

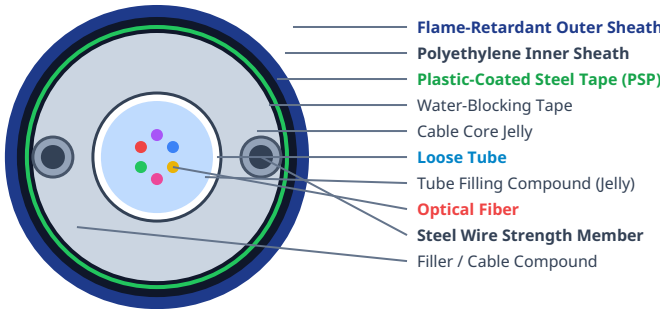
Central-Tube Mine-Used Optical Cable (MGXTSV)

Flame-Retardant Central Loose Tube Mining Fiber Cable Technical Datasheet

Product Description

The structure of the **MGXTSV optical cable** involves encasing 250 μm optical fibers into a loose tube made of high-modulus material, which is filled with a waterproof compound. The loose tube is wrapped longitudinally with a layer of double-sided plastic-coated steel tape (PSP), with water-blocking material placed between the steel tape and the loose tube to ensure compactness and longitudinal water resistance of the cable. Two parallel steel wires are placed on both sides, after which a polyethylene inner sheath and a flame-retardant outer sheath are extruded to complete the cable core.

Cable Cross-Section & Structural Diagram



Product Features

Superior Mechanical & Thermal Performance

Exhibits high mechanical strength and exceptional stability across standard operating temperature ranges.

Critical Fiber Protection Jelly

Specialized filling compound inside loose tubes provides essential protection against moisture ingress and physical stress.

CMR Sheath Flame Retardancy

High-grade CMR outer sheath offers superior flame-retardant properties for safe underground deployment.

Enhanced Moisture Resistance (PSP)

Double-sided plastic-coated steel tape (PSP) significantly improves moisture barriers and water tightness.

Parallel Steel Wire Strength Members

Two parallel steel wires provide high tensile resistance to withstand installation and operational strain.

Compact & Lightweight Design

Small outer diameter and lightweight structure make cable laying, handling, and installation effortless.

Technical Specifications

Cable Model	Fiber Count	Cable Diameter (mm)	Allowable Tensile Force (N)		Allowable Crush Resistance (N/100mm)		Bending Radius (mm)	
			Long-Term	Short-Term	Long-Term	Short-Term	Static	Dynamic
MGXTSV-4Xn	4	15.2	600	1500	300	1000	10D	20D
MGXTSV-6Xn	6	15.2	600	1500	300	1000	10D	20D
MGXTSV-8Xn	8	15.2	600	1500	300	1000	10D	20D
MGXTSV-12Xn	12	15.2	600	1500	300	1000	10D	20D
MGXTSV-24Xn	24	19.2	600	1500	300	1000	10D	20D

Note: The above data is for reference only. Cable storage and operating temperature range: -40°C to +70°C.

Product Standard: Complies with Guangdong JuXian Fiber Communication Co., Ltd. MGXTSV Optical Cable Standard **YD/T 769**.