Laser Sensor Family

Optimized Laser technology

A lifetime of commitment to automation

The LD32.. laser family in general

The LD32 laser sensor features a unique combination of ultra-compact housing perfect functionality and a very high price/performance ratio.

With its small dimensions and high-precision detection, the sensor is particularly useful in applications within fine mechanics and micro-technology.

The sensors are among the world's smallest sensors with Teach-In. All setting functions are easily performed by pushbutton, and moreover, setting can take place dynamically during the production process to prevent costly downtime.

All sensors fulfill the high demands of laser protection class 2 and consequently require no special safety measures.

Common features of the laser sensor family include:

- Compliance with laser class 2
- Light source: red light laser diode, for easy adjustment
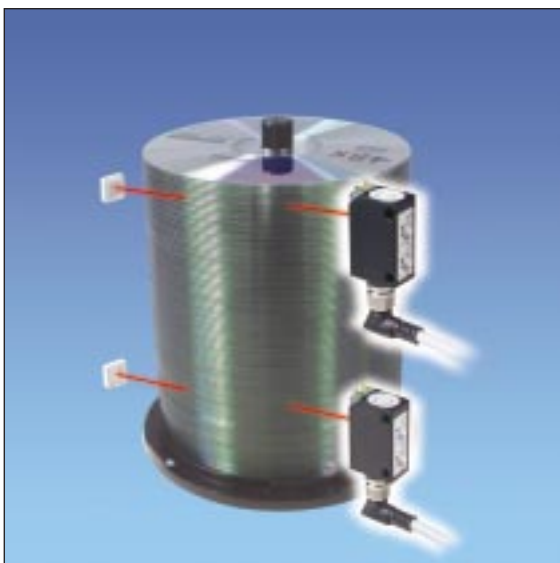- Robust ABS housing 32 x 20 x 12 mm

Teach-in

The LD32 laser sensor family consists of three different types: a polarized retro-reflective sensor, a diffuse-reflective sensor capable of being used as contrast sensor and a background suppression sensor:

Polarized retro-reflective sensor

Exceptional sensing distance

- Polarized retro-reflective sensor type LD32CNP10..
- Scanning distance 100 to 1000 mm
- Light spot diameter 1 mm @ 300 mm
- Switching frequency 1000 Hz
- Power supply 10-30 VDC
- Output load 100 mA
- NPN or PNP output, NO or NC
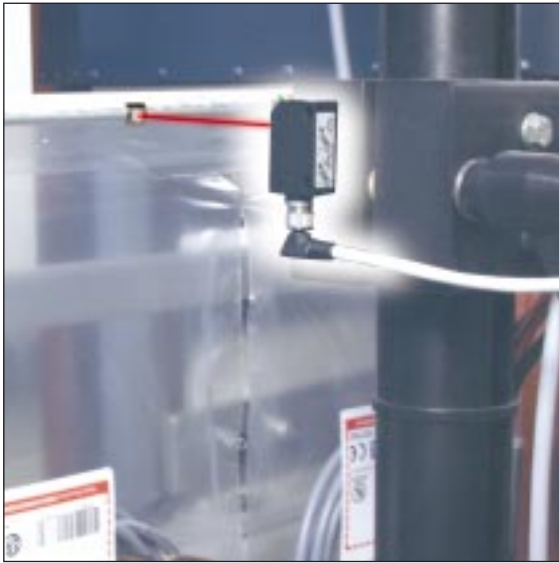- Degree of protection IP 67

Application
- Detection of small parts over long distances
  - a strong alternative to fiber optical sensors.

Diffuse-reflective sensor

Ultra-precise detection of contrast differences

- Diffuse-reflective sensor type LD32CND15..
- Scanning distance 40 to 150 mm
- Light spot diameter 0.7 mm
- Switching frequency 1000 Hz
- Power supply 10-30 VDC
- Output load 100 mA
- NPN or PNP output, NO or NC
- Degree of protection IP 67

Application
- Detection of differences in contrast of small structures like thin lines, written characters, etc.

- Detection of small parts differing distinctly from the surroundings in colour, for example small components on printed circuit boards.

Background suppression sensor

High-accuracy detection of small approaching objects

- Background suppression sensor type LD32CNB06..
- Scanning distance 20 to 60 mm
- Light spot 0.5 mm in focus
- Switching frequency 1000 Hz
- Power supply 10-30 VDC
- Output load 100 mA
- NPN or PNP output, NO or NC
- Degree of protection IP 67

Application
- By suppressing disturbances from the surroundings, the sensor is capable of detecting extremely small approaching objects, for example 0.5 mm wide slots or components having a diameter of only 0.2 mm.