

Article Overview

Leading manufacturers provide a range of polymer-based sheath materials for optical cables, including PE, XLPE, PVC, and high-performance polymers like PEEK and PTFE.

Key Manufacturers and Suppliers

1. Mallefer Mallefer specializes in fiber optic cable sheathing with advanced extrusion technology, offering a wide variety of plastic materials for high-quality jacketing. Their solutions ensure mechanical strength, durability, and smooth installation, with global logistics support from Switzerland, Finland, China, India, USA, and Russia . 2. Zeus Inc. Zeus manufactures polymer-reinforced optical fibers and high-temperature sheathing products. They provide solutions using polymers such as PEEK, PTFE, PFA, ETFE, PVDF, and FEP, designed for extreme environments requiring chemical resistance, abrasion protection, and mechanical strength. Zeus collaborates with OEMs and cable manufacturers to customize sheathing solutions . 3. Nextrom and Other Suppliers Nextrom is a global supplier of fiber optic production technologies, including sheathing solutions. They offer monocoil sheathing and jackets made from PVC or silicone rubber, providing protection and flexibility for optical fibers . 4. Chinese Manufacturers Several Chinese suppliers provide polyethylene (PE), low-density PE (LDPE), cross-linked polyethylene (XLPE), and PVC compounds for optical cable sheathing. Companies like JIANGSU RELIABLE INDUSTRY CO., LTD. offer environmentally friendly, flame-retardant, and cost-effective materials suitable for FTTH and other fiber optic applications .

Material Types and Applications

- o PE and LDPE: Common for outdoor and indoor cables, offering flexibility and environmental resistance.
- o XLPE: Provides higher thermal and mechanical performance, suitable for high-stress installations.
- o PVC and LSZH (Low Smoke Zero Halogen): Flame-retardant and safe for indoor use.
- o High-performance polymers (PEEK, PTFE, ETFE, PVDF, FEP): Used in harsh environments, including chemical exposure, high temperatures, and industrial applications.

Considerations for Selection

When choosing a sheath material manufacturer, consider:

- o Mechanical and thermal properties required for your application.
- o Environmental compliance (e.g., flame retardancy, low smoke).
- o Customization capabilities for diameter, color, and compound additives.
- o Global logistics and support for timely delivery and technical assistance. These manufacturers and suppliers provide a comprehensive range of optical cable sheath materials suitable for telecom, industrial, and specialty fiber optic applications.

The sheathing process is where you apply the final touch to your loose tube fiber optic cable. Mechanical properties for different

Fiber-optic cable A TOSLINK optical fiber cable with a clear jacket. These cables are used mainly for digital audio connections

Outdoor Optic Fiber Cable for Enhanced Optical Communication Systems ZTT is a leading global manufacturer of outdoor optic fiber

Do you want to improve your cable performance or optimize your process to reduce scrap? Get in touch

With 2 billion kilometers of fiber optic cables installed around the globe, Corning continues to lead the industry in product quality and

The "Waterproof Optical Cable for Mobile Base Stations" is a product handled by Caltech, a specialized manufacturer of

Find here Armoured Fiber Optic Cable, 4 Core Armoured Fiber Optic manufacturers,

Based on 2025 rankings from industry sources like Owire and TSCables, the

Our first customers, NASA and the U.S. Armed Forces, inspired us to develop the most rugged, reliable fiber cable for harsh

One-stop sourcing solutions for fiber optic cables extrusion lines, including loose tube, tight buffer and cable sheathing processes.

Radiall is a global leader in the design, development and manufacturing of high quality optical cable assemblies and complex optical

Leading players, including global polymer producers and specialized cable manufacturers, control the supply chain,

There are a wide variety of different cable sheaths and jackets which all serve a different purpose. Understanding the

By Type Polymer Sheaths Polymer-based sheaths, predominantly constructed from materials such as polyethylene



Optical cable sheath manufacturers

CenturyFiber Optics is a manufacture and supplier of fiber optic interconnect enclosures and accessories for wall, rack, and OSP.

FS provides multiple fiber optic cable types and cabling solutions proven in the demo scenario lab to ensure reliable high-speed

Web: <https://bssoda.pl>

