

松套管绞式加强铠装光缆(GYTA53) Stranded Loose Tube Armored Cable

产品描述 Description

GYTA53 光缆的结构是将 250 μ m 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。缆芯的中心是一根金属加强芯, 对于某些芯数的光缆来说, 金属加强芯外还需挤上一层聚乙烯(PE)。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, 缆芯内的缝隙充以阻水填充物。涂塑铝带(APL)纵包后挤一层聚乙烯内护套, 双面涂塑钢带(PSP)纵包后挤制聚乙烯护套成缆。

The fibers, 250 μ m, 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 core is covered with a thin PE inner sheath. After the PSP is longitudinally applied over the inner sheath, the cable is completed with a PE outer sheath.



产品特点 Characteristics

- 具有很好的机械性能和温度特性
 Good mechanical and temperature performance
- 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:
 - 单根钢丝中心加强芯
 Steel wire used 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
 - 涂塑铝带 (APL) 防潮层
 APL moisture barrier
 - 双面涂塑钢带 (PSP) 提高光缆的抗透潮能力
 PSP enhancing moisture-proof
 - 良好的防水材料防止光缆纵向渗水
 Water-blocking material



光缆结构图
 Cable Structure

产品标准 Standards

长飞上海公司 GYTA53 光缆符合 YD/T 901-2001 和 IEC 60794-1 标准。

YOFC(SH) GYTA53 cable complies with Standard YD/T 901-2001 as well as IEC 60794-1.

(GYTA53)

适用: 管道、架空、直埋
Application: Duct / Aerial / Direct buried

■ 光学特性 Optical Characteristics

	G.652	G.655	50 / 125 μm	62.5 / 125 μm
衰减 Attenuation (+20°C)	@ 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 λ _{cc}	≤ 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
GYTA53-2~6Xn	2~6	1	5	14.5	209	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-8~12Xn	8~12	2	4	14.5	209	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-14~18Xn	14~18	3	3	14.5	209	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-20~24Xn	20~24	4	2	14.5	209	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-26~30Xn	26~30	5	1	14.5	209	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-32~36Xn	32~36	6	0	14.5	209	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-38~48Xn	38~48	4	1	15.4	234	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-50~60Xn	50~60	5	0	15.4	234	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-62~72Xn	62~72	6	0	15.9	244	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-74~84Xn	74~84	7	1	18.0	297	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-86~96Xn	86~96	8	0	18.0	297	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-98~108Xn	98~108	9	1	19.4	338	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-110~120Xn	110~120	10	0	19.4	338	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-122~132Xn	122~132	11	1	21.3	392	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-134~144Xn	134~144	12	0	21.3	392	1000 / 3000	1000 / 3000	10D / 20D
GYTA53-146~216Xn	146~216			21.3	395	1000 / 3000	1000 / 3000	10D / 20D

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

注 Note:

- 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.
- 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.
- 聚乙烯外护套厚度标称值 2.0mm, 聚乙烯内护套厚度标称值 1.0mm.
The nominal value of the PE outer sheath thickness is 2.0mm while the nominal value of the PE inner sheath thickness is 1.0mm.