TM AERIAL FIBER OPTIC CABLE – 12-24 CORE SINGLEMODE

The Aerial Fiber Optic Cable (24C Singlemode) is designed for outdoor aerial installation. It provides high tensile strength, excellent crush resistance, and superior water-blocking performance. This cable type is suitable for long-distance telecommunication and broadband network applications.

■ Cable Construction Design

• Central Strength Member (CSM): Glass Fiber Reinforced Plastic Rod (GFRP) with optional PE sheath.
• Loose Tube: PBT plastic material containing 12 fibers per tube, filled with water-blocking jelly.
• Filler Elements: PP plastic rods used to maintain roundness.
• Stranding: Loose tubes and fillers SZ-stranded around the CSM.
• Water Tightness: Longitudinally water-blocked using filling compound and water-blocking tape.
• Ripcord: 2 polyester ripcords placed under the outer sheath.
• Outer Sheath: Black UV-resistant PE (Polyethylene).
• Messenger Wire: 7×1.6 mm Stranded Galvanized Steel Wire for aerial support.

■ Cable Technical Specifications

Item	Specification	Unit
Cable Cores	12-24Core	Fibers
No. of Tubes	2	-
Fiber Count per Tube	12	-
No. of Fillers	4	-
Tube/Filler Diameter	2.0 ± 0.2	mm
Central Strength Member (CSM)	2.2 ± 0.2	mm
Outer Sheath Thickness	≥1.3	mm
Messenger Wire	7×(1.6 ± 0.1)	mm
Nominal Cable Width	9.4 ± 0.5	mm
Nominal Cable Height	18.1 ± 1.0	mm
Nominal Cable Weight	214 ± 15	kg/km
Tensile Strength	2000	N

■ Applications

- Aerial installations on poles and messenger wire systems.
- Backbone fiber optic networks and FTTx distribution.
- Rural broadband and telecommunication infrastructure.
- Long-distance transmission lines requiring high tensile performance.

■ Features & Advantages

- High tensile and crush resistance for aerial use.
- Water-blocking compound ensures long-term protection.
- Lightweight design allows easy installation.
- UV and weather resistant black PE outer sheath.
- Fiber optic is Fiberhome,China

- Compatible with standard 24-core singlemode optical fibers (ITU-T G.652D or G.657A1).

Design comply to MCCM

MCMC MTSFB TC G007:2016