

# Stranded Loose Tube Non-metallic Strength Member Non-armored Cable (GYFTY)

(GYFTY)松套层绞式非金属加强芯非铠装光缆

## Description 产品描述

The fibres, 250µm, are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. A Fibre Reinforced Plastic (FRP) locates in the center of core as a non-metallic strength member. The tubes (and fillers) are stranded around the strength member into a compact and circular core. After the cable core is filled with the filling compound to protect it from water ingress, the cable is completed with a PE sheath.

GYFTY光缆的结构是将250µm光纤套入高模量材料制成的松套管中，松套管内填充防水化合物。缆芯的中心是一根玻璃纤维增强塑料(FRP)，松套管(和填充绳)围绕中心加强芯绞合成紧凑和圆形的缆芯，缆芯内的缝隙用以阻水填充物。缆芯外挤上一层聚乙烯护套成缆。

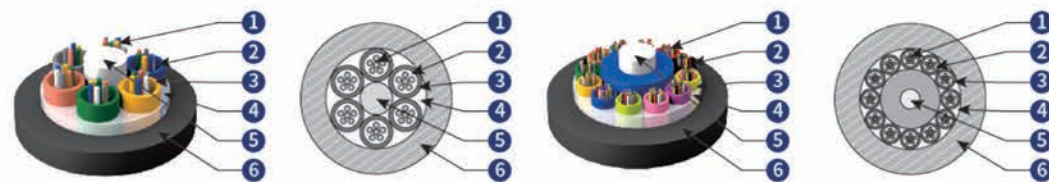
## Characteristics 产品特点

- Good mechanical and temperature performance  
具有很好的机械性能和温度特性
- High strength loose tube that is hydrolysis resistant  
松套管材料本身具有良好的耐水解性能和较高的强度
- Special tube filling compound ensure a critical protection of fibre  
管内充以特种油膏，对光纤进行了关键性保护
- Crush resistance and flexibility  
良好的抗压性和柔软性
- The following measures are taken to ensure the cable watertight:  
采用下列措施来确保光缆的防水性能:
  - Single Fibre Reinforced Plastic as the central strength member  
-单根非金属中心加强芯
  - Loose tube filling compound  
-松套管内填充特种防水化合物
  - 100% cable core filling  
-完全缆芯填充

## Standards 产品标准

GYFTY cable complies with Standard YD/T 901 as well as IEC 60794-1 GYFTY光缆符合YD/T 901和IEC 60794-1标准。

## Structure Drawing 结构图



- 1. Fibre 光纤
- 2. Tube Filling Compound 套管填充物
- 3. Loose Tube 松套管
- 4. Cabling Filling Compound 缆芯填充物
- 5. FRP Strength Member 非金属加强芯
- 6. PE Sheath 聚乙烯护套

## Specifications 参数

### Technical Parameters 结构参数

Cable Type 光缆型号 (Increased by 2 fibres) (以2纤递增)	Fibre Count 光纤数	Tubes 套管数	Fillers 填充绳数	Cable Weight (Ref) 参考光缆重量 (kg/km)	Tensile Strength 允许拉伸力 Long/Short term 长期/短期 (N)	Crush Resistance 允许压扁力 Long/Short term 长期/短期 (N/100mm)	Bending Radius 弯曲半径 Dynamic/Static 动态/静态 (mm)
GYFTY-2~6Xn	2~6	1	5	86	400/1000		
GYFTY-8~12Xn	8~12	2	4	86			
GYFTY-14~18Xn	14~18	3	3	86			
GYFTY-20~24Xn	20~24	4	2	86			
GYFTY-26~30Xn	26~30	5	1	86			
GYFTY-32~36Xn	32~36	6	0	86			
GYFTY-38~48Xn	38~48	4	2	109	600/1500		
GYFTY-50~60Xn	50~60	5	1	109			
GYFTY-62~72Xn	62~72	6	0	109			
GYFTY-2~6Xn	2~6	1	6	98			
GYFTY-8~12Xn	8~12	2	5	98			
GYFTY-14~18Xn	14~18	3	4	98			
GYFTY-20~24Xn	20~24	4	3	98	1000/3000	300/1000	12.5D/25D
GYFTY-26~30Xn	26~30	5	2	98			
GYFTY-32~36Xn	32~36	6	1	98			
GYFTY-38~42Xn	38~42	7	0	98			
GYFTY-44~48Xn	44~48	4	3	115			
GYFTY-50~60Xn	50~60	5	2	115			
GYFTY-62~72Xn	62~72	6	1	115			
GYFTY-2~6Xn	2~6	1	7	119			
GYFTY-8~12Xn	8~12	2	6	119			
GYFTY-14~18Xn	14~18	3	5	119			
GYFTY-20~24Xn	20~24	4	4	119			
GYFTY-26~30Xn	26~30	5	3	119			
GYFTY-32~36Xn	32~36	6	2	119			
GYFTY-38~42Xn	38~42	7	1	119			
GYFTY-44~48Xn	44~48	8	0	119			
GYFTY-50~60Xn	50~60	5	3	125			
GYFTY-62~72Xn	62~72	6	2	125			
GYFTY-74~84Xn	74~84	7	1	125			
GYFTY-86~96Xn	86~96	8	0	125			
GYFTY-98~108Xn	98~108	9	1	149			
GYFTY-110~120Xn	110~120	10	0	149			
GYFTY-122~132Xn	122~132	11	1	145			
GYFTY-134~144Xn	134~144	12	0	145			

Storage/Operating Temperature: -40°C~+70°C  
储存/使用温度: -40°C~+70°C

### Optical Characteristics 光学特性

Fiber Type 光纤类型	Attenuation 衰减				Bandwidth 带宽		Numerical Aperture 数值孔径	Cable Cut-off Wavelength λ <sub>c</sub> 光缆截止波长
	@850nm	@1300nm	@1310nm	@1550nm	@850nm	@1300nm		
Unit	dB/km	dB/km	dB/km	dB/km	MHZ.km	MHZ.km	NA	nm
G.652			≤0.36	≤0.22	—	—	—	≤1260
G.655			≤0.40	≤0.23	—	—	—	≤1450
50/125µm	≤3.3	≤1.2	—	—	≥500	≥500	0.200±0.015	—
62.5/125µm	≤3.5	≤1.2	—	—	≥200	≥500	0.275±0.015	—

Note: 注意:

- a. Suffix Xn denotes fibre type 型号的后缀Xn表示选用的光纤类型
- b. The colour arrangements of fibre and tube are specified in the colour identification table 套管和光纤的颜色排列见色谱表
- c. The cable shouldn't store in outdoor environment more than 6 months in order to keep the cable reel good state 光缆在露天环境中不要超过6个月，否则盘具可能会受损

Application: Duct/Aerial  
适用: 管道、架空