OY650145

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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 ... 60 °C
Degree of protection (IP)	IP67
Ejection control	Yes
Housing coating	Anodised
Housing design	Cuboid
Housing material	Aluminium
Reflector included in the scope of delivery	No
Row length	20 mm
Sensor diameter	32 mm
Sensor length	65 mm
Storage temperature	85 °C
Storage temperature	-20 °C
Thread pitch	1.5 mm
Thread size, metric	34
With interchangeable lens	No

ELECTRICAL DATA

Alarm output	No
Clock frequency of the transmitter	0.75 kHz
Equipment protection class	Protection class 3
High repeat accuracy	Yes
Interference suppression	No
Max. output current	100 mA
Max. switching distance	55 mm
No-load current	220 mA
Number of pins	8
Number of pins of the communication interface	4

ELECTRICAL DATA

Operating voltage	24 V ... 24 V
Pre-failure message	No
Repeatability +/-	60 µm
Scanning function	Light-/dark-on mode
Sensing range	50 mm ... 60 mm
Setting procedure	Parameterization
Short-circuit-proof	Yes
Suitable for safety functions	No
Type of communication interface	Connector M5
Type of electrical connection	Connector M9
Type of plug-in contact, communication interface	Female (socket)
Type of switching function	Programmable/configurable
Type of switching output	PNP/NPN
USB connection	Yes
Voltage type	DC
With communication interface, RS-232	Yes
With monitoring function of downstream devices	No
With other analog output	No
With restart lock	No
With time function	No

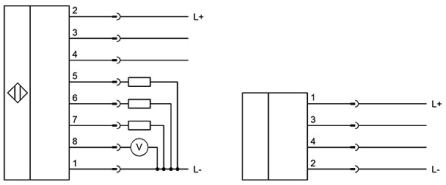
OPTICAL DATA

Light beam form	Line
Light exit	IV000197
Light source	White light
Line scanner	Yes
Min. object size	0.1 mm
Small light beam diameter	No

OTHER DATA

	No
	No
Feeding technology	Yes

CONNECTION



DIMENSIONAL DRAWING

INSTALLATION

DISPOSAL

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

SAFETY WARNINGS

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