

OG050171

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 (MAX) | 60 °C |
|---|-----------|
| Ambient temperature (MIN) | -10 °C |
| Degree of protection (IP) | IP67 |
| Fork depth | 17 mm |
| Fork light barrier design | Furcate |
| Fork width | 5 mm |
| Housing design | Cuboid |
| Housing material | Aluminium |
| Material of optical surface | Plastic |
| Reflector included in the scope of delivery | No |
| Sensor height | 25 mm |
| Sensor length | 10 mm |
| Sensor width | 45 mm |

ELECTRICAL DATA

| LLLCTRICAL 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 | 0.5 ms |
| Hysteresis | 0.2 mm |
| Max. output current | 200 mA |
| Max. switching distance | 5 mm |
| No-load current | 35 mA |
| Number of pins | 3 |
| Operating voltage (MAX) | 35 V |
| Operating voltage (MIN) | 10 V |
| Pre-failure message | No |
| Rated control supply voltage Us at DC (MAX) | 35 V |
| Rated control supply voltage Us at DC (MIN) | 10 V |
| Relative repeat accuracy | 0.01 mm |



ELECTRICAL DATA

| Repeatability +/- | 10 μm |
|--|----------------------------|
| Response time | 0.5 ms |
| Reverse polarity protection | Yes |
| Scanning function | Dark switching |
| Setting procedure | Manual adjustment |
| Short-circuit-proof | Yes |
| Suitable for safety functions | No |
| Switching frequency | 1000 Hz |
| Type of electrical connection | Connector M8 |
| Type of switching function | Normally open contact (NO) |
| Type of switching output | PNP |
| Type of the forked light barrier | Standard |
| 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 | 0.5 mm |

OTHER DATA

Wavelength of the sensor

Resolution

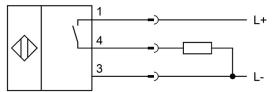
| Feeding technology | Yes |
|--------------------|-----|

 $500 \, \mu m$

880 nm



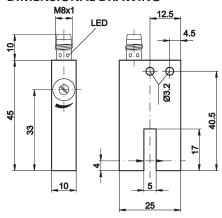
CONNECTION



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

Functions: 1 = L+, 3 = L-, 4 = PNP 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!

Never use these devices in applications where the safety of a person depends on their functionality.