

PT98A841

LASER SENSORS • DIFFUSE REFLECTION SENSORS WITH INTENSITY DIFFERENTIATION

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	-10 °C ... 55 °C
Degree of protection (IP)	IP40
Housing design	Cuboid
Housing material	PBT
Number of wires	2
Reflector included in the scope of delivery	No
Sensor height	33.5 mm
Sensor length	25 mm
Sensor width	11.2 mm
Storage temperature	70 °C
Storage temperature	-20 °C
With interchangeable lens	No

ELECTRICAL DATA

Alarm output	No
Equipment protection class	Protection class 3
High repeat accuracy	No
Interference suppression	No
Max. switching distance	1000 mm
Pre-failure message	No
Sensing range	30 mm ... 1000 mm
Setting procedure	Manual adjustment
Suitable for safety functions	No
Type of electrical connection	Cable with connector
With communication interface, RS-232	Yes
With LED display	Yes
With monitoring function of downstream devices	No

ELECTRICAL DATA

With other analog output	No
With restart lock	No
With time function	No

OPTICAL DATA

Light beam form	Line
Light exit	IV000197
Light source	Laser diode, red light
Line scanner	No
Small light beam diameter	No
Wavelength of the sensor	655 nm

OTHER DATA

	No
	No
Feeding technology	Yes

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!