

# C-LAS Series

## ▶ Product Information

Because of its outstanding compact design, the C-LAS Series is especially suitable for applications in the field of robotics. Due to the high type of protection (IP67) and the scratch-proof glass cover of the optical unit, the sensors can be operated in rough industrial environments. Apart from the laser ranging sensor types (analog and digital), a transmitted-light (up to 100 m) and a reflected-light version (up to 30 m), and a contrast sensor (up to 200 mm) are also available.

Ideal for positioning tasks.



## Characteristics

### **C-LAS-LT-65 - Laser sensor with background suppression**

Operates according to the triangulation principle, i.e. objects are detected against the background by way of their smaller distance to the sensor. Exact detection of the object is achieved by the focused visible laser spot. Furthermore, the sensor adjusts itself to the respective object, i.e. there is no distance misalignment between dark and bright objects. The object distance at which there is a change of switching state at the sensor output is set with the integrated potentiometer.  
Operating range: 35 mm ... 120 mm.

### **C-LAS-LT-65-ANA - Laser ranging sensor with analog output (0 ... +10V)**

Operates according to the triangulation principle, i.e. the optical laser transmitter and receiver axes are arranged at a certain angle; laser power is automatically controlled, which ensures bright-dark object compensation. The analog signal that is provided at the sensor output continuously informs about the current object distance, the sensor can thus be used for the positioning of objects and for quality inspection (object within the tolerance range).  
Operating range 35 mm ... 120 mm.

### **C-LAS-LR-RP2 - Laser reflex light barrier with polarisation filter and interference filter**

The combination with a reflector allows an operating range of up to 30 m. The laser power for the respective measuring task can be set with a potentiometer. This makes it possible to even detect extremely thin objects (down to the  $\mu\text{m}$ -range).

### **C-LAS-LR-OP2 - Laser reflex light barrier as contrast sensor**

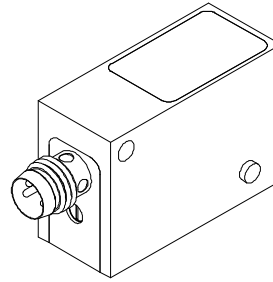
Objects are detected by way of the difference in brightness (contrast) against the background. The sensor is adjusted to the respective object by varying the laser power with the integrated potentiometer.  
Operating range 0 ... 200 mm.

### **C-LAS-14 - Laser one-way light barrier as contrast sensor**

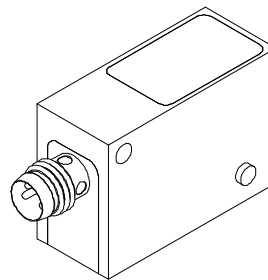
A collimated laser beam allows a large transmitter-receiver distance. Alignment of transmitter and receiver is facilitated by the visible laser beam. The laser power can be set with the integrated potentiometer. This makes it possible to even detect very thin objects (down to the  $\mu\text{m}$ -range).  
Operating range 0 ... 100 m.

**Product Line****C-LAS-LT-65**

Laser sensor with background suppression

**C-LAS-LT-65-ANA**

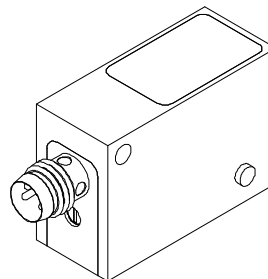
Laser ranging sensor with analog output (0 ... +10V)

**C-LAS-LR-OP2**

Laser reflex light barrier as contrast sensor

**C-LAS-LR-RP2**

Laser reflex light barrier with polarisation filter and interference filter

**C-LAS-14 (Transmitter and receiver)**

Laser one-way light barrier as contrast sensor

