PN630520

LASER SENSORS • AUTO-REFLECTIVE SENSORS

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)	50 °C
Ambient temperature (MIN)	0 °C
Degree of protection (IP)	IP67
Housing design	Cuboid
Housing material	Plastic
Material of optical surface	PMMA
Reflector included in the scope of delivery	No
Sensor height	23.4 mm
Sensor length	45 mm
Sensor width	63 mm

ELECTRICAL DATA

Decay time	10 ms
Max. output current	80 mA
Max. switching distance	2000 mm
No-load current	40 mA
Number of pins	4
Operating voltage (MAX)	30 V
Operating voltage (MIN)	10 V
Response time	10 ms
Reverse polarity protection	Yes
Scanning function	Light-/dark-on mode
Setting procedure	Teach-In
Short-circuit-proof	Yes
Switching frequency	50 Hz
Type of electrical connection	Connector M12
Type of switching function	Change-over contact (NO/NC)

ELECTRICAL DATA

Voltage drop	3.5 V
Voltage type	DC
With LED display	Yes
With time function	No

OPTICAL DATA

Laser class	1
Laser protection class	Class 1
Light beam form	Point
Light source	Laser diode, red light
Wavelength of the sensor	656 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.

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