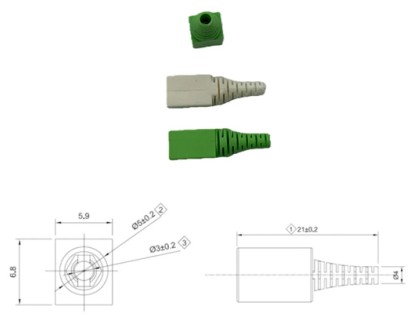
Flame-retardant and fire-resistant multimode optical fiber models



Overview

Offered in OM1, OM3 and OM4 multimode and OS2 singlemode, in 4, 8, 12 or 24 core fibre configurations.

Key Takeaways

Key multimode optical fiber models with flame-retardant and fire-resistant properties include OM1, OM3, and OM4 fibers with LSZH sheaths, compliant with IEC 60331-25 and IEC 60332-2-3 standards.

Draka Fire

Tuf Series

The Draka FireTuf fiber optic cables are available in OM1, OM3, and OM4 multimode configurations, with 4, 8, 12, or 24 cores. They feature a central loose tube design and internal/external LSZH (Low Smoke Zero Halogen) sheaths, providing UV stability and flame retardance. The OM3 and OM4 variants incorporate MaxCap BendBright™ technology, which ensures performance under tight bends or pressure.

These cables are certified to IEC 60331-25 (fire resistance) and IEC 60332-2-3 (flame retardant), making them suitable for fire alarm systems, voice evacuation systems, tunnels, and public buildings where circuit integrity during fire is critical.

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ETK Kablo Fire-

Resistant Fiber OpticsETK Kablo offers B2ca-classified fire-resistant multimode fibers that maintain optical signal integrity under extreme heat and flame. These cables are CPR B2ca and FE180 certified, ensuring low smoke emission, zero halogen content, and exceptional flame retardance. They are designed for tunnels, hospitals, airports, industrial plants, data centers, and railway networks, providing uninterrupted connectivity during emergencies.

The cables are mechanically durable, resistant to bending and environmental stress, and suitable for indoor/outdoor routes and tight bending installations.

Webro Fire-

Resistant Multimode Fibers

Webro provides OM3 and OM4 multimode fibers in 4 to 24 core configurations with a central loose tube design. These cables are tested for fire resistance (IEC 60331-25) and flame retardancy, ensuring continuous operation during fire emergencies. They are widely used in life safety systems, fire alarms, and voice evacuation networks, as well as in high-risk environments like metro systems and public buildings.

Additional High-

Performance Options

Other high-performance fire-resistant multimode fibers use jelly-filled loose tubes with mica tape wrapping around a central steel or FRP element. These designs enhance fire resistance, mechanical durability, and signal integrity. The outer sheaths are typically halogen-free and flame-retardant, protecting equipment from secondary damage during fire events.

Summary

For flame-retardant and fire-resistant multimode optical fibers, the most common models are: OM1, OM3, OM4 multimode fibersCore counts: 4, 8, 12, 24Construction: Central loose tube, bend-insensitive options availableSheath: LSZH, halogen-free, flame-retardantStandards compliance: IEC 60331-25 (fire resistance), IEC 60332-2-3 (flame retardant), CPR B2ca, FE180Applications: Fire alarms, voice evacuation systems, tunnels, metro lines, hospitals, industrial plants These models ensure continuous data transmission and circuit integrity during fire events, making them essential for critical infrastructure and life safety systems.

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Article Content

Draka FireTuf Fire Resistant Fibre Optic Cable

Offered in OM1, OM3 and OM4 multimode and OS2 singlemode, in 4, 8, 12 or 24 core fibre configurations. All feature a central loose tube construction and

General Catalogue

From 1988 Optral design, manufacture and commercialize optical cables as well optoelectronic equipments for audio, video and data signals. Our philosophy is to supply the best cable for each

TRATOS FIRESAFE-OPTI®

Firesafe optical fibre cables have been designed for use in areas where optical fibre cables are required to operate in the event of a fire and are used in railway and

QFCI Fiber Cable | Lifeline® MC Cable | Fire Rated Cables

We carry RHW-2 and RW90-Two-Hour Fire cables as well as Two-Hour Horizontal and One-Hour Vertical Cables. We also carry QFCI Fire Resistant Fiber Optic Cables for communications.

OM4 Multimode SWA Heavy Armoured Fibre Optic Cable

The SWA fibre cable has excellent tensile strength and the layer of 0.9mm steel wire provides safe rodent protection. The fibre cable core consists of a central jelly filled green polyester tube, with up to

DataGuard® (SWA) Loose Tube Fire Resistant Fibre Optic Cable

DataGuard® (SWA) Loose Tube Fire Resistant Fibre Optic Cable LSZH Cable Design ... Characteristics • Indoor/Outdoor applications • Fire Resistant • Mechanical protection • Rodent Protection • Direct

QFCI | Fire-Resistant Loose Tube Optical Fiber Cable

Gel filled multi loose tube cable for indoor / outdoor installation. Each tube contains no more thant 12 fibres and it is fire protected by mica tape. Strength members

Optical Distribution Frame (ODF) in Telecom: Types & Uses

An Optical Distribution Frame (ODF) is a specialized enclosure designed to manage, connect, protect, and distribute fiber optic cables in telecom and data networks. Think of it as a

How Much Temperature Can Optical Fiber Withstand? A Complete

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This comprehensive guide answers the question: “How much temperature can optical fiber withstand?” We''ll explore thermal limits for different fiber types, explain how temperature affects

Global Optical Cable Sheath Market Size, Share, Growth Trends

Optical Cable Sheath Market Overview 2026-2033 The optical cable sheath market constitutes a critical segment within the broader fiber optic infrastructure ecosystem, serving as the protective outer layer

Fiber Optic Sensor Cables for Advanced Monitoring | AP Sensing

Fiber optic sensor cables used for fire detection typically feature a flame-retardant, non-corrosive (FRNC) outer jacket. This prevents flame propagation along the cable and ensures minimal smoke

OFNP OM4 Tight Buffer Fiber Cable | Corning Glass | Indoor & Outdoor

OM4 Multimode 50/125 Indoor/Outdoor Plenum OFNP Distribution Fiber Optic Cable with Corning Glass This OM4 plenum distribution fiber cable is composed of 2-24 colored tight buffers, aramid yarn, and

Product Spec Sheet 012TUV-T4190D20

The flexible, flame-retardant outer jacket is UV-resistant and enables direct exposure to sunlight. Interlocking armor is available for special applications requiring additional mechanical

Tight Buffer Fiber Optic Cable, OM4, OFNP Indoor/Outdoor

OM4 Multimode 50/125 Indoor/Outdoor Plenum OFNP Distribution Fiber Optic Cable with Corning Glass This OM4 plenum distribution fiber cable is composed of 2-24 colored tight buffers, aramid yarn, and

Covalently anchored superhydrophobic coatings on intrinsically flame ...

Herein, a multi-level synergistic strategy termed “intrinsically flame-retardant substrate-enhanced interface-functionalized surface” is proposed to fabricate a durable, superhydrophobic, and fire-safe

Product Spec Sheet 096TUK-T4680D20

096TUK-T4680D20 Corning LSZHTM and Riser-rated loose tube gel-free cables are flame-retardant, indoor/outdoor, suitable for installation in interbuilding and intrabuilding applications. The

10 Best Fiber Optic Christmas Trees (2026 Reviews)

Looking for the best fiber optic Christmas tree for your space? Explore top-rated picks for every room size and budget, with lighting features, setup tips, and expert advice.

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Fiber Optic Cable Jackets and Fire Ratings Explained

Learn about fiber optic cable jackets, materials, and fire ratings. Find the right jacket for plenum, riser, or general-purpose environments.

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