Complete List of 24-Core Optical Cable Models and Specifications

Overview

24 Core Fiber Optic Cables | Products & Suppliers | GlobalSpecFind 24 Core Fiber Optic Cables related suppliers, manufacturers, products and specifications.

Key Takeaways

24-core optical fiber cables are available in various types including ADSS, armored, LSZH, and indoor/outdoor loose-tube designs, supporting both singlemode and multimode fibers with diverse installation and environmental capabilities.ADSS 24-Core Fiber Optic Cable

ADSS (All-Dielectric Self-Supporting) cables are designed for overhead power line installations without requiring electrical grounding. They feature a loose tube layer stranded structure, filled with water-blocking compounds, reinforced with two layers of aramid fibers, and a polyethylene or electric tracking resistant outer sheath. These cables are lightweight, have small diameters, and can span over 1000 meters, making them suitable for high-voltage transmission lines (220KV, 110KV, 35KV) and challenging environments like rivers, valleys, or lightning-prone areas .

Distribution and LSZH 24-Core Cables

Distribution cables, such as those from SABA, use loose tube fibers with aramid yarn strength members and a metal-free LSZH jacket. They offer excellent crush and tensile resistance and are available in singlemode or multimode configurations. These cables are suitable for outdoor deployment while meeting IEC standards for mechanical and environmental performance .

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Armored and Gel-Filled 24-Core Cables

Outside plant cables, like CommScope's 24-core ECSS armored cables, feature loose-tube, gel-filled construction with 9/125 µm OS2 singlemode fibers and a protective black jacket. The electro chrome coated steel (ECSS) armor provides mechanical protection against crushing and rodent damage, making them ideal for harsh outdoor environments .

Indoor/Outdoor Multi Loose Tube Cables

Belden's FOLU72MA024BKAA-C model is a universal indoor/outdoor dry tube cable with 24 singlemode fibers (G.657.A2), a glass yarn strength member, and corrugated steel tape armor. It features a low smoke zero halogen (LSZH) outer jacket, is IEC 60332-3-24 rated for fire safety, and is suitable for structured wiring systems, industrial backbones, campus networks, and direct burial installations. It provides high tensile strength during installation and operation, along with crush resistance .

Key Specifications to Consider

• Fiber Type: Singlemode (OS2, G.657.A2) or Multimode (OM3/OM4)

• Construction: Loose tube, gel-filled, armored, ADSS, LSZH

• Strength Members: Aramid yarn, glass yarn, or steel armor

• Outer Jacket: Polyethylene, LSZH, or electric tracking resistant

• Installation: Overhead, direct burial, duct, tunnel, or indoor backbone

• Mechanical Properties: Tensile strength, crush resistance, temperature tolerance

• Standards Compliance: IEC 60794, IEC 60332, GR-20, ICEA S-104-696 These 24-core optical cables are widely used in telecom, industrial, data center, and utility networks, with selection depending on environmental conditions, mechanical protection requirements, and fiber type needed for the application .

Article Content

Optical fiber connector

An optical fiber connector is a device used to link optical fibers, facilitating the efficient transmission of light signals. An optical fiber

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