

Stranded Ribbon Fiber Optic Cable (GYDTA/S)

Model: GYDTA / GYDTS

Product Description

The structure of GYDTA/S optical cable is formed by inserting 6, 12, or 24 core fiber ribbons into loose tubes made of high-modulus material, which are filled with a waterproof compound. The center of the cable core is a metallic central strength member; for certain fiber counts, a layer of Polyethylene (PE) is extruded over the metallic strength member. The loose tubes and filler rods are stranded around the central strength member into a compact and circular cable core. Interstices within the cable core are filled with water-blocking compound. Finally, an Aluminum Polyethylene Laminate (APL) tape or Corrugated Steel Tape (PSP) is longitudinally applied before extruding a Polyethylene (PE) outer sheath.

Cable Cross-Section Structure

Structural Components:		
• PE Outer Sheath	• Coated Aluminum Tape (APL) / Steel Tape (PSP)	• Water-Blocking Material
• Core Filling Compound	• Central Metallic Strength Member	• Optical Fiber Ribbon
• Tube Filling Compound	• Loose Tube	• Filler Rod

Product Features

- Excellent Mechanical & Temperature Performance:** High tensile/crush resistance and stable operation across wide temperature ranges.
- High-Density Splicing Efficiency:** Multiple fibers per ribbon enable batch mass splicing, reducing splicing time and labor costs.
- High-Strength Loose Tube Material:** Loose tubes feature high hydrolysis resistance and high mechanical strength.
- Special Fiber Protection Compound:** Loose tubes are filled with special compound to provide critical, long-term protection for optical fibers.
- Anti-Shrinkage Cable Design:** Specially designed compact cable structure effectively prevents loose tube shrinkage.
- Convenient Maintenance & Repair:** Ribbon fiber structure simplifies cable maintenance, troubleshooting, and emergency repairs.

Technical Parameters

Cable Model	Fiber Count	Loose Tube Count	Filler Rod Count	Ref. Cable Weight (kg/km)		Allowable Tensile Force (N)		Allowable Crush Resistance (N/100mm)		Bending Radius (mm)	
				GYDTA	GYDTS	Long Term	Short Term	Long Term	Short Term	Static	Dynamic
GYDTA/S-48Xn	4 × 12	1	3	265	306	600	1500	300	1000	10D	20D
GYDTA/S-96Xn	8 × 12	2	2	265	306	600	1500	300	1000	10D	20D
GYDTA/S-144Xn	12 × 12	3	1	265	306	600	1500	300	1000	10D	20D
GYDTA/S-288Xn	24 × 12	4	0	295	338	600	1500	300	1000	10D	20D
GYDTA/S-360Xn	30 × 12	5	0	295	338	600	1500	300	1000	10D	20D
GYDTA/S-432Xn	36 × 12	6	0	395	447	600	1500	300	1000	10D	20D

* Note: The above data is for reference only. Storage & Operating Temperature: -40°C to +70°C. ("D" represents cable outer diameter)

Product Standards

GYDTA/S Fiber Optic Cable Standards: Complies with **YD/T 981.3** and **IEC 60794-1** standards.