

PG308571

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 (MAX)	50 °C
Ambient temperature (MIN)	-20 °C
Aperture diameter	1 mm
Degree of protection (IP)	IP67
Fork depth	43 mm
Fork light barrier design	Furcate
Fork width	30 mm
Housing design	Cuboid
Housing material	Aluminium
Material of optical surface	Glass
Reflector included in the scope of delivery	No
Sensor height	49 mm
Sensor length	8 mm
Sensor width	43 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	30 mm
No-load current	20 mA
Number of pins	4
Operating voltage (MAX)	30 V
Operating voltage (MIN)	12 V
Pre-failure message	No
Rated control supply voltage U_s at DC (MAX)	30 V
Rated control supply voltage U_s at DC (MIN)	12 V
Relative repeat accuracy	0.01 mm

ELECTRICAL DATA

Repeatability +/-	10 µm
Response time	0.02 ms
Reverse polarity protection	Yes
Scanning function	Light-/dark-on mode
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

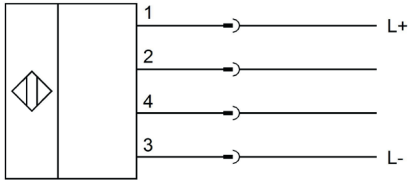
OPTICAL DATA

Laser protection class	Class 1
Light beam form	Point
Light source	Laser diode, infrared light
Min. object size	0.01 mm
Resolution	500 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!

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