

Non-Metallic Flat Central Loose Tube Optical Cable (GYFXTY)

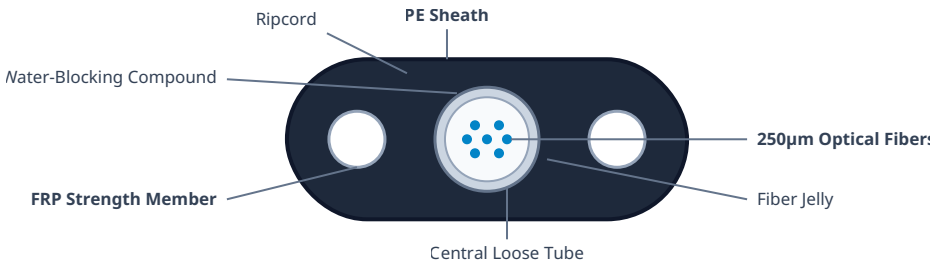
Lightweight Outdoor Flat Optical Fiber Cable Datasheet

Product Description

The structure of the **GYFXTY flat optical cable** is formed by housing 250µm optical fibers inside a loose tube made of high-modulus material, which is filled with a waterproof compound. Two parallel non-metallic FRP strength members are placed on both sides of the loose tube, followed by an extruded Polyethylene (PE) outer sheath to form the flat optical cable structure.

As a lightweight outdoor flat optical cable for telecommunications, GYFXTY features a compact outer diameter, enabling easy construction. Its mechanical performance, electrical properties, and environmental resistance fully meet national and industry standards. It is suitable for non-self-supporting aerial installation, duct/pipe laying, tunnel deployment, short-span self-supporting aerial installation, and environments exposed to severe electromagnetic hazards.

Cable Cross-Section & Component Breakdown



Product Features

All-Dielectric Structure

Completely non-metallic design, providing immunity to lightning strikes and strong electromagnetic interference (EMI).

High Tensile Strength

Two parallel FRP strength members ensure exceptional anti-tensile capacity and mechanical stability.

Hydrolysis-Resistant Loose Tube

The loose tube material features high strength and excellent resistance to hydrolysis for long-term optical protection.

Special Water-Blocking Filling Jelly

The loose tube is filled with a specialized gel, delivering critical water-blocking protection to the optical fibers.

Compact Bending Radius & Space Saving

Flat profile design offers a smaller bending radius compared to round optical cables, significantly saving installation space.

Lightweight & Easy Deployment

Small outer diameter and lightweight construction ensure low friction and easy field installation.

Technical Parameters

Cable Model	Fiber Count	Outer Diameter (mm)	Cable Weight (kg/km)	Allowable Tensile Force (N)		Allowable Crush Resistance (N/100mm)		Bending Radius (mm)	
				Long-Term	Short-Term	Long-Term	Short-Term	Static	Dynamic
GYFXTY-2~12Xn	2 - 12	7.2 × 4.5 mm	42	600	1500	300	1000	15D	30D
GYFXTY-14~24Xn	14 - 24	8.0 × 4.8 mm	48	600	1500	300	1000	15D	30D

Note: The parameters listed above are for reference only. Operating & Storage Temperature Range: -40°C to +70°C. (D = Cable Diameter)

Product Standards

Standard Compliance: The GYFXTY optical cable fully complies with the **YD/T 1460-2006** industry standard for telecom-grade optical fiber cables.