid yarn and water blocking yarn, PE outer sheath with a steel messenger wire combined.

Cable structure and parameter

SN	Item	Unit	Value	
1	No. of fibers	count	6/12	24
2	Messenger wire	mm	1.6	
3	Cable diameter(±5%)	mm	5.2	5.8
4	Cable height (±10%)	Mm	10.2	10.8
5	Cable weight (±10%)	Kg/Km	48	53
6	Short term tension	N	1000	
7	Short term crush	N/100mm	800	

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
13	14	15	16	17	18	19	20	21	22	23	24
Blue	Orange	Green	Brown	Gray	White	Red	Black	Yellow	Purple	Pink	Aqua
100	100	100	100	100	100	100	100	100	100	100	0

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	- 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):	$\leq 0.05\text{dB}$
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:	$\leq 0.092\text{ps}/(\text{nm}^2\cdot\text{km})$