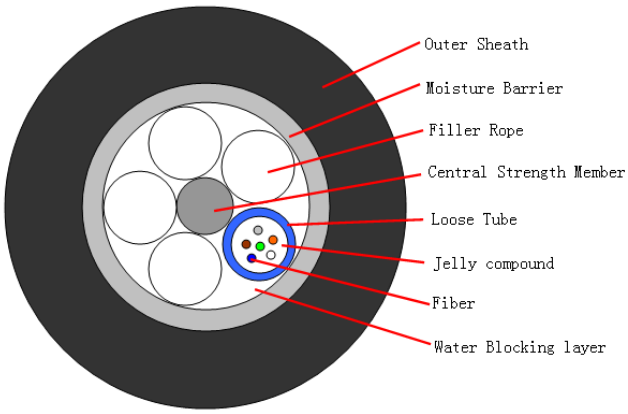
GYTA Stranded Loose Tube Non-armored Cable

Description

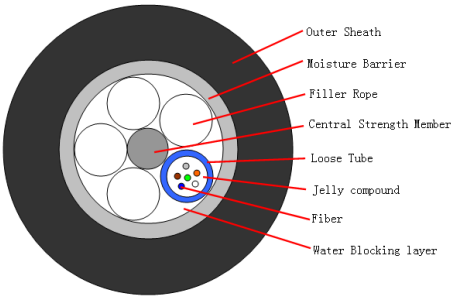
The fibers, 250μm, are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. A steel wire, sometimes sheathed with polyethylene (PE) for cable with high fiber count, locates in the center of core as a metallic strength member. Tubes (and fillers) are stranded around the strength member into a compact and circular cable core. An Aluminum Polyethylene Laminate (APL) is applied around the cable core, which is filled with the filling compound to protect it from water ingress. Then, the cable is completed with a PE sheath.

Feature

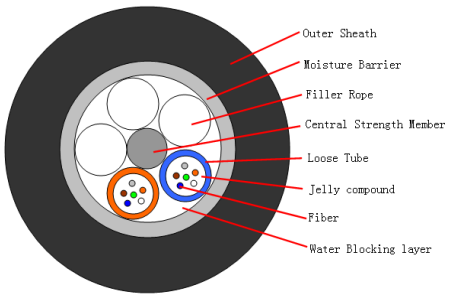
- Good mechanical and temperature performance
- High strength loose tube that is hydrolysis resistant
- Special tube filling compound ensure a critical protection of fiber
- Specially designed compact structure is good at preventing loose tubes from shrinking
- PE sheath protects cable from ultraviolet radiation
- The following measures are taken to ensure the cable watertight:
  ---Steel wire used as the central strength member
  ---Loose tube filling compound
  ---100% cable core filling
  ---APL moisture barrier



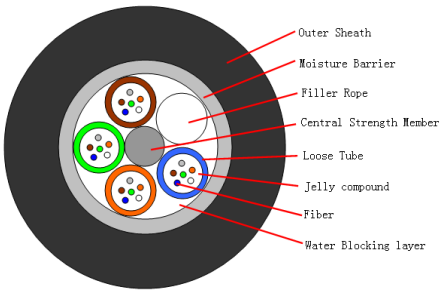
Technical Data Sheet



GYTA 6 core



GYTA 12 core

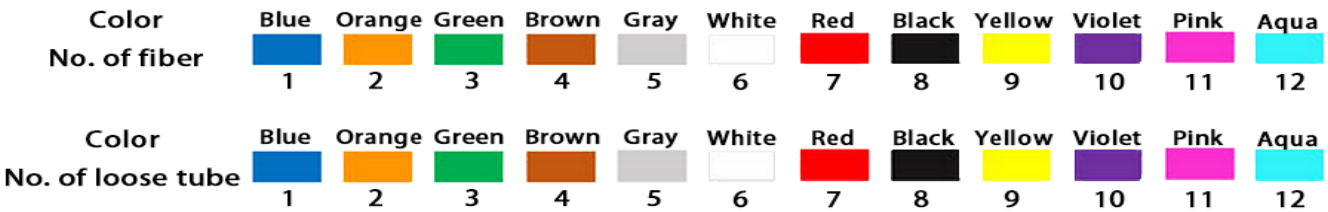


GYTA 24 core

No. of cable	6	12	24
Fiber Model	G.652D		
Design(StrengthMember+Tube&Filler)	1+5		

Central Strength Member	Material	Steel Wire
	Diameter（±0.05）mm	1.5
Loose Tube	Material	PBT
	Diameter（±0.06）mm	1.8
	Thickness（±0.03）mm	0.32
	The Max.Core NO./Tube	6
Filler Rope	Material	LDPE
	Color	White
	Diameter（±0.06）mm	1.8
Water Blocking layer（Material）		Flooding Compound
Moisture Barrier	Material	Aluminum Tape
	Thickness（±0.03）mm	0.20
Outer Sheath	Material	MDPE
	Thickness（±0.2）mm	1.8
Cable Diameter（±0.2）mm		9.5
Cable Weight（±10）kg/km		90
Min. bending radius	Without Tension	10.0×Cable -φ
	Under Maximum Tension	20.0×Cable -φ
Temperature range （℃）	Installation	-20~+60
	Transport&Storage	-40~+70
	Operation	-40~+70

Fiber&Loose tube colors



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

G.652D Single-mode fiber characteristics			
Characteristic	**Condition**	**Data**	**Unit**
Optical properties			
Attenuation	1310nm 1383nm 1550nm	≤0.35 ≤0.34 ≤0.21	dB/km dB/km dB/km

	1625nm	≤0.24	dB/km
Relative wavelength attenuation @1310nm @1550nm	 1285～1330nm 1525～1575nm	 ≤0.03 ≤0.02	 dB/km dB/km
Dispersion in the wavelength range of	1550nm	≤18	ps/(nm.km)
Zero dispersion wavelength	—	1312±10	nm
A zero-dispersion slope zero-dispersion slope typical value	—	≤0.092 0.086	ps/(nm^2.km) ps/(nm^2.km)
Cable cut-off wavelength λcc	—	≤1260	nm
Mode field diameter MFD	1310nm 1550nm	9.2±0.4 10.4±0.5	μm μm
Effective group refractive index	1310nm 1550nm	1.466 1.467	—
Attenuation discontinuities	1310nm 1550nm	≤0.05 ≤0.05	dB dB
Geometric characteristics			
Core diameter	—	124.8±0.7	μm
Cladding roundness	—	≤0.70	%
Coating diameter	—	245±5	μm
Coating / package concentricity error	—	≤12.0	μm
Coating no roundness	—	≤6.0	%
Core / package concentricity error	—	≤0.5	μm
The warpage (radius)	—	≥4	m
Environmental characteristics（1310nm、1550nm、1625nm）			
Temperature additional attenuation	-60℃ ～+85℃	≤0.05	dB/km
Flooding additional attenuation	23℃，30 days	≤0.05	dB/km
Hot and humid additional attenuation	85℃ and 85% Relative humidity, 30 days	≤0.05	dB/km
Dry heat aging	85℃	≤0.05	dB/km
Mechanical properties			
Screening tension	—	≥9.0	N
The macro bend Additional attenuation 1Circle Φ32mm 100Circle Φ50mm 100Circle Φ60mm	 1550nm 1310nm 和 1550nm 1625nm	 ≤0.05 ≤0.05 ≤0.05	 dB dB dB
Coating peeling force	Typical average	1.5 ≥1.3 ≤8.9	N N
Dynamic fatigue parameters	—	≥20	—

NO.	Item		Requirement
1	Allowable Tensile Strength	Short Term	1500 N
		Long Term	600 N
2	Allowable Crush Resistance	Short Term	1000 (N/100mm)
		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 - Length of cable: about 50m	-No fiber break and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load: Short term crush - Load time: 1min	-Loss change ≤ 0.05dB@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: 5J	-Loss change ≤ 0.1dB@1550nm -No fiber break and no sheath damage.
Temperature Cycling Test YD/T901-2001-4.4.4.1	- Temperature step: +20°C→-40°C→+70°C →+20°C - Time per each step: 12 hrs - Number of cycle: 2	-Loss change ≤ 0.05 dB/km@1550 nm -No fiber break and no sheath damage.

Sheath marking

The color of marking is white, but if the remarking is necessary, the white color marking shall be printed newly on a different position.

An occasional unclear of length marking is permitted if both of the neighboring markings are clear.

The both cable ends are sealed with heat shrinkable end caps to prevent water ingress.

Packaging

Packaging detail: 2km / export wooden drum (your request is available)





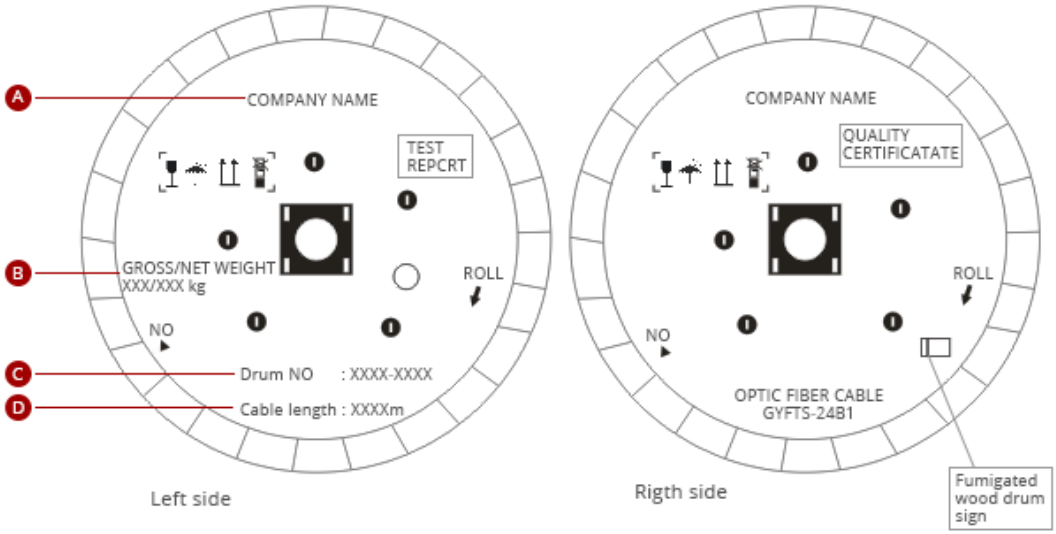
Remark：Usually we only attach the test report on the packaging, but your request is available too. For example:

A, Company Name

B, Gross/Net Weight

C, Fiber Type

D, Cable Length



Note：

a. Storage/Operating Temperature：-40℃ to +70℃.

b. The minimum value of the PE sheath thickness is 1.6mm.

c. The cable should not store in outdoor environment more than 6 months in order to keep the cable reel good state.

d. This data sheet can only be a reference, but not a supplement to the contract. Please contact our sales people for more detailed information.