

## OG500375

### OPTICAL 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                         | 0 °C ... 60 °C |
| Degree of protection (IP)                   | IP67           |
| Fork depth                                  | 55 mm          |
| Fork light barrier design                   | Furcate        |
| Fork width                                  | 50 mm          |
| Housing design                              | Cuboid         |
| Housing material                            | Aluminium      |
| Material of optical surface                 | Plastic        |
| Reflector included in the scope of delivery | No             |
| Sensor height                               | 50 mm          |
| Sensor length                               | 10 mm          |
| Sensor width                                | 70 mm          |
| Transparent material detection              | Yes            |

#### 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                               | 0.1 ms        |
| Hysteresis                               | 0.2 mm        |
| Max. output current                      | 200 mA        |
| Max. switching distance                  | 50 mm         |
| No-load current                          | 35 mA         |
| Number of pins                           | 3             |
| Operating voltage                        | 12 V ... 35 V |
| Pre-failure message                      | No            |
| Rated control supply voltage $U_s$ at DC | 12 V ... 35 V |
| Relative repeat accuracy                 | 0.1 mm        |
| Repeatability +/-                        | 100 $\mu$ m   |
| Response time                            | 0.1 ms        |

**ELECTRICAL DATA**

|  |   |
|--|---|
| Reverse polarity protection                    | Yes   |
| Scanning function                              | Light-/dark-on mode                           |
| Setting procedure                              | Manual adjustment                             |
| Short-circuit-proof                            | Yes   |
| Suitable for safety functions                  | No  |
| Switching frequency                            | 5000 Hz                                       |
| Type of electrical connection                  | Connector M8                                  |
| Type of switching function                     | Normally closed contact/normally open contact |
| Type of switching output                       | PNP   |
| Type of the forked light barrier               | Difference evaluation                         |
| Voltage drop                                   | 2.5 V   |
| 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  |

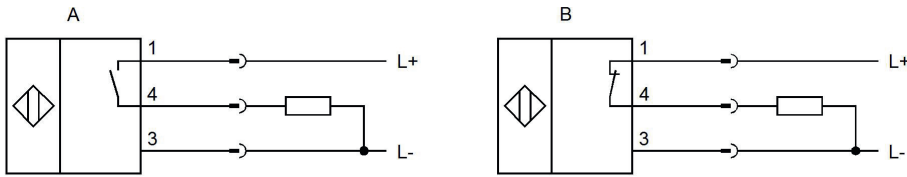
**OPTICAL DATA**

|                          |                |
|--------------------------|----------------|
| Laser protection class   | None           |
| Light beam form          | Point          |
| Light source             | Infrared light |
| Min. object size         | 0.07 mm        |
| Resolution               | 70 µm          |
| Wavelength of the sensor | 880 nm         |

**OTHER DATA**

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

## CONNECTION

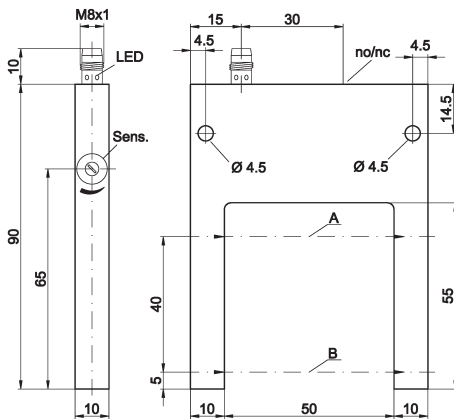


**Colors:** A: 1 = BN (brown), 3 = BU (blue), 4 = BK (black)

B: 1 = BN (brown), 3 = BU (blue), 4 = BK (black) **Functions:** A: 1 = L+, 3 = L-, 4 = PNP NO

B: 1 = L+, 3 = L-, 4 = PNP NC

## 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!