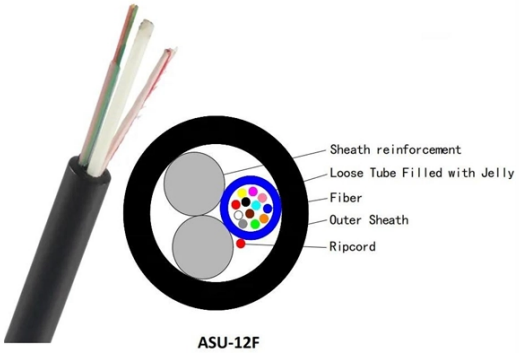
Fiber optic cable sw



Overview

The GrabCAD Library offers millions of free CAD designs, CAD files, and 3D models. Join the GrabCAD Community today to gain access and download!

Key Takeaways

SWA (Steel Wire Armoured) fiber optic cables are armored cables designed for high durability, rodent protection, and outdoor or underground installation. Construction and FeaturesSWA fiber optic cables consist of multiple layers to ensure mechanical protection and environmental resilience. Key components include a central strength element, loose tubes filled with gel for fiber protection, strength members, ripcords, an inner jacket, steel wire armouring, and an outer jacket, often made of LSZH (Low Smoke Zero Halogen) thermoplastic for safety and durability.

The steel wire armouring provides resistance against crushing, impact, and rodent attacks, making these cables suitable for direct burial and harsh outdoor conditions. Types and Fiber OptionsSWA cables are available in single-mode (OS2) for long-distance transmission and multimode (OM1, OM2, OM3, OM4, OM5) for high-bandwidth, shorter-distance applications. Fiber counts can range from 4 to 96 cores, depending on the installation requirements.

Pre-terminated SW

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

A cables are also available, allowing quick installation without specialized termination equipment, and can be fitted with connectors such as LC, SC, ST, FC, or APC variants. ApplicationsSWA fiber optic cables are widely used in environments where durability is critical, including: Underground and direct burial installationsOutdoor fiber networksIndustrial automation systemsLAN and WAN backbonesTelecom access lines and fiber-to-the-building connections The robust construction ensures protection against moisture, soil acidity, tensile stress, and environmental wear, making SWA cables ideal for both indoor/outdoor and industrial applications.

Installation ConsiderationsPre-terminated SWA cables simplify installation by providing epoxy-bonded glands, Kevlar strain relief, and protective sleeves to handle high-tension loads during pulling through ducts or trays. Standard tail lengths and breakout options allow flexibility in connecting to enclosures or network equipment. Proper handling ensures the cable maintains its mechanical and optical performance over time.

SummarySWA fiber optic cables combine high-speed data transmission with mechanical robustness, making them a preferred choice for outdoor, underground, and industrial fiber optic networks. They are available in various fiber types, counts, and pre-terminated configurations to suit different installation needs.

Article Content

Search results for: sw Fiber Optic Cables – Mouser

Fiber Optic Cables Plastic Fiber, Opposed Mode; Core Dia.: 32 x 0.25 mm; Fiber Length 2 m; Rectangle W/Flex Relief; Vantage Line Terminated for use in Plastic Fiber Sensors

Design and Simulation of Fiber Optic Cable using SolidWorks for ...

This paper presents fiber optic cable design and simulation using SolidWorks software. SolidWorks software is an effective tool that helps design, analyze, and give a better understanding of fiber optic

SOLIDWORKS, fiber

The GrabCAD Library offers millions of free CAD designs, CAD files, and 3D models. Join the GrabCAD Community today to gain access and download!

Fiber Optic Cable Assemblies: 3D models

Discover all CAD files of the "Fiber Optic Cable Assemblies" category from Supplier-Certified Catalogs SOLIDWORKS, Inventor, Creo, CATIA, Solid Edge, autoCAD, Revit and many more CAD software

SOLIDWORKS, fiber-optic

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

The GrabCAD Library offers millions of free CAD designs, CAD files, and 3D models. Join the GrabCAD Community today to gain access and download!

Optic fiber connectors: 3D models

Discover all CAD files of the "Optic fiber connectors" category from Supplier-Certified Catalogs SOLIDWORKS, Inventor, Creo, CATIA, Solid Edge, autoCAD, Revit and many more CAD software

Fiber Optic Cables, Fiber Optic Patch Cables, Fiber Optic Adapters ...

Optical Cleaning Wipes Optical Cleaning "Clickers" and Cassettes Optical Cleaning Sticks Field Cleaning Kits & Air Spray Frequently Asked Questions Fiber Optic Tools Loopback Jumpers Visual

Fiber Optic Cable Types Explained

Our comprehensive guide to types of fiber optic cables. Learn all about the differences between single mode and multimode cables, as well as the various fiber wavelengths and standard core sizes used

Fiber Optic Cables Turned Into Hidden Microphones to Secretly Spy

Fiber Optic Cables Turned Into Microphones Fiber optic cables have long been considered inherently secure communication channels resistant to RF emissions and electromagnetic

Engineers enable quantum communication over existing fiber optic cables ...

Tech Industry Engineers enable quantum communication over existing fiber optic cables — new research shows data transmission using quantum teleportation is possible in parallel with a

Fiber-optic submarine cables: The deep-sea datalinks binding global ...

Beneath the mighty oceans across the world lie hidden something just as mighty: The submarine cables that have been carrying data traffic around the world and connecting countries.

Fiber Optic Cables for the Last Mile Market 2025-2030: Industry Sees ...

Companies Target Hybrid Fiber Strategies to Meet Global Connectivity Demands in Diverse MarketsDublin, April 14, 2025 (GLOBE NEWSWIRE) -- The "Fiber Optic Cables for Last Mile

Fiber Optics | Connectivity and Tools | Shop trueCABLE

Shop performance-tested fiber optic cables, patch cables, pigtails, and tools. Certified to industry standards with Forever Warranty. Free shipping on orders over $449.99.

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Fiber Optic Cable

Belden''s extensive line of indoor and outdoor cable products is offered in tight buffer and loose tube designs. Learn more about each fiber cable Belden has to offer.

Fiber Optic Indoor/Outdoor Cables

Fiber Optic Cables For Indoor/Outdoor Applications Fiber Optic Cables For Indoor/Outdoor Applications These are cables that are designed to meet both the rigorous environment of the outdoors but also

Outdoor Fiber Optic Cable | Outside Plant Fiber (OSP) Cable

Fiber optic cables for outdoor applications are engineered to withstand the more demanding conditions seen outside, from environmental extremes to mechanical forces. These are the outdoor fiber optic

Fiber Optic Bird''s Nest Heralds A Fiber Drone Summer

A bird''s nest incorporating fiber optic cable is a striking sign of how much debris from fiber-guided FPVs now litters the landscape of Ukraine. Other

(PDF) 3D modeling of multimode and single mode fiber

Abstract This paper presents a design of 3D modeling of Multimode and Single Mode Fiber using SolidWorks. Fiber technology is essential that presents optical fiber is the fastest optical cable laid by

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Contact Us

Continue your research online:

Website: https://alfa-pro.co.za
Technical inquiry: https://alfa-pro.co.za/contact.html

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved