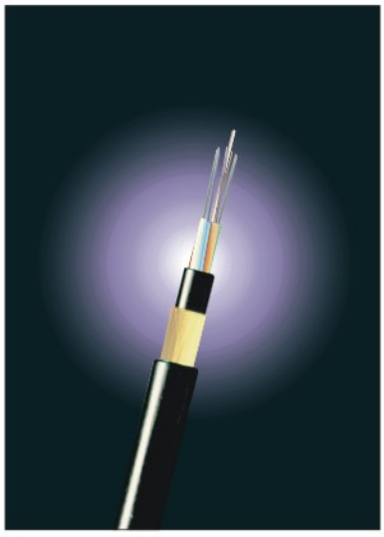
松套层绞式非金属加强芯光缆(GYHTY)
Stranded Loose Tube Non-metallic Strength Member Cable

产品描述
Description

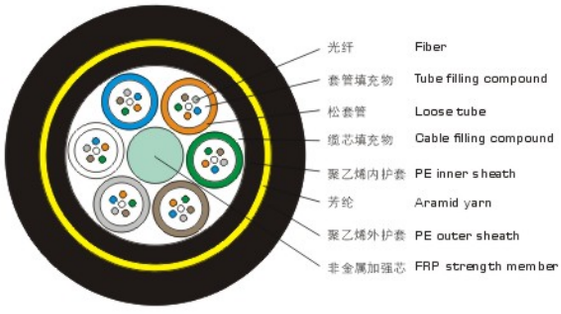
GYHTY 光缆的结构是将 250μm 光纤套入高模量材料制成的松套管中，松套管内填充防水化合物。缆芯的中心是一根玻璃纤维增强塑料（FRP），松套管（和填充绳）围绕中心加强芯绞合成紧凑和圆形的缆芯。缆芯的缝隙充以阻水油膏后挤制聚乙烯内护套，再包上一层芳纶后挤制聚乙烯外护套成缆。

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 Fiber 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 filling compound, it is covered with thin PE (polyethylene) inner sheath. Then, a layer of aramid yarn is applied as additional strength member and the cable is completed with a polyethylene (PE) outer sheath.



产品特点
Charateristics

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



光缆结构图
Cable Structure

产品标准
Standards

长飞上海公司GYHTY光缆符合YD/T 901-2001和IEC 60794-1标准。

YOFC(SH) GYHTY cable complies with Standard YD/T 901-2001 as well as IEC 60794-1.

发布日期 Issue Date：2008.03

(GYHTY)

适用：架空
Application: Aerial

■ 光学特性 Optical Characteristics

		G.652	G.655	50 / 125 μm	62.5 / 125 μm
衰减 Attenuation（+20℃）	@ 850 nm			≤ 3.0 dB / km	≤ 3.0 dB / km
	@1300 nm			≤ 1.0 dB / km	≤ 1.0 dB / km
	@1310 nm	≤ 0.36 dB / km	≤ 0.40 dB / km		
	@1550 nm	≤ 0.22 dB / km	≤ 0.23 dB / km		
带宽（A 级） Bandwidth（Class A）	@ 850 nm			≥ 600 MHz·km	≥ 200 MHz·km
	@1300 nm			≥ 1200 MHz·km	≥ 600 MHz·km
数值孔径 Numerical Aperture				0.200 ± 0.015 NA	0.275 ± 0.015 NA
光缆截止波长 Cable Cut-off Wavelength λcc		≤ 1260 nm	≤ 1450 nm		

■ 结构参数 Technical Parameters

光缆型号 Cable Type（以 2 纤递增）（Increased by 2 fibers）	光纤数 Fiber Count	套管数 Tubes	填充绳数 Fillers	光缆直径 Cable Diameter mm	光缆重量 Cable Weight kg / km	允许拉伸力 Tensile Strength 长期 / 短期 Long / Short Term N	允许压扁力 Crush Resistance 长期 / 短期 Long / Short Term N / 100mm	弯曲半径 Bending Radius 静态 / 动态 Static / Dynamic mm
GYHTY-2~6Xn	2~6	1	5	11.0	100	600 / 1500	300 / 1000	10D / 20D
GYHTY-8~12Xn	8~12	2	4	11.0	100	600 / 1500	300 / 1000	10D / 20D
GYHTY-14~18Xn	14~18	3	3	11.0	100	600 / 1500	300 / 1000	10D / 20D
GYHTY-20~24Xn	20~24	4	2	11.0	100	600 / 1500	300 / 1000	10D / 20D
GYHTY-26~30Xn	26~30	5	1	11.0	100	600 / 1500	300 / 1000	10D / 20D
GYHTY-32~36Xn	32~36	6	0	11.0	100	600 / 1500	300 / 1000	10D / 20D

储存、使用温度：-40℃至+70℃
Storage / Operating Temperature: -40℃ to +70℃

注 Note:

a. 型号的后缀 Xn 表示选用的光纤类型，详见长飞上海光纤型号说明；
Suffix Xn denotes fiber type and see details in YOFC(SH)'s optical fiber illustration.

b. 套管和光纤的颜色排列见色谱表；
The colour arrangements of fiber and tube are specified in the colour identification table.

c. 聚乙烯外护套厚度标称值 1.0mm，聚乙烯内护套厚度标称值 1.0mm。
The nominal value of the PE outer sheath thickness is 1.0mm while the nominal value of the PE inner sheath thickness is 1.0mm.