

Retro-Reflex Sensor for Transparent Objects

OKII603C0103

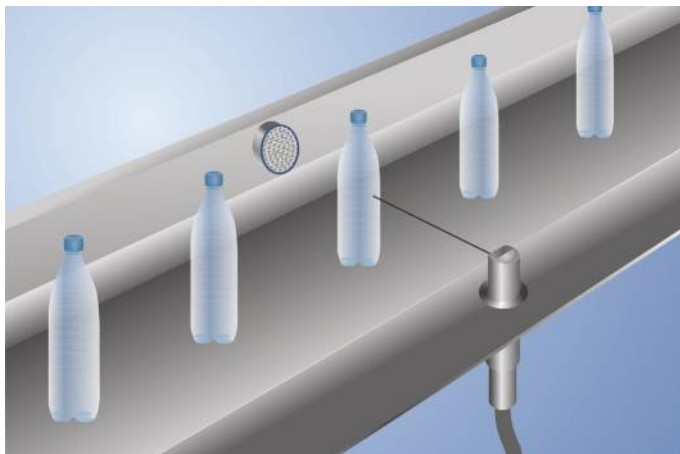
Part Number

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	6000 mm
Reference Reflector/Reflector Foil	RQ100BA
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 °
Two-Lens Optic	yes

Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 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
Protection Class	III

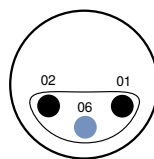
Mechanical Data	
Setting Method	Teach-In
Housing Material	Stainless steel 316L
Degree of Protection	IP68/IP69K
Connection	M12 × 1; 4-pin
Optic Cover	PMMA (FDA)
Material Control Panel	PC (FDA)
Ecolab	yes

PNP NC	●
RS-232 with Adapterbox	●
Connection Diagram No.	152
Control Panel No.	II1
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	140 490

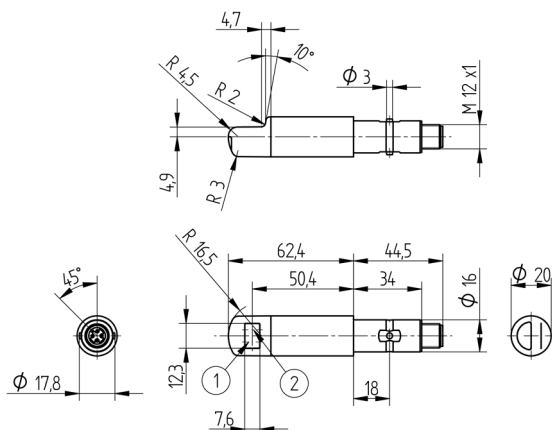
Complementary Products

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

Ctrl. Panel



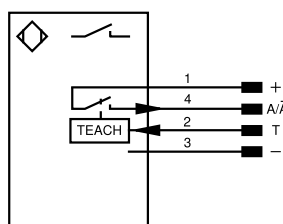
01 = Switching Status Indicator
02 = Contamination Warning
06 = Teach Button



1 = Emitter
2 = Receiver

All dimensions in mm (1 mm = 0.03937 Inch)

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Legend

+	Supply Voltage +	nc	Not connected	ENBR422	Encoder B/B (TTL)
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	ENB	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ā	Switching Output (NC)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	AOK	Digital output OK
Ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT
T	Teach Input	Amv	Valve Output	OLT	Brightness output
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved
RxD	Interface Receive Path	SY	Synchronization	Wire Colors according to DIN IEC 60757	
TxD	Interface Send Path	SY-	Ground for the Synchronization	BK	Black
RDY	Ready	E+	Receiver-Line	BN	Brown
GND	Ground	S+	Emitter-Line	RD	Red
CL	Clock	±	Grounding	OG	Orange
E/A	Output/Input programmable	SnR	Switching Distance Reduction	YE	Yellow
IO-Link	IO-Link	Rx+/-	Ethernet Receive Path	GN	Green
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path	BU	Blue
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey
Signal	Signal Output	Mag	Magnet activation	WH	White
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contact Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	ENAR422	Encoder A/Ā (TTL)		

Feasible reflector distance

Reflector type, mounting distance

RQ100BA	0,03...6 m	RR25KP	0,09...1 m
RE18040BA	0,04...4 m	RR21_M	0,07...1,6 m
RQ84BA	0,04...4,7 m	Z90R001	0,06...1,2 m
RR84BA	0,04...5,9 m	ZRAE02B01	0,04...2,5 m
RE9538BA	0,06...2,4 m	ZRME01B01	0,06...0,8 m
RE6151BM	0,11...4,6 m	ZRME03B01	0,1...2,2 m
RR50_A	0,03...3,5 m	ZRMR02K01	0,06...0,9 m
RE6040BA	0,02...4,5 m	ZRMS02_01	0,06...1,2 m
RE8222BA	0,03...2,7 m	RF505	0,14...1,7 m
RR34_M	0,13...1,9 m	RF508	0,14...1,7 m
RE3220BM	0,11...1,9 m	RF258	0,14...1,5 m
RE6210BM	0,15...1 m	ZRDF_K01	0,14...4 m
RR25_M	0,08...1,5 m		

