PYSI0317

LASER SENSORS • LINE 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)	60 °C
Ambient temperature (MIN)	-10 °C
Degree of protection (IP)	IP54
Ejection control	Yes
Housing coating	Anodised
Housing design	Cuboid
Housing material	Aluminium
Reflector included in the scope of delivery	No
Sensor height	39 mm
Sensor length	65 mm
Sensor width	65 mm
Storage temperature	85 °C
Storage temperature	-20 °C
With interchangeable lens	Yes

ELECTRICAL DATA

Alarm output	No
Equipment protection class	Protection class 3
High repeat accuracy	Yes
Interference suppression	No
Max. output current	100 mA
No-load current	200 mA
Number of digital inputs	2
Number of pins	8
Number of pins of the communication interface	4
Number of switching outputs	3
Operating voltage (MAX)	24 V

ELECTRICAL DATA

Operating voltage (MIN)	24 V
Pre-failure message	No
Reverse polarity protection	Yes
Scanning function	Light-/dark-on mode
Setting procedure	Parameterization
Short-circuit-proof	Yes
Suitable for safety functions	No
Switching frequency	1500 Hz
Type of analog output	0 V ... 10 V / 4 mA ... 20 mA
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 LED display	Yes
With monitoring function of downstream devices	No
With other analog output	No
With restart lock	No
With time function	No

OPTICAL DATA

Light exit	Axial
Line scanner	No
Small light beam diameter	No

OTHER DATA

Feeding technology	Yes
For gloss queries	No
Is line scan camera	Yes
Resolution of CCD chip	512 Px
Size of CCD chip	6 mm

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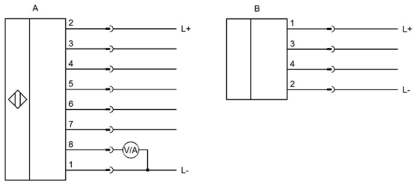
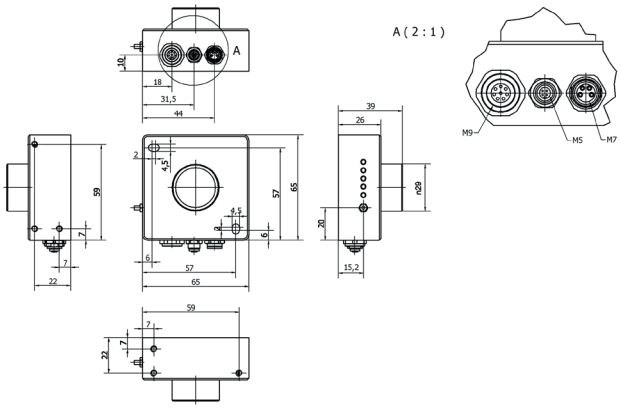
CONNECTION



Colors: A: M9: 1 = WH (white), 2 = BN (brown), 3 = GN (green), 4 = YE (yellow), 5 = GY (gray), 6 = PK (pink), 7 = BU (blue), 8 = RD (red)
Functions: A: 1 = GND, 2 = L+, 3 = IN 0 (ext. Trigger), 4 = IN 1 (teach/reset), 5 = Out 0, 6 = Out 1, 7 = Out 2, 8 = 4-20mA/0-10V
B: M5: 1 = L+, 2 = L-, 3 = RxD, 4 = TxD

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.