

Rat-proof Flame Retardant Directly Buried Optical Cable

Model: GYFTZY63

Product Description

The structure of GYFTZY63 optical cable is formed by encasing 250 μm optical fibers into PBT loose tubes filled with a waterproof compound. The center of the cable core is a non-metallic central strength member, and the interstices within the core are filled with water-blocking compound. The loose tubes (and filler rods) are stranded around the central strength member to form a compact, circular core. A inner sheath layer is extruded over the core, followed by glass yarn placed outside the inner sheath as a rodent-proof material, and finally extruded with a layer of flame-retardant outer jacket.

Cable Cross-Section Structure

Structural Components:

- Flame-Retardant Outer Sheath
- Water-Blocking Tape
- Optical Fiber Core

- Glass Yarn
- Core Filling Compound
- Fiber Filling Gel

- Polyethylene Inner Sheath
- Non-Metallic Strength Member
- Loose Tube

Product Features

- Excellent Mechanical & Temperature Performance:** Superior physical strength and reliable stability across wide operating temperature ranges.
 - Hydrolysis-Resistant Loose Tube:** High-strength PBT loose tube material exhibits excellent hydrolysis resistance and mechanical strength.
 - Special Jelly Protection for Fibers:** Loose tubes are filled with special compound jelly to provide critical, long-term protection for the optical fibers.
- Effective Rodent Protection:** Specially incorporated glass yarn design effectively prevents damage to the optical cable caused by rodents.
 - Superior Water-Blocking Performance:** Premium water-blocking material prevents longitudinal water ingress along the cable.
 - Flame-Retardant Safety:** Flame-retardant outer jacket enhances safety for critical direct burial and duct installations.

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)	
					Long Term	Short Term	Long Term	Short Term	Static	Dynamic
GYFTZY63-4Xn	4	1	5	121	1000	3000	800	2000	10D	20D
GYFTZY63-12Xn	12	2	4	121	1000	3000	800	2000	10D	20D
GYFTZY63-24Xn	24	4	2	125	1000	3000	800	2000	10D	20D
GYFTZY63-48Xn	48	4	2	145	1000	3000	800	2000	10D	20D
GYFTZY63-96Xn	96	8	0	175	1000	3000	800	2000	10D	20D
GYFTZY63-120Xn	120	10	0	216	1000	3000	800	2000	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

GYFTZY63 Optical Cable Standards: Complies with **YD/T 901** and **IEC 60794-1** standards.