

# Retro-Reflex Sensor for Clear Glass Recognition

## OKII403C0203

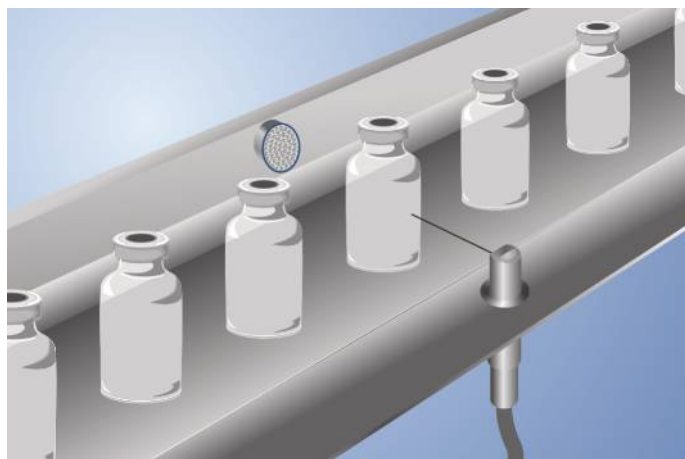
Part Number

InoxSens



- Hygienic design makes it easy to clean
- Made with food safe materials that are FDA approved
- Touch teach-in, external teach-in
- Waterproof (IP68/IP69K)

InoxSens is the hygiene series from wenglor. The innovative design of InoxSens sensors allows contamination and cleaning agents to flow off by themselves. A variety of components form a complete system which integrates seamlessly into the machine. The laser welded stainless steel housing made of V4A (1.4404/316L) is corrosion-free and resistant to cleaning agents. Gap-free mounting with InoxLock and the captive optics further contribute to these sensors' optimal suitability for cleaning-heavy environments. The InoxSens sensors are set up with the help of touch teach-in and is made possible by the hermetically sealed housing.



### Technical Data

Optical Data	
Range	4000 mm
Reference Reflector/Reflector Foil	RQ100BA
Clear Glass Recognition	yes
Switching Hysteresis	< 5 %
Light Source	Red Light
Polarization Filter	yes
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	3 °
Single-Lens Optic	yes

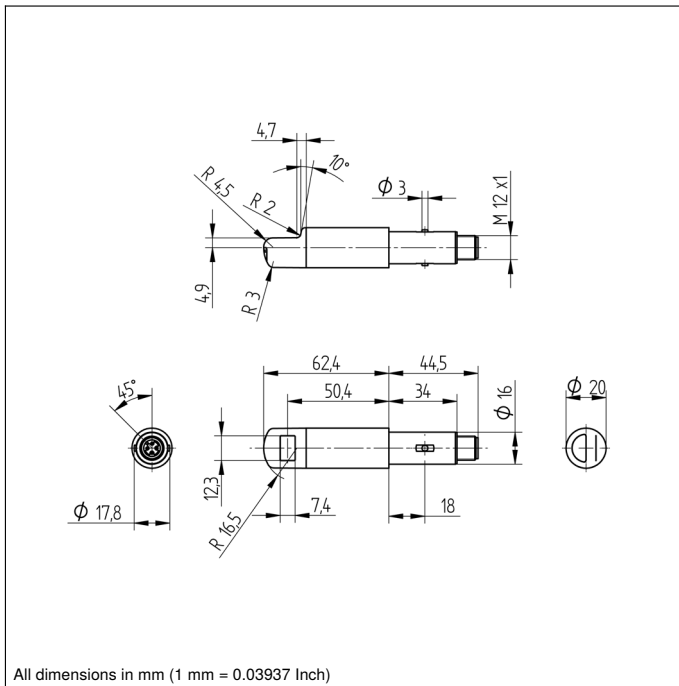
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U <sub>b</sub> = 24 V)	< 40 mA
Switching Frequency	1600 Hz
Response Time	313 μs
On-/Off-Delay (RS-232)	0...5 s
Temperature Drift	< 5 %
Temperature Range	-10...60 °C
Switching Output Voltage Drop	< 2,5 V
PNP Switching Output/Switching Current	200 mA
Residual Current Switching Output	< 50 μA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Lockable	yes
Teach Mode	NT, MT, XT
Protection Class	III

Mechanical Data	
Setting Method	Teach-In
Housing Material	Stainless Steel 316L
Degree of Protection	IP68/IP69K
Connection	M12 × 1; 4-pin
Optic Cover	Glass
Material Control Panel	PC (FDA)
Ecolab	yes

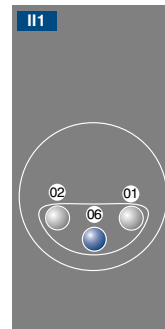
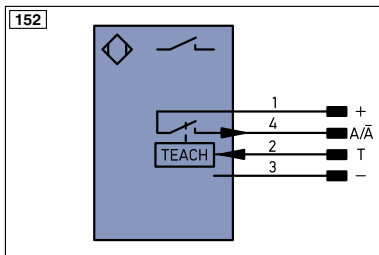
PNP NO/NC switchable	●
RS-232 with Adapterbox	●
Connection Diagram No.	152
Control Panel No.	111
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	140 490

### Complementary Products

Adapterbox A232
PNP-NPN Converter BG2V1P-N-2M
Reflector in Stainless Steel Protective Housing
Reflector, Reflector Foil
Software



All dimensions in mm (1 mm = 0.03937 Inch)

**Ctrl. Panel**

 01 = Switching Status Indicator  
 02 = Contamination Warning  
 06 = Teach Button

**Legend**

+	Supply Voltage +	PT	Platinum measuring resistor	EN <sup>A</sup> RS422	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	not connected	EN <sup>B</sup> RS422	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	EN <sup>A</sup>	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	EN <sup>B</sup>	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	A <sub>MIN</sub>	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	A <sub>MAX</sub>	Digital output MAX
Ū	Contamination/Error Output (NC)	O	Analog Output	A <sub>OK</sub>	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY <sub>in</sub>	Synchronization In
T	Teach Input	BZ	Block Discharge	SY <sub>OUT</sub>	Synchronization OUT
Z	Time Delay (activation)	A <sub>WV</sub>	Valve Output	OL <sub>T</sub>	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance reserved
RxD	Interface Receive Path	b	Valve Control Output 0 V	rsv	reserved
TxD	Interface Send Path	SY	Synchronization	Wire Colors according to DIN IEC 757	
RDY	Ready	SY-	Ground for the Synchronization	BK	Black
GND	Ground	E+	Receiver-Line	BN	Brown
CL	Clock	S+	Emitter-Line	RD	Red
E/A	Output/Input programmable	±	Grounding	OG	Orange
	IO-Link	S <sub>n</sub> R	Switching Distance Reduction	YE	Yellow
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path	GN	Green
IN	Safety Input	Tx+/-	Ethernet Send Path	BU	Blue
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
Signal	Signal Output	L <sub>a</sub>	Emitted Light disengageable	GY	Grey
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN <sup>0</sup> RS422	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactur Monitoring	GNVE	Green/Yellow

**Feasible reflector distance**

Reflector type, mounting distance

RQ100BA	0...4 m	RE6210BM	0...0,7 m
RE18040BA	0...2,5 m	RR25_M	0...1 m
RQ84BA	0...3,5 m	RR25KP	0...0,55 m
RR84BA	0...4 m	RR21_M	0...0,9 m
RE9538BA	0...1,5 m	ZRAE02B01	0...1,6 m
RE6151BM	0...3,4 m	ZRDS01R01	0...0,7 m
RR50_A	0...2,6 m	ZRME01B01	0...0,4 m
RE6040BA	0...3,2 m	ZRME03B01	0...1,6 m
RE8222BA	0...1,9 m	ZRMR02K01	0...0,5 m
RR34_M	0...1,6 m	ZRMS02_01	0...0,7 m
RE3220BM	0...0,8 m	Z90R001	0...0,7 m

