Fiber Optic Sensor Head



Overview

Fiber optic sensor head Find your fiber optic sensor head easily amongst the 11 products from the leading brands (OMRON, KEYENCE, SENSOPART.) on Direct.

Key Takeaways

Fiber optic sensor heads are versatile devices used in various applications to detect light and measure conditions in challenging environments.

Overview of Fiber Optic Sensors

Fiber optic sensors consist of two main components: the sensor head and the amplifier. The sensor head is responsible for detecting light, while the amplifier processes the signals. These sensors are particularly useful in environments where traditional electronic sensors may fail due to space constraints, harsh conditions, or the need for high precision.

Types of Fiber Optic Sensor Heads

Sensing Methods: Fiber optic sensor heads can operate using various sensing methods, including: Through-beam: Light is transmitted from the emitter to the receiver, detecting objects that interrupt the beam. Retroreflective: Light is reflected back to the sensor from a target, allowing detection without a direct line of sight. Convergent reflective: Light converges on a target, enabling detection at various angles.

Head Types: There are multiple head types designed for specific applications, including: Threaded, cylindrical, and flat heads for different mounting options. L-shaped and U-shaped heads for tight spaces. Wide area detection heads for larger target areas.

© 2026 METRA FIBER MARKET - All rights reserved

Applications

Fiber optic sensor heads are widely used in industries such as: Factory Automation: For detecting objects on assembly lines and ensuring quality control. Medical Devices: In applications requiring precise measurements in sterile environments. Automotive: For monitoring and controlling various processes in vehicle manufacturing.

Advantages

High Sensitivity: Capable of detecting minute changes in light, making them suitable for precise applications. Durability: Resistant to harsh environmental conditions, including extreme temperatures and chemicals. Compact Design: Ideal for installations in tight spaces where traditional sensors may not fit.

Conclusion

Fiber optic sensor heads are essential tools in modern technology, providing reliable and accurate detection capabilities across various industries. Their adaptability to different environments and applications makes them a preferred choice for many engineering and manufacturing processes. For more detailed specifications and product options, you can explore manufacturers like KEYENCE and Omron, which offer a range of fiber optic sensors tailored to specific needs.

Article Content

Fiber optic sensor head

Find your fiber optic sensor head easily amongst the 11 products from the leading brands (OMRON, KEYENCE, SENSOPART, ...) on DirectIndustry, the industry specialist for your professional purchases.

FIBER-OPTIC SENSORS

© 2026 METRA FIBER MARKET - All rights reserved

For over 30 years OMRON has been a supplier of fiber2. Preventing fiber breakageModels with enhanced protection and tested resistance against harsh environments3. Operational stabilityEasy to set up and adjustThe little extraApplication solution supportProduct modificationsSpecial solutions400°C 350°C 200°C 150°CVacuum chamberAtmospheric-pressure sideOutput 1: ON Output 2: ONSpecial application fiber sensor headsfor saturated andPress only twice.DPCAutomatically compensateDPCField bus connectivityST 5000 9999Dynamic range increased by a factor of 40,000 Automatically compensate incident levelDPCN-Smart platformSpecificationsE3X-DAC-S high functionality mark detection sensorFiber amplifier connectorsDigital fiber amplifier with infrared LEDTightening ForceCylindrical modelCutting FiberE32-T14/E32-G14Supplied slit for E32-T16E32-G14Protective Spiral TubesMounting the End Plate (PFP-M)Mounting ConnectorsRemoving Connectors1. ConnectionJoining Amplifier UnitsSeparating Amplifier Unitsa time. (Do not attempt to remove Amplifier Units from the DIN track without sep-arating them first.)Protective CoverREAD AND UNDERSTAND THIS DOCUMENTWARRANTYLIMITATIONS OF LIABILITYSUITABILITY FOR USEPERFORMANCE DATACHANGE IN SPECIFICATIONSDIMENSIONS AND WEIGHTSERRORS AND OMISSIONSPROGRAMMABLE PRODUCTSCOPYRIGHT AND COPY PERMISSIONControl SystemsMotion & DrivesControl ComponentsSensing & SafetyToday, already with over 500 standard, application optic solutions to leading manufacturers, especially in the semiconductor, the consumer electronics and the car electronics industry, as well as for food packaging and small plastic parts production. The requirements for fiber optic solutions can be very demanding particularly for applications wi...See more on assets.omron OMRON, Europe

Fiber sensor heads | OMRON, Europe

Download datasheets, manuals and brochures. See our systems in use and consult our experts.

Fiber head FN series | volsentec

Fiber sensor head with complete specifications, 9 categories and hundreds of sizes and shapes to choose from, suitable for various scene application and installation requirements Standard design,

Fiber optic sensors

Both plastic and glass fiber optic cables are characterized by their transmission accuracy and speed. Various heads (diameter from 2 to 8 mm, square from 5 x 4 mm to 23 x 55 mm, ...) with straight,

Fiber Unit

This is a series of fiber optic sensor heads designed to be connected to a fiber optic sensor amplifier. The FU Series offers a wide variety of options including

E32 Robot Application Fiber Optic Sensor Heads

© 2026 METRA FIBER MARKET - All rights reserved

Robot application fiber sensor heads with enhanced bend resistance. For applications on frequently or fast moving parts, the robot fibers reduce the risk of fiber breakage with the capability to withstand

Fiber optic technique SKL-Sensor head

The SKL sensor head is the link between the BFI fiber optic cable (FOC) and the burner''s viewing nozzle. SKL and fiber optic cables are mechanically and in the spectral range matched to each other.

ZYGO | Precision Optical Metrology | Optical Components

ZYGO is a worldwide supplier of optical metrology systems, custom optical components, and complex electro-optical systems design and

Advanced Photonics Solutions

We deliver advanced photonics solutions by combining fiber optic components, high-performance light sources, and integrated photonics. With expertise in fiber

Fiber Optic Sensors | KEYENCE America

KEYENCE America provides Fiber Optic Sensors; Any application in any environment. Universal amplifiers with flexible and compact fiber optic heads.

Fiber optic sensors and fiber optics | Baumer international

Fiber optic sensors and fiber optics - limitless and customized The perfect solution with the fiber optics sensor toolbox Over 350 customized fiber optic solutions

Fiber optic sensor head

Find out all of the information about the Autonics product: fiber optic sensor head FD/FT/FL/GD/GT series. Contact a supplier or the parent company directly to get a quote or to find out a price or your

Sensor head | CITIZEN FINEDEVICE CO.,LTD.

Fiber type head Fiber-optic bare head suitable for measurement in narrow space. Two types are available depending on the measurement location: Horizontal type

Fiber Optic Units

The fiber optic units are available in 9 head types (thread, cylindrical, flat, L-shaped, plastic, perpendicular, stainless steel, U-shaped, area detection), and 7 cable types (standard, flexible, break

E32 Longer distance | OMRON, Europe

© 2026 METRA FIBER MARKET - All rights reserved

E32 Longer distance Longer distance fiber sensor heads With built-in focal lenses the longer distance fiber heads provide enhanced operational stability in dusty environments or long distance

Fibre Optic Sensors

Fibre Optic Sensors Omron''s fibre optic portfolio contains hundreds of sensor heads designed to cover virtually any fibre application requirement, this guide simplifies choosing by listing the most

Fiber Optic Sensor Head for sale | eBay

Get the best deals for Fiber Optic Sensor Head at eBay . We have a great online selection at the lowest prices with Fast & Free shipping on many items!

Fiber optic sensors

Compact fiber optic sensors with one-way or detecting principle. Various model series for plastic or glass optical fiber.

Related Video Reference

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

Contact Us

Continue your research online:

Website: https://metramarket.es
Technical inquiry: https://metramarket.es/contact.html

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

© 2026 METRA FIBER MARKET - All rights reserved