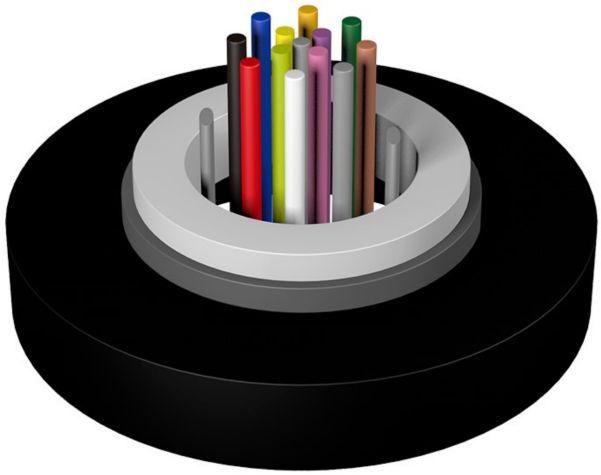
GYFXTY Outdoor Central Loose Tube Non-Metallic Non-Armored Fiber Optic Cable

GYFXTY

GYFXTY | Central Loose Tube | Non-Metallic Non-Armored Design

Product Photo



Cable Structure Diagram

Product	GYFXTY
Model	GYFXTY
Structure	Central Loose Tube — Non-Metallic Non-Armored Design
Strength Member	Non-metallic central strength member, usually FRP, subject to final cable design
Armor / Protection	Non-armored structure, subject to final cable design
Sheath	PE outer sheath, subject to project requirements
Category	Outdoor Central Loose Tube Fiber Optic Cable
Application	Duct / Outdoor access / Feeder
Company	Maplearashi
Website	www.maplearashi.com

Technical parameters are subject to the final cable design and project specifications. Contact Maplearashi for project-specific data.

1. Company Profile

Maplearashi is a fiber optic cable manufacturer serving global communication networks. With experience across outdoor, FTTH, and indoor communication cable products, Maplearashi provides OEM/ODM solutions for telecommunication carriers, system integrators, and broadband infrastructure projects.

2. Product Overview

GYFXTY is an outdoor central loose tube fiber optic cable designed for communication routes requiring a non-metallic central strength member and non-armored design. A typical structure includes optical fibers inside a central loose tube with tube filling, water-blocking or cable filling materials around the tube, a non-metallic central strength member (usually FRP), filling elements and binders as needed, and a PE outer sheath. Fiber type, fiber count, sheath material, strength member design, and mechanical performance should be confirmed according to the final cable design and project requirements.

3. Cable Structure

Optical Fiber	G.652D / G.657 / multimode / custom per project
Central Loose Tube	Filled loose tube for fiber protection
Tube Filling	Water-blocking compound or dry material, subject to design
Water Blocking	Water-blocking or cable filling material, subject to design
Strength Member	Non-metallic central strength member, usually FRP, subject to final cable design
Filling Elements + Binders	Cable filling elements and binders as needed, subject to final cable design
Outer Sheath	PE outer sheath, subject to project requirements

4. Key Features

- Compact central loose tube structure for outdoor communication routes
- Non-metallic central strength member design, usually FRP, for routes requiring all-dielectric or non-metallic cable construction
- Non-armored design for lightweight, flexible, and cost-effective installation
- PE outer sheath suitable for outdoor cable environments
- Tube filling and water-blocking design for moisture protection
- Suitable for duct, outdoor access, and indoor-outdoor transition routes
- Fiber type, fiber count, sheath material, cable marking, and drum length can be customized
- Designed for projects requiring lightweight cable without steel tape or PSP armoring

5. Design Notes

- GYFXTY is designed as a non-armored central loose tube cable for lightweight outdoor communication routes
- The final cable construction may vary according to fiber count, installation environment, and project requirements
- Sheath material, cable marking, and drum length should be confirmed before production
- GYFXTY does not include steel tape (GYXTS) or PSP (GYXTW) protection layers

6. Installation Guidance

- For duct installation, cable pulling force and bending radius should be controlled according to the final cable design
- For outdoor access routes, cable sheath, marking, and drum length should be confirmed before production
- For outdoor access routes, cable sheath and marking should be confirmed according to installation requirements
- For project supply, final cable structure and test requirements should be confirmed according to the application environment

7. Fiber Options

GYFXTY is an outdoor central loose tube fiber optic cable designed for communication routes requiring a non-metallic central strength member and non-armored design. A typical structure includes optical fibers inside a central loose tube with tube filling, water-blocking or cable filling materials around the tube, a non-metallic central strength member (usually FRP), filling elements and binders as needed, and a PE outer sheath. Fiber type, fiber count, sheath material, strength member design, and mechanical performance should be confirmed according to the final cable design and project requirements.

Fiber Type	Description
G.652D	Standard single-mode fiber for access, metro, and long-haul networks
G.657A1 / A2	Bend-insensitive single-mode fiber
OM1–OM4 (MM)	Multimode fiber for short-reach links
Custom fiber	Available upon request

Fiber type selection requires project-specific datasheet. Contact Maplearashi for the recommended fiber type for your project.

8. Applications

- Outdoor duct communication routes
- Outdoor access and feeder networks
- Campus backbone communication routes
- Industrial communication routes
- Lightweight communication routes where non-armored cable is sufficient

GYFXTY is not designed for ADSS self-supporting installations, figure-8 messenger configurations, or applications requiring steel tape armor, PSP protection, or APL moisture barrier. For armored designs, refer to GYXTW53 or GYTA53. For self-supporting designs, refer to ADSS or GYXTC8S.

9. Model Comparison

GYFXTY is an outdoor central loose tube fiber optic cable designed for communication routes requiring a non-metallic central strength member and non-armored design. A typical structure includes optical fibers inside a central loose tube with tube filling, water-blocking or cable filling materials around the tube, a non-metallic central strength member (usually FRP), filling elements and binders as needed, and a PE outer sheath. Fiber type, fiber count, sheath material, strength member design, and mechanical performance should be confirmed according to the final cable design and project requirements.

Note: GYFXTY is a central loose tube, non-metallic, non-armored cable. It is not designed for ADSS self-supporting aerial applications, figure-8 messenger configurations, or applications requiring steel tape armor (PSP).

Feature	GYFXTY	GYXTS
Cable Core	Central loose tube	Central loose tube
Armor / Protection	None — non-armored	Steel tape / steel-polyethylene
Sheath	PE outer sheath (single)	PE outer sheath (single)
Protection Level	Lightweight / standard	Enhanced / moderately armored
Application	Duct / indoor-outdoor / outdoor access	Duct / outdoor access / aerial with support

Feature	GYFXTY	GYXTW
Cable Core	Central loose tube	Central loose tube
Protection	None — PE only	Steel-polyethylene composite / PSP
Sheath	PE outer sheath (single)	PE outer sheath (single)
Protection Level	Lightweight / standard	Enhanced waterproof + mechanical
Application	Duct / indoor-outdoor / outdoor access	Duct / outdoor access / aerial with support

Feature	GYFXTY	GYXTW53
Cable Core	Central loose tube	Central loose tube
Sheath	PE outer sheath (single)	Inner PE + outer PE (53)
Protection	None — non-armored	PSP / corrugated steel tape
Protection Level	Lightweight	Heavy-duty (53)
Application	Duct / indoor-outdoor	Duct / direct-buried / heavy access

Feature	GYFXTY	GYFTY
Cable Core	Central loose tube	Stranded loose tube (multiple tubes)
Strength Member	Non-metallic central CSM (usually FRP)	Non-metallic central CSM (usually FRP)
Armor / Protection	Non-armored (no steel tape, no PSP)	Non-armored (no steel tape, no PSP)
Sheath	PE outer sheath	PE outer sheath
Fiber Count Range	Generally lower (single tube design)	Generally higher (multi-tube design)
Typical Use	Outdoor access / duct with compact profile	Outdoor backbone / duct with higher fiber requirements

Feature	GYFXTY	ADSS
Cable Core	Central loose tube	Stranded loose tube
Strength Member	Non-metallic central CSM (usually FRP)	Non-metallic central CSM (usually FRP)
Installation	Duct / outdoor access	Aerial self-supporting (no messenger needed)
Self-Supporting	Duct / outdoor access only — requires external support	Designed for self-supporting aerial spans
Sheath	PE outer sheath	PE outer sheath (ADSS-specific grade)

10. Customization Options

- Fiber type: G.652D, G.657A1/A2, multimode, or customer-specified
- Fiber count: subject to cable design and project requirements
- Sheath specification: subject to final cable design
- Sheath type and cable marking: subject to project environment and customer requirement
- Drum length and packaging: subject to project or shipping requirements

11. Mechanical & Environmental Parameters

Mechanical and environmental parameters (tensile strength, crush resistance, bending radius, temperature range) are determined by the cable design and project environment. Refer to project datasheet for specific values.

- Tensile strength: depends on cable design, fiber count, and strength member configuration; subject to project datasheet
- Crush resistance: depends on sheath design and cable construction; subject to project datasheet
- Minimum bend radius: depends on cable diameter, fiber type, and installation conditions; subject to final cable design
- Operating temperature range: depends on sheath material and project environment; subject to final cable design
- Cable diameter and weight: depend on fiber count, tube design, and sheath material; subject to project datasheet
- Temperature cycle, water penetration, and aging performance: subject to final design and applicable standards

12. Compliance

Applicable standards and compliance requirements should be confirmed according to the project specification. Compliance documentation, test reports, or project-specific declarations can be provided upon request where required.

13. Contact Information

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