

PR98C172

LASER SENSORS • RETRO-REFLECTIVE LIGHT BARRIERS

Optical sensors function contactlessly. They detect objects independent of their characteristics (e.g., shape, color, surface structure, material). The basic operating principle is based on the transmission and reception of light. There are three different versions: 1. The through-beam sensor consists of two separate devices, a transmitter and a receiver that are aligned with one another. If the light beam between the two devices is interrupted, the switching output integrated in the receiver changes its status. 2. With the retro-reflective sensor, the transmitter and receiver are located in one device. The emitted light beam is reflected back to the receiver by a reflector that is to be mounted opposite the device. As soon as the light beam is interrupted, the switching output integrated in the device changes its status. 3. With the diffuse reflection sensor, the transmitter and receiver are in one device. The emitted light beam is reflected by the object that is to be detected. As soon as the receiver detects the reflected light, the switching output integrated in the device changes its status.



MECHANICAL DATA

Ambient temperature (MAX)	55 °C
Ambient temperature (MIN)	-10 °C
Cable length	2 m
Housing material	PBT
Material of optical surface	Acrylic glass
Number of wires	2
Reflector included in the scope of delivery	Yes
Sensor height	31 mm
Sensor length	25 mm
Sensor width	2 mm
Storage temperature	70 °C
Storage temperature	-20 °C
Wire cross section	0.1 mm ²

ELECTRICAL DATA

Laser power	3 mW
Max. switching distance	7000 mm
Type of electrical connection	Cable
With LED display	Yes
With time function	No

OPTICAL DATA

Laser class	2
Laser protection class	Class 2
Light beam form	Point
Light source	Laser diode, red light
Wavelength of the sensor	655 nm

DIMENSIONAL DRAWING**INSTALLATION**

Mounting / Installation may only be carried out by a qualified electrician!

DISPOSAL**SAFETY WARNINGS**

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!

Never use these devices in applications where the safety of a person depends on their functionality.