

**PG056571****LASER SENSORS • FORK LIGHT BARRIERS**

Special design of through-beam sensor. Transmitter and receiver are located in the fork or angular limbs and are perfectly aligned to each other.

**MECHANICAL DATA**

|   |                  |
|---|------------------|
| Ambient temperature                         | -20 °C ... 50 °C |
| Degree of protection (IP)                   | IP67             |
| Fork depth                                  | 13.5 mm          |
| Fork light barrier design                   | Furcate          |
| Fork width                                  | 5 mm             |
| Housing design                              | Cuboid           |
| Housing material                            | Aluminium        |
| Material of optical surface                 | Glass            |
| Reflector included in the scope of delivery | No               |
| Sensor height                               | 19 mm            |
| Sensor length                               | 6 mm             |
| Sensor width                                | 31.5 mm          |

**ELECTRICAL DATA**

|  |                     |
|--|---------------------|
| Analogue output 0 mA ... 20 mA           | No                  |
| Analogue output 0 V ... 10 V             | No                  |
| Analogue output -10 V ... +10 V          | No                  |
| Analogue output 4 mA ... 20 mA           | No                  |
| Decay time                               | 0.02 ms             |
| Max. output current                      | 100 mA              |
| Max. switching distance                  | 5 mm                |
| No-load current                          | 20 mA               |
| Number of pins                           | 4                   |
| Operating voltage                        | 12 V ... 30 V       |
| Pre-failure message                      | No                  |
| Rated control supply voltage $U_s$ at DC | 12 V ... 30 V       |
| Relative repeat accuracy                 | 0.01 mm             |
| Repeatability +/-                        | 10 $\mu$ m          |
| Response time                            | 0.02 ms             |
| Reverse polarity protection              | Yes                 |
| Scanning function                        | Light-/dark-on mode |

## ELECTRICAL DATA

|  |   |
|--|---|
| Short-circuit-proof                            | Yes   |
| Suitable for safety functions                  | No  |
| Switching frequency                            | 25000 Hz                                      |
| Type of electrical connection                  | Connector M8                                  |
| Type of switching function                     | Normally closed contact/normally open contact |
| Type of switching output                       | PNP/NPN                                       |
| Type of the forked light barrier               | Standard                                      |
| Voltage type                                   | DC  |
| With communication interface, analog           | No  |
| With communication interface, AS-Interface     | No  |
| With communication interface, CANOpen          | No  |
| With communication interface, DeviceNet        | No  |
| With communication interface, Ethernet         | No  |
| With communication interface, INTERBUS         | No  |
| With communication interface, PROFIBUS         | No  |
| With communication interface, RS-232           | No  |
| With communication interface, RS-422           | No  |
| With communication interface, RS-485           | No  |
| With communication interface, SSD              | No  |
| With communication interface, SSI              | No  |
| With monitoring function of downstream devices | No  |
| With other analog output                       | No  |
| With restart lock                              | No  |
| With time function                             | No  |

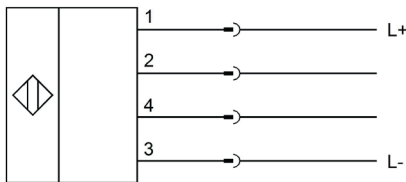
## OPTICAL DATA

|                          |                        |
|--------------------------|------------------------|
| Laser protection class   | Class 1                |
| Light source             | Laser diode, red light |
| Min. object size         | 0.01 mm                |
| Resolution               | 10 µm                  |
| Wavelength of the sensor | 850 nm                 |

## OTHER DATA

|                    |     |
|--------------------|-----|
| Feeding technology | Yes |
|--------------------|-----|

## CONNECTION



**Colors:** 1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black)

**Functions:** 1 = L+, 2 = PNP NO NPN NC, 3 = L-, 4 = PNP NC NPN NO

## 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!