IPF ELECTRONIC

DATA SHEET **PG500375** • Subject to alteration! Version: 03.11.2017

PG500375
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.
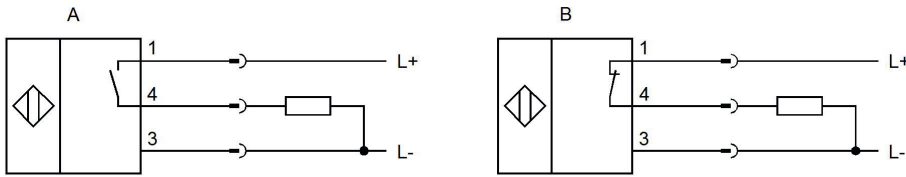
TECHNICAL DATA

Adjustable opening width	No
Ambient temperature	0 °C ... 50 °C
Analogue output -10 V ... +10 V	No
Analogue output 0 V ... 10 V	No
Analogue output 0 mA ... 20 mA	No
Analogue output 4 mA ... 20 mA	No
Connection to amplifier	No
Decay time	0.167 ms
Degree of protection (IP)	IP67
Diameter detection	No
Dynamic switching output	No
Edge control	No
Feeding technology	Yes
Fork depth	35 mm
Fork light barrier design	Furcate
Fork width	50 mm
Heavy soiling	No
Housing design	Cuboid
Housing material	Zinc die-cast
Housing material	Metal
Hysteresis	0.05 mm
Laser protection class	Class 1
Light beam form	Point
Light source	Laser diode, red light
Material of optical surface	Glass
Max. output current	200 mA
Max. switching distance	50 mm
Measurement of light beam coverage	No
Min. object size	0.1 mm
No-load current	30 mA

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TECHNICAL DATA

Number of pins	3
Operating voltage	10 V ... 35 V
Pre-failure message	No
Punching tools	No
Rated control supply voltage Us at DC	10 V ... 35 V
Reflector included in the scope of delivery	No
Relative repeat accuracy	0.02 mm
Repeatability +/-	20 µm
Resolution	100 µm
Response time	0.167 ms
Reverse polarity protection	Yes
Scanning function	Light-/dark switching
Sensor height	70 mm
Sensor length	10 mm
Sensor width	80 mm
Setting procedure	Manual adjustment
Short-circuit-proof	Yes
Suitable for safety functions	No
Switching frequency	3000 Hz
Transparent material detection	No
Type of electrical connection	Connector M8
Type of switching function	Normally closed contact/normally open contact
Type of switching function	Programmable/configurable
Type of switching output	PNP
Type of the forked light barrier	Standard
Voltage drop	2.8 V
Voltage type	DC
Wavelength of the sensor	670 nm
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 communication interface, analog	No
With monitoring function of downstream devices	No
With other analog output	No
With restart lock	No
With time function	No

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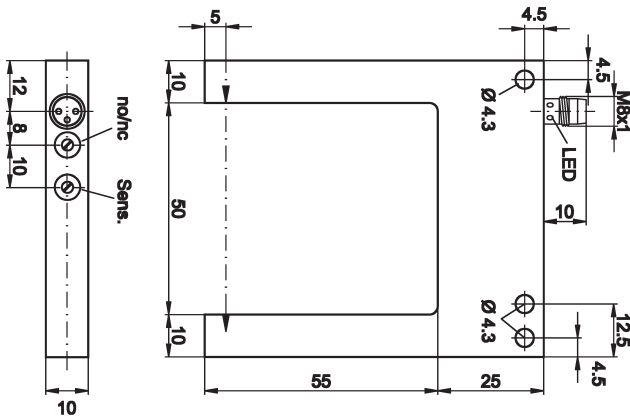
CONNECTION

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!

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