

More Precision

optoCONTROL CLS1000 // Fiber optic sensor for industrial applications



Notes on the function of the CFS sensors

Application instructions on selecting the appropriate function.



Reflex sensor (one-way system)

- Detection range max. 1200 mm
- Quick and easy installation
- Detection of the finest structures
- Presence detection
- Ideal for level monitoring, position and location determination



Reflex mode V-arrangement (two-way system)

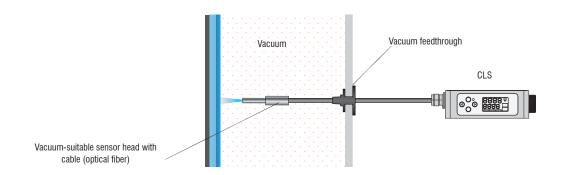
- Detection range max. 1200 mm
- Very exact positioning of the switching point
- Two objects generate highest intensity on the intersection
- Suitable for light dust and particles flying in the path of the beam
- Gloss detection



Transmission mode (two-way system)

- Large distance between receiving and transmission unit up to 2000 mm
- Objects are detected by interruption of light beam
- Arbitrary point of light transmission
- Detection of transparent objects
- Ideal for part recognition, counting tasks, edge detection, presence monitoring

Vacuum suitability

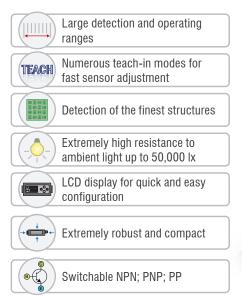


The fiber optic sensors and fiber optic cables are built with passive components and do not emit heat to the environment.

In vacuum, sensors (temperature bonding T250), optical fibers (stainless steel sheath), and the vacuum feedthrough up to 10^{-5} mbar can be used.

Controller

optoCONTROL CLS1000





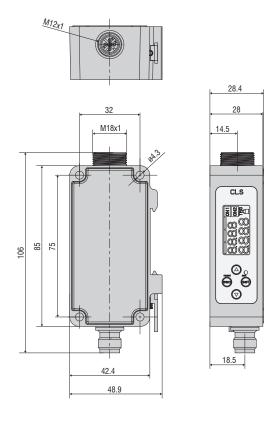
Reliable presence detection and position control

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)