

Totally Dry Stranded Loose Tube Cable (DCFA)

(DCFA) 松套层绞式全干式光缆

Description 产品描述

The fibres, 250µm, are positioned in a loose tube made of a high modulus plastic. Special water-blocking yarns are placed in the tube. 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. The cable core is protected from water ingress by water-blocking yarn and tape. After an Aluminum Polyethylene Laminate (APL) moisture barrier is applied around the cable core, the cable is completed with a PE sheath.

DCFA光缆的结构是将250µm光纤套入高模量材料制成的松套管中，松套管内放入特种阻水纱对光纤进行关键性保护。缆芯的中心是一根非金属加强芯(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。松套管及加强芯外均设有阻水纱，缆芯上纵包阻水带，进行涂塑铝带(APL)纵包后，挤制聚乙烯护套成缆。

Characteristics 产品特点

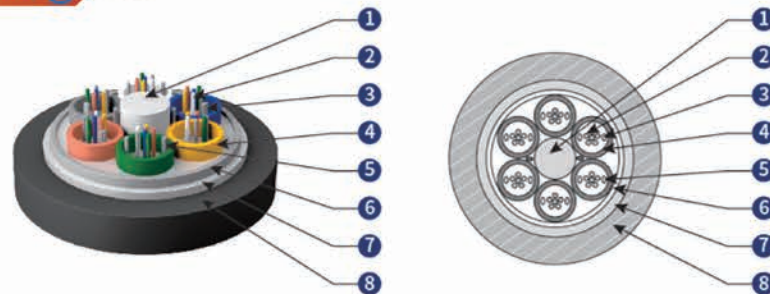
- Good mechanical and temperature performance
光缆具有很好的机械性能和温度特性
- High strength loose tube that is hydrolysis resistant
松套管材料本身具有良好的耐水解性能和较高的强度
- Special water-blocking yarns ensure a critical protection of fibre in loose tube
松套管内放入特种阻水纱，对光纤进行了关键性保护
- Specially designed compact structure is good at preventing loose tubes from shrinking
特别设计的紧密的光缆结构，有效防止套管回缩
- PE sheath protects cable from ultraviolet radiation
PE护套具有很好的抗紫外辐射性能
- 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
 - Water-blocking yarn around the loose tube and central strength member
-松套管和加强芯外阻水纱
 - APL moisture barrier
-涂塑铝带 (APL)防潮层
 - Special water-blocking yarn in loose tube
-松套管内特种阻水纱
 - Water-blocking tape around the cable core
-缆芯外阻水带

Standards 产品标准

GYTC8A cable complies with Standard YD/T 1155 as well as IEC 60794-1.
GYTC8A光缆符合YD/T 1155和IEC 60794-1标准。

Structure Drawing 结构图

- FRP Strength Member
非金属加强芯
- Fibre
光纤
- Water Blocking Yarn
阻水纱
- Loose Tube
松套管
- Water Blocking Yarn
阻水纱
- Water Blocking Tape
阻水带
- APL
涂塑铝带
- 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)
DCFA-2~6Xn	2~12	1	5	96	400/1000	300/1000	10D/20D
DCFA-8~12Xn	8~12	2	4	96			
DCFA-14~18Xn	14~18	3	3	96			
DCFA-20~24Xn	20~24	4	2	96			
DCFA-26~30Xn	26~30	5	1	96			
DCFA-32~36Xn	32~36	6	0	96			

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 (+20°C)				Bandwidth 带宽		Numerical Aperture 数值孔径	Cable Cut-off Wavelength λ _c 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