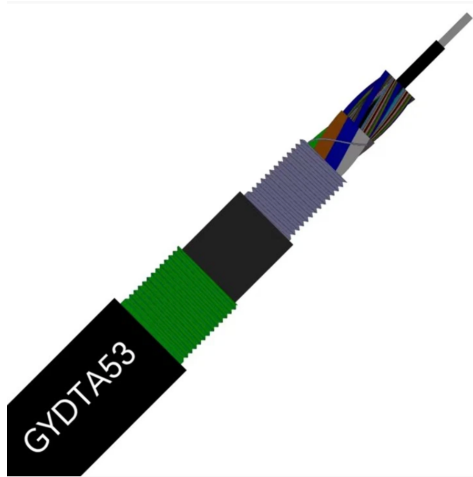


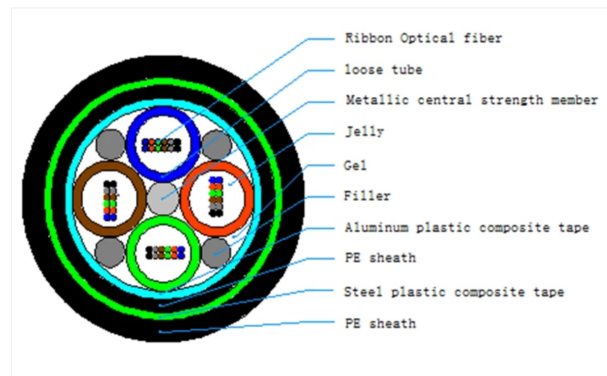
# MapleArashi

Fiber Optic Cable Manufacturer

## Armored Ribbon Cable- GYDTA53



## Inner Structure - GYDTA53



## GYDTA53 Outdoor Stranded Loose Tube Ribbon Fiber Optic Cable — Armored

[Stranded Loose Tube](#) | [Ribbon Fiber Structure](#) | [APL Moisture Barrier](#) | [Steel Tape Armor](#) | [Double PE Sheath](#)

GYDTA53 is an armored stranded loose tube ribbon fiber optic cable designed for high fiber-count applications such as direct burial, duct installation, and outdoor backbone routes, subject to project requirements and cable design confirmation.

The ribbon fiber structure enables significantly higher fiber density compared to standard loose tube cables. The 53 armored variant adds corrugated steel tape armor between inner and outer PE sheaths for enhanced mechanical protection.

Product	GYDTA53
Model	GYDTA53
Category	Outdoor Fiber Cables - Ribbon Fiber Cables
Structure	Stranded Loose Tube - Ribbon Fiber with APL Moisture Barrier, Steel Tape Armor, 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	GYDTA53
Model	GYDTA53
Category	Outdoor Stranded Loose Tube Ribbon Fiber Optic Cable — Armored
Structure	Stranded loose tube — ribbon fiber with APL moisture barrier, steel tape armor, double PE sheath
Fiber Type	Single-mode G.652D or G.657A1; subject to project requirements
Number of Fibers	Commonly available from 12 to 288, depending on ribbon count and tube layout
Sheath Material	Double PE (inner + outer)
Armor Type	Corrugated steel tape / PSP between inner and outer sheath
Moisture Barrier	APL (aluminum-polyethylene laminated tape)

## 2. Company Profile

Maplearashi Technology, with 20 years of expertise in fiber optic communication, manufactures GYDTA53 armored ribbon fiber cables in our facility located in the Guangdong-Hong Kong-Macao Greater Bay Area. The ribbon fiber technology enables high fiber count in a single cable, while the 53 armored variant adds steel tape armor and double PE sheath for enhanced mechanical protection in direct burial and harsh outdoor environments. Compliance documents available upon request.

## 3. Product Overview

GYDTA53 is a stranded loose tube ribbon fiber optic cable with steel tape armor and double PE sheath designed for high fiber-count applications such as direct burial, duct installation, and outdoor backbone routes, subject to project requirements and cable design confirmation. Ribbon fibers are placed inside water-blocking filled loose tubes stranded around a central strength member. APL aluminum-polyethylene laminated moisture barrier provides environmental sealing, and the corrugated steel tape armor between inner and outer PE sheaths delivers enhanced crush and rodent protection. The ribbon fiber structure enables significantly higher fiber density compared to standard loose tube cables.

## 4. Key Features

- Ribbon fiber structure for high-density fiber deployment
- Filled loose tube construction with full water-blocking protection
- APL aluminum-polyethylene moisture barrier for environmental sealing
- Corrugated steel tape armor between inner and outer PE sheath for enhanced mechanical protection
- Double PE sheath for durability in direct-burial and harsh outdoor environments
- Standardized loose tube stranding for stable fiber performance

## 5. Technical Specifications

### 5.1. Cable Structure

Layer	Component	Material / Function
1	Optical Fiber	Ribbon fibers (12-fiber ribbons or per project requirement)
2	Loose Tubes (PBT)	Filled loose tubes stranded around CSM
3	Tube Filling	Water-blocking filling compound
4	Cable Core Filling	Water-blocking material in cable core interstices
5	Central Strength Member	Metallic central strength member, subject to final cable design
6	Wrapping	Water-blocking tape / binder
7	Moisture Barrier	APL (aluminum-polyethylene laminated tape)
8	Inner Sheath	PE (polyethylene)
9	A armor	Corrugated steel tape / PSP
10	Outer Sheath	PE (polyethylene)

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

## 6. Applications

- Direct burial outdoor backbone and trunk routes in telecom infrastructure
- Outdoor duct installations requiring enhanced mechanical protection
- High rodent-pressure outdoor environments in metropolitan and rural networks
- Data center interconnect (DCI) outdoor campus links with high fiber-count requirements
- Metropolitan area network (MAN) feeder cables and distribution networks
- Subscriber aggregation for high-density FTTx deployment scenarios

## 7. Design Notes

- Ribbon fiber structure may require specialized splicing equipment
- Fiber count and ribbon count configurable per project requirements
- Steel tape armor adds weight and stiffness — pulling tension and bend radius differ from non-armored variants
- Mechanical parameters subject to final cable design
- Not designed for all-dielectric installation requirements (see GYFTY for non-metallic option)

## 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 tension subject to project-specific cable design
- Minimum bend radius during installation: refer to project-specific datasheet
- Steel tape armor increases stiffness — conduit size must accommodate larger cable diameter
- Ribbon fiber handling requires appropriate tooling and technician training
- Not designed for self-supporting aerial installation (consider ADSS or Figure-8 cable options)

## 10. Model Comparison & Reference

GYDTA53 vs GYDTA

Parameter	GYDTA53	GYDTA
Fiber Structure	Ribbon fiber	Ribbon fiber
Armor	Steel tape / PSP armor + double sheath (53)	No armor (APL only)
Sheath	Double PE (inner + outer)	Single PE
Application	Direct burial / duct outdoor	Duct / outdoor access

GYDTA53 vs GYTA53

Parameter	GYDTA53	GYTA53
Fiber Structure	Ribbon fiber	Individual fibers
Armor	Steel tape + double sheath (53)	Steel tape + double sheath (53)
Fiber Density	High (ribbon)	Standard
Application	High-count direct burial / duct	Standard direct burial / duct

## 11. Customization Options

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

### Maplearashi

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