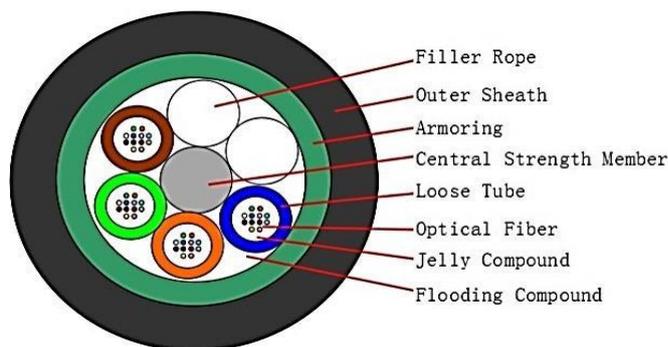


## Cable Design:



## Technical Data:

No. of cable		24	48
Fiber Model		G.652D	
Design (Strength Member + Tube & Filler)		1+6	
Central Strength Member	Material	Steel Wire	
	Diameter (±0.05) mm	2	
Loose Tube	Material	PBT	
	Diameter (±0.06) mm	2	
	Thickness (±0.03) mm	0.32	
	The Max. Core NO./Tube	12	
Water Blocking layer (Material)		Flooding Compound	
Armoring	Material	Steel Strip	
	Thickness (+0.03) mm	0.2	
Outer Sheath	Material	MDPE	
	Thickness (±0.2) mm	2	
Cable Diameter (±0.2) mm		11	
Cable Weight (±5) kg/km		131	
Min. Bending Radius	Without Tension	10.0×Cable-φ	
	Under Maximum Tension	20.0×Cable-φ	
Temperature Range ( °C )	Installation	-20~+60	
	Transport & Storage	-40~+70	
	Operation	-40~+70	

## Fiber Colors:

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	Violet	Pink	Aqua

## Loose Tube:

No.	1	2	3	4
Color	Blue	Orange	Green	Brown



**The properties of single mode optical fiber (ITU-T Rec. G.652.D):**

Item	Specification
Fiber type	Single mode
Fiber material	Doped silica
Attenuation coefficient	
@ 1310 nm	□ 0.35 dB/km
@ 1383 nm	□ 0.30 dB/km
@ 1550 nm	□ 0.21 dB/km
@ 1625 nm	□ 0.24 dB/km
Point discontinuity	□ 0.05 dB
Cable cut-off wavelength	□ 1260 nm
Zero-dispersion wavelength	1300 ~ 1324 nm
Zero-dispersion slope	□ 0.092 ps/(nm <sup>2</sup> .km)
Chromatic dispersion	
@ 1288 ~ 1339 nm	□ 3.5 ps/(nm. km)
@ 1271 ~ 1360 nm	□ 5.3 ps/(nm. km)
@ 1550 nm	□ 18 ps/(nm. km)
@ 1625 nm	□ 22 ps/(nm. km)
PMDQ (Quadrature average*)	□ 0.2 ps/km <sup>1/2</sup>
Mode field diameter @ 1310 nm	9.2±0.4 μm
Core / Clad concentricity error	□ 0.5 μm
Cladding diameter	125.0 □ 0.7 μm
Cladding non-circularity	□ 1.0%
Primary coating diameter	245 □ 10 μm
Proof test level	100 kpsi (=0.69 Gpa), 1%
Temperature dependence 0°C~+70°C @ 1310 & 1550nm	□ 0.1 dB/km

**Application:**

NO.	Item	Requirement
1	Allowable Tensile Strength	Short Term
		1500 N
2	Allowable Crush Resistance	Long Term
		600 N
2	Allowable Crush Resistance	Short Term
		1000 (N/100mm)
2	Allowable Crush Resistance	Long Term
		300 (N/100mm)

**Main mechanical & environmental performance test:**

Item	Test Method	Acceptance Condition
Tensile Strength IEC 794-1-2-E1	- Load: Short term tension	- Fiber strain □ 0.33%
	- Length of cable: about 50m	- Loss change □ 0.1 dB @1550 nm
		- No fiber break and no sheath damage.
Crush Test	- Load: Short term crush	- Loss change □ 0.05dB@1550nm



IEC 60794-1-2-E3	- Load time: 1min	- No fiber break and no sheath damage.
Impact Test IEC 60794-1-2-E4	- Points of impact: 3	- Loss change $\leq$ 0.1dB@1550nm
	- Times of per point: 1	- No fiber break and no sheath damage.
	- Impact energy: 5J	
Temperature Cycling Test YD/T901-2001-4.4.4. 1	- Temperature step:	
	+20oC→-40oC→+70oC	
	→+20oC	- Loss change $\leq$ 0.05 dB/km@1550 nm
	- Time per each step: 12 hrs	- No fiber break and no sheath damage.
	- Number of cycle: 2	

### Sheath Marking:

The optical fiber drop cable shall have sequentially numbered length marking at intervals of approximately 1 meter. The starting number of ordering length for any coil shall begin with zero meter. The accuracy of the measurement of length marking shall be held within the limits of  $\pm 1\%$ .

- Manufacturer's name
- Type of wire
- Year and month of manufacture
- Length marking each meter along the wire

ATOP	GYTS- $\times\times$ B1	2019	=0001
(a)	(b)	(c)	(d)

m=

### Part Number:

Items Name	Part Number
24 core Armored Cable	24F-GYTS-SM-AT
48 core Armored Cable	48F-GYTS-SM-AT

