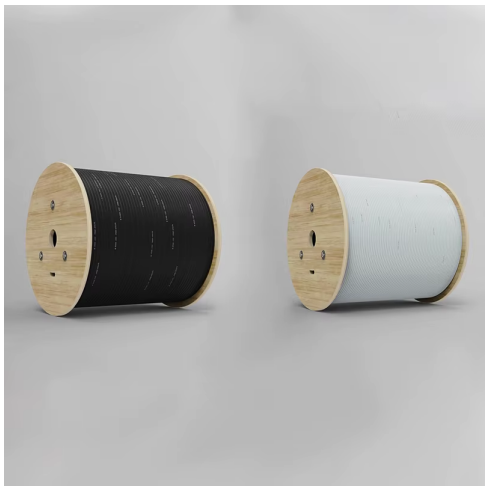
MapleArashi

Fiber Optic Cable Manufacturer

Armored Double Sheath Ribbon Cable - GYDTS53



Inner Structure - GYDTS53

GYDTS53 Outdoor Stranded Loose Tube Ribbon Fiber Optic Cable — Armored Double Sheath

Ribbon Fiber Structure | Stranded Loose Tube | Steel Tape Armor | Double PE Sheath

GYDTS53 is an outdoor stranded loose tube ribbon fiber optic cable with 53 armored double-sheath protection, designed for high fiber-count duct, backbone, and outdoor distribution applications, subject to project requirements and cable design confirmation. Optical fiber ribbons are placed inside water-blocking filled loose tubes stranded around a central strength member. The inner PE sheath, corrugated steel tape / PSP armor, and outer PE sheath provide enhanced mechanical, crush, and rodent protection, while the ribbon fiber structure enables high fiber density and efficient mass fusion splicing. Final cable parameters are subject to project requirements and confirmed cable design.

Product	GYDTS53
Model	GYDTS53
Category	Outdoor Fiber Cables - Ribbon Fiber Cables
Structure	Stranded Loose Tube Ribbon Fiber Cable with 53 Armored Double Sheath, Steel Tape / PSP, Double PE Sheath

This specification is for reference only. Final cable design parameters are subject to project requirements and manufacturing feasibility.

1. Product Information

Field	Specification
Product	GYDTS53
Model	GYDTS53
Category	Outdoor Fiber Cables - Ribbon Fiber Cables
Structure	Stranded loose tube ribbon fiber cable with 53 armored double sheath, corrugated steel tape / PSP armor, double PE sheath
Fiber Type	Single-mode G.652D or G.657A1; subject to project requirements
Number of Fibers	Subject to final cable design and project requirements
Sheath Material	Double PE sheath, subject to project requirements
Armor Type	Corrugated steel tape / PSP
Moisture Barrier	Water-blocking tape and filling compound

2. Company Profile

Maplearashi Technology, with 20 years of expertise in fiber optic communication, manufactures GYDTS53 armored double-sheath ribbon fiber optic cables in our facility located in the Guangdong-Hong Kong-Macao Greater Bay Area. The 53 armored double-sheath design provides enhanced mechanical, crush, and rodent protection, while the ribbon fiber structure enables high fiber density and efficient mass fusion splicing for demanding backbone, duct, and confirmed direct-burial installations. Compliance documents available upon request.

3. Product Overview

GYDTS53 is an outdoor stranded loose tube ribbon fiber optic cable with 53 armored double-sheath protection, subject to project requirements and cable design confirmation. Optical fiber ribbons are placed inside water-blocking filled PBT loose tubes stranded around a central strength member. The inner PE sheath, corrugated steel tape / PSP armor, and outer PE sheath provide enhanced mechanical, crush, and rodent protection for demanding outdoor environments. The ribbon fiber structure enables high fiber density and supports mass fusion splicing for efficient installation in high-count backbone and distribution networks.

4. Key Features

- 53 armored double-sheath design with inner PE, steel tape / PSP armor, and outer PE sheath
- Ribbon fiber structure for high-density fiber deployment in backbone and metro networks
- Optical fiber ribbons inside water-blocking filled loose tubes for mechanical and environmental protection
- Enhanced crush, impact, and rodent protection over non-armored and single-sheath cables
- Stranded loose tube design with full water-blocking protection
- Mass fusion splicing support for faster backbone deployment compared to individual fiber splicing

5. Technical Specifications

5.1. Cable Structure

Layer	Component	Material / Function
1	Optical Fiber	Optical fiber ribbons (ribbon fiber), subject to project requirements
2	Loose Tubes (PBT	Filled PBT loose tubes containing optical fiber ribbons, stranded around CSM
3	Tube Filling	Water-blocking filling compound
4	Cable Core Filling	Water-blocking material in cable core interstices
5	Central Strength M	Subject to final cable design
6	Wrapping	Water-blocking tape / binder
7	Inner Sheath	PE (polyethylene)
8	Armor	Corrugated steel tape / PSP
9	Outer Sheath	PE (polyethylene), UV-resistant

Material and design details can be adjusted according to fiber count, ribbon count, tube layout, and project needs.

6. Applications

- High fiber-count outdoor backbone and trunk routes
- Metropolitan area network (MAN) duct infrastructure
- Campus backbone and outdoor distribution links
- Telecom feeder and trunk networks requiring high fiber density
- Areas requiring stronger crush, impact, and rodent protection than single-armor cables
- Direct burial applications where cable design and project conditions are confirmed

7. Design Notes

- Ribbon fiber structure may require specialized mass fusion splicing equipment and technician training
- Double-sheath design with steel tape armor increases weight and stiffness
- Mechanical parameters subject to final cable design
- Not designed for all-dielectric or self-supporting aerial installation requirements
- Direct burial application requires project-specific cable design confirmation
- GYDTS53 uses the 53 double-sheath armored structure, while GYDTS is the standard steel tape armored ribbon fiber variant.
- This model is distinct from GYTS53 — GYDTS53 uses ribbon fiber structure; GYTS53 generally uses individual fibers.

8. Fiber Options

Fiber Type	Description
G.652D	Standard single-mode fiber — ITU-T G.652.D standard
G.657A1	Bend-insensitive fiber — ITU-T G.657.A1 standard
Custom	Other fiber types available per project requirements

9. Installation Guidance

- Installation temperature and pulling tensions subject to project-specific cable design
- Minimum bend radius during installation: refer to project-specific datasheet
- Double-sheath design with steel tape armor increases stiffness — conduit size must accommodate larger cable diameter
- Ribbon fiber handling requires appropriate mass fusion splicing tooling and technician training
- Not designed for self-supporting aerial installation (consider ADSS or Figure-8 cable options)

10. Model Comparison & Reference

GYDTS53 vs GYDTS

Parameter	GYDTS53	GYDTS
Armor Design	Inner PE + steel tape/PSP + outer PE	Single PE sheath + steel tape/PSP
Mechanical Protection	Enhanced — double sheath + steel tape	Standard — single sheath + steel tape
Fiber Structure	Ribbon fiber / optical fiber ribbons	Ribbon fiber / optical fiber ribbons
Application	Direct burial where project conditions are confirmed	Duct / backbone / outdoor distribution

GYDTS53 vs GYTS53

Parameter	GYDTS53	GYTS53
Fiber Structure	Ribbon fiber / optical fiber ribbons	Individual fibers (non-ribbon)
Armor Design	53 armored double sheath	53 armored double sheath
Tube Type	Stranded loose tube (ribbon-filled)	Stranded loose tube (individual fibers)
Note	GYDTS53 and GYTS53 are separate models	See separate GYTS53 specification

GYDTS53 vs ADSS

Parameter	GYDTS53	ADSS
Fiber Structure	Ribbon fiber in stranded loose tubes	Individual fibers / loose tube
Material	Metallic (inner PE + steel tape armor + outer PE)	All-dielectric
Installation	Duct / outdoor distribution / confirmed direct-burial	Self-supporting aerial
Armor	Corrugated steel tape / PSP	None (dielectric strength members)

11. Customization Options

- Fiber type and count per project requirements
- Ribbon count and fiber-per-ribbon configuration
- Central strength member material per project specification
- Sheath marking, meter marking, and cable color
- Alternative sheath materials subject to project requirements
- Drum length and packaging per project or shipping requirements

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