

Luminescence Sensor

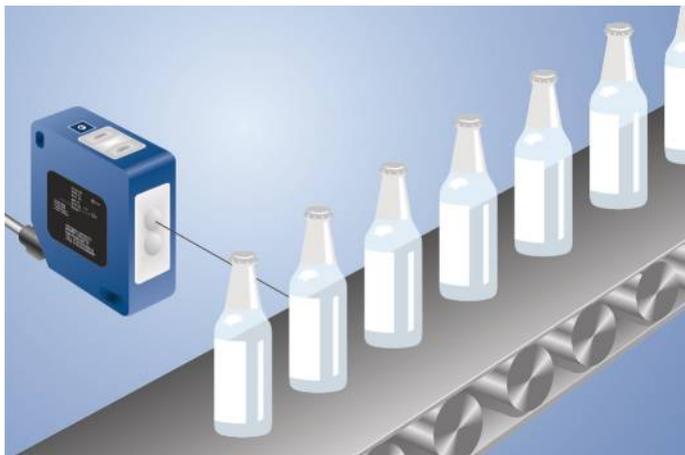
A1P05QAT80

Part Number



- Digital read-out of intensity values via the RS-232 interface
- Recognition of luminescent marks
- Teach-in, dynamic teach-in, key potentiometer

The luminescence sensor detects with a receiver filter all luminescent markings which emit light within a wavelength range from 420-750 nm. With another receiver filter suppresses especially interfering whiteners. The sensors have a very small spot, and use a UV LED with a very long service life.

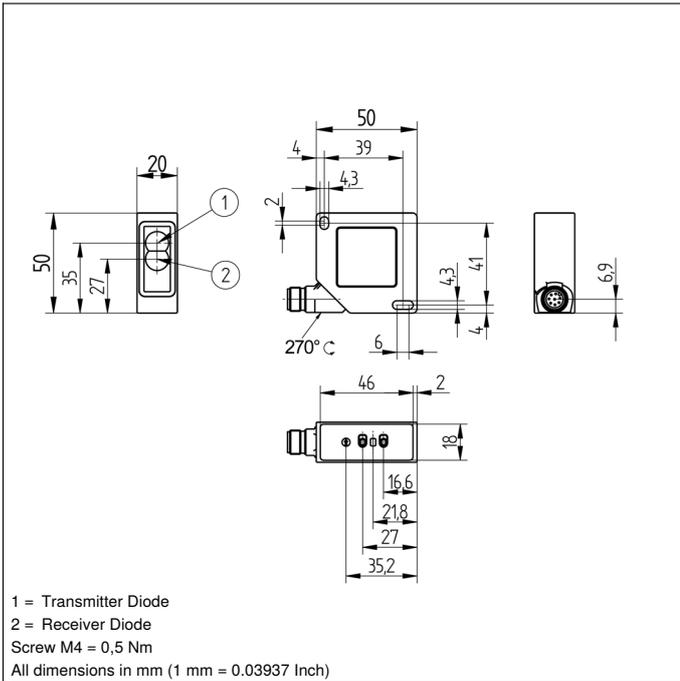


Technical Data

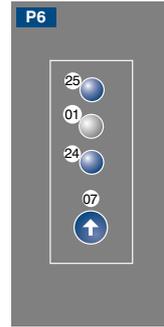
Optical Data	
Working Range	30...50 mm
Working Distance	40 mm
Receiving Range	420...750 nm
Switching Hysteresis	< 1 %
Light Source	UV Light
Wavelength	375 nm
Service Life (T = +25 °C)	100000 h
Risk Group (EN 62471)	2
Max. Ambient Light	10000 Lux
Light Spot Diameter	5 mm
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 50 mA
Switching Frequency	2500 Hz
Response Time	200 μs
On-/Off-Delay	0...100 ms
Temperature Drift	< 1 %
Temperature Range	-25...60 °C
Number of Switching Outputs	2
Switching Output Voltage Drop	1,5 V
Switching Output/Switching Current	200 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Lockable	yes
Teach Mode	ZT, DT, TP
Interface	RS-232
Baud Rate	38400 Bd
Number of Digital Inputs	2
Protection Class	III
Mechanical Data	
Setting Method	Teach-In
Housing Material	Plastic
Degree of Protection	IP67
Connection	M12 × 1; 8-pin
Configurable as PNP/NPN/Push-Pull	●
Switchable to NC/NO	●
RS-232 Interface	●
Connection Diagram No.	736
Control Panel No.	P6
Suitable Connection Equipment No.	80
Suitable Mounting Technology No.	380

Complementary Products

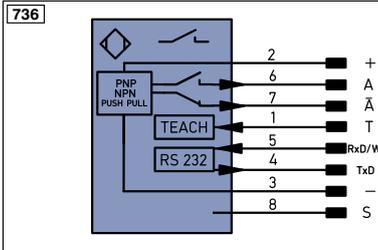
Fieldbus Gateway ZAGxxxN01, EPGG001
Interface Cable S232W3
Software



Ctrl. Panel

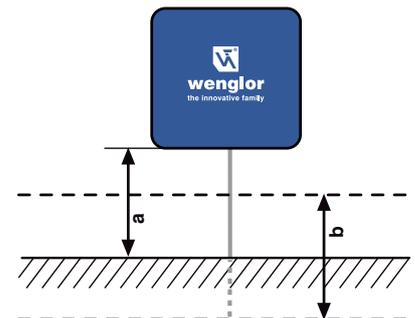


- 01 = Switching Status Indicator
- 07 = Selector Switch
- 24 = Plus Button
- 25 = Minus Button



Legend			
+	Supply Voltage +	PT	Platinum measuring resistor
-	Supply Voltage 0 V	nc	not connected
~	Supply Voltage (AC Voltage)	U	Test Input
A	Switching Output (NO)	Ū	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
Ṽ	Contamination/Error Output (NC)	O	Analog Output
E	Input (analog or digital)	O-	Ground for the Analog Output
T	Teach Input	BZ	Block Discharge
Z	Time Delay (activation)	AWV	Valve Output
S	Shielding	a	Valve Control Output +
RxD	Interface Receive Path	b	Valve Control Output 0 V
TxD	Interface Send Path	SY	Synchronization
RDY	Ready	SY-	Ground for the Synchronization
GND	Ground	E+	Receiver-Line
CL	Clock	S+	Emitter-Line
E/A	Output/Input programmable	±	Grounding
	IO-Link	SnR	Switching Distance Reduction
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path
IN	Safety Input	Tx+/-	Ethernet Send Path
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)
Signal	Signal Output	La	Emitted Light disengageable
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation
EN0RS422	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation
		EDM	Contactor Monitoring
		EN0RS422	Encoder A/Ā (TTL)
		EN0RS422	Encoder B/B̄ (TTL)
		ENa	Encoder A
		ENb	Encoder B
		AMIN	Digital output MIN
		AMAX	Digital output MAX
		AOk	Digital output OK
		SY In	Synchronization In
		SY OUT	Synchronization OUT
		OLt	Brightness output
		M	Maintenance
		rsv	reserved
		Wire Colors according to DIN IEC 757	
		BK	Black
		BN	Brown
		RD	Red
		OG	Orange
		YE	Yellow
		GN	Green
		BU	Blue
		VT	Violet
		GY	Grey
		WH	White
		PK	Pink
		GNYE	Green/Yellow

Ideal Working Distance



a = Working Distance
 b = Working Range

