



More Precision

optoCONTROL CLS1000 // Fiber optic sensor for industrial applications



Reflex sensor for the distinction of materials and parts

optoCONTROL CFS4

-  Detection range up to 430 mm
-  Options with light band and 90° output
-  Simple and space-saving mounting
-  Models with and without external thread



In the case of the reflex sensor, the infrared light emitted by the controller is guided to the detecting object via the sensor's fiber-optic light guides and reflected there. Both diffuse and directly reflected components are present in the back-reflected infrared light. The reflected light components of the object to be detected are received by the same sensor and transmitted back to the controller via the optical fiber for evaluation.

The high-quality reflective sensor, in combination with the performance of the CLS1000 series, delivers even more precise detection of a wide variety of objects and structures. The sensors are available with a wide range of detection ranges, temperature ranges and lengths. This enables a wide range of applications. The fiber optic cable has a sensor head, which is available in different versions:

These sensor heads can be easily mounted in the machine on a bracket using M4, M6, and M10 threads.

With external thread: For example, threaded sensors can be easily fixed on a mounting bracket.

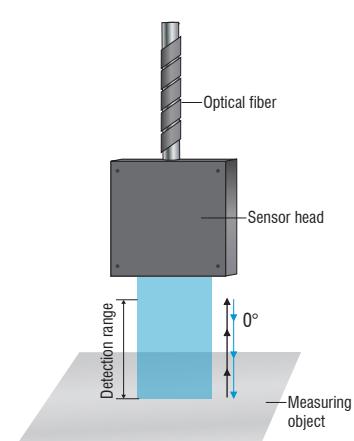
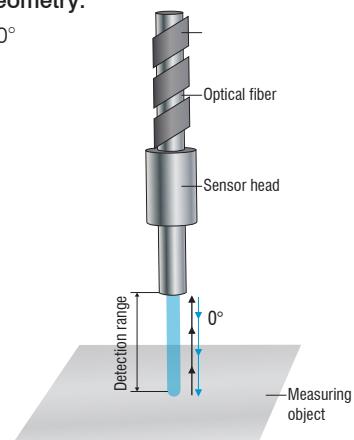
Without external thread: Cylindrical sensor heads are suitable for space-saving mounting. This is achieved by simply setting a grub screw.

90° deflection: If the installation depth and the mounting space are very limited, sensors with integrated 90° deflection are the optimal solution.

Flat sensor head: Thanks to the light band, flat sensor heads are best suited for detecting larger objects. These can be located anywhere in the light band.

Measurement geometry:

Reflex sensor 0°:0°



Controller optoCONTROL CLS1000

-  Large detection and operating ranges
-  Numerous teach-in modes for fast sensor adjustment
-  Detection of the finest structures
-  Extremely high resistance to ambient light up to 50,000 lx
-  LCD display for quick and easy configuration
-  Extremely robust and compact
-  Switchable NPN; PNP; PP



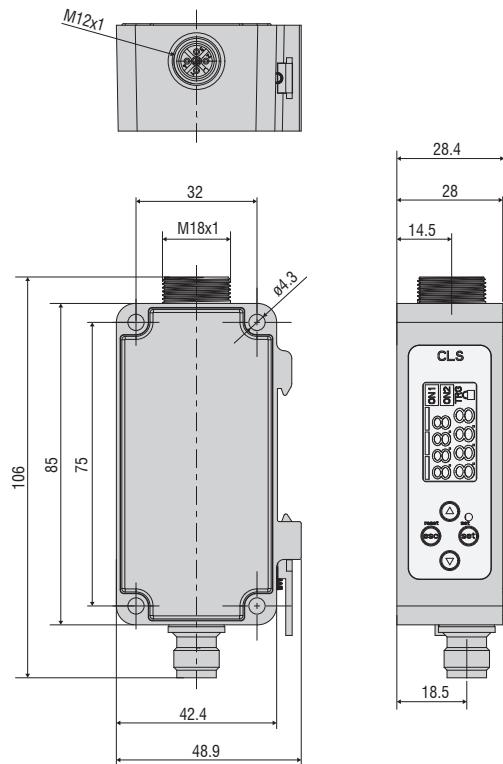
Reliable presence detection and position control

The fiber optic sensor comprises a CFS sensor and a CLS1000 controller. The wide detection and operating ranges of up to 2000 mm make the fiber optic sensor ideal for the detection of components even at great distances.

The optoCONTROL CLS1000 optoelectronic fiber optic sensor is suitable for use in automation thanks to its variable switching outputs. The fiber optic sensor is used, for example, in position control and for position and presence detection.

The CLS1000 controller is available in five different versions: CLS1000-QN with antivalence function (normally open/normally closed), CLS1000-2Q with two switching outputs, CLS1000-OC with optocoupler, CLS1000-AU with voltage output and CLS1000-AI with current output. Each model is available in NPN, PNP or push-pull versions, each with or without trigger.

Due to the high resistance to ambient light and the possibility to adapt the controller in OEM applications, the CLS1000 can be used in almost all environments, regardless of high temperatures or confined installation spaces.



(dimensions in mm, not to scale)