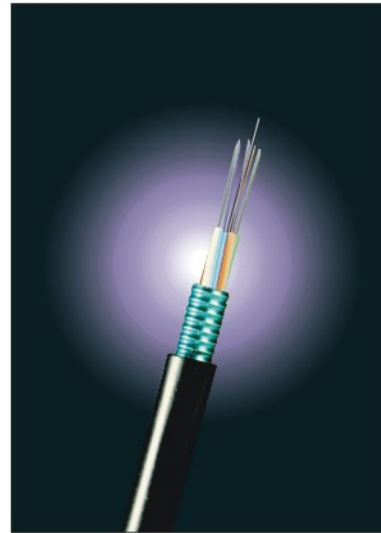


## 松套管绞式煤矿用阻燃光缆(MGTS) Stranded Loose Tube Mining Flame-retardant Cable

### 产品描述 Description

MGTS光缆的结构是将250 $\mu$ 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。双面涂塑钢带(PSP)纵包后挤制阻燃护套成缆。

The fibers, 250  $\mu$ 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 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. The PSP is longitudinally applied over the cable core, which is filled with the filling compound to protect it from water ingress. The cable is completed with a flame-retardant 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
- 特别设计的紧密的光缆结构,有效防止套管回缩  
Specially designed compact structure is good at preventing loose tubes from shrinking
- 良好的抗压性和柔软性  
Crush resistance and flexibility
- 特种护套材料具有优异的阻燃性能  
Special sheath material ensures excellent flame-retardant performance
- 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
  - 双面涂塑钢带(PSP)提高光缆的抗透潮能力  
PSP enhancing moisture-proof



光缆结构图  
Cable Structure

### 产品标准 Standards

长飞上海公司MGTS光缆符合YD/T 901-2001和MT386-1995标准。

YOFC(SH) MGTS cable complies with Standard YD/T 901-2001 as well as MT386-1995.

■ 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 λ <sub>cc</sub>		≤ 1260 nm	≤ 1450 nm		

■ 结构参数 Technical Parameters

光缆型号 Cable Type (以2纤递增)	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
MGTS-2~6Xn	2~6	1	4	10.8	156	600/1500	300/1000	100/200
MGTS-8~12Xn	8~12	2	3	10.8	156	600/1500	300/1000	100/200
MGTS-14~18Xn	14~18	3	2	10.8	156	600/1500	300/1000	100/200
MGTS-20~24Xn	20~24	4	1	10.8	156	600/1500	300/1000	100/200
MGTS-26~30Xn	26~30	5	0	10.8	156	600/1500	300/1000	100/200
MGTS-32~36Xn	32~36	6	0	11.2	170	1000/3000	300/1000	100/200
MGTS-38~48Xn	38~48	4	1	11.8	188	1000/3000	300/1000	100/200
MGTS-50~60Xn	50~60	5	0	11.8	188	1000/3000	300/1000	100/200
MGTS-62~72Xn	62~72	6	0	12.4	204	1000/3000	300/1000	100/200
MGTS-74~84Xn	74~84	7	1	13.8	255	1000/3000	300/1000	100/200
MGTS-86~96Xn	86~96	8	0	13.8	255	1000/3000	300/1000	100/200
MGTS-98~108Xn	98~108	9	1	15.6	284	1000/3000	300/1000	100/200
MGTS-110~120Xn	110~120	10	0	15.6	284	1000/3000	300/1000	100/200
MGTS-122~132Xn	122~132	11	1	17.4	340	1000/3000	300/1000	100/200
MGTS-134~144Xn	134~144	12	0	17.4	340	1000/3000	300/1000	100/200

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

订货信息 Order Information

MGTS-□□  
1 2

① 芯数 Fiber Counts  
02~144

② 光纤类型 Fiber Type  
B1-G.652  
B1.3-G.652.D  
B4-G.655  
E1-EasyBand®G.657  
E1.1-EasyBand®Plus G.657  
A1-50/125 μm  
A1b-62.5/125 μm  
A1H-HiBand®50/125  
A1bH-HiBand®62.5/125  
M1-MaxBand®150  
M3-MaxBand®300  
M5-MaxBand®550

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. 阻燃护套厚度标称值1.8mm。  
The nominal value of the flame-retardant sheath thickness is 1.8mm.