Through-Beam Sensor

OEII403C0203

Part Number

- **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.
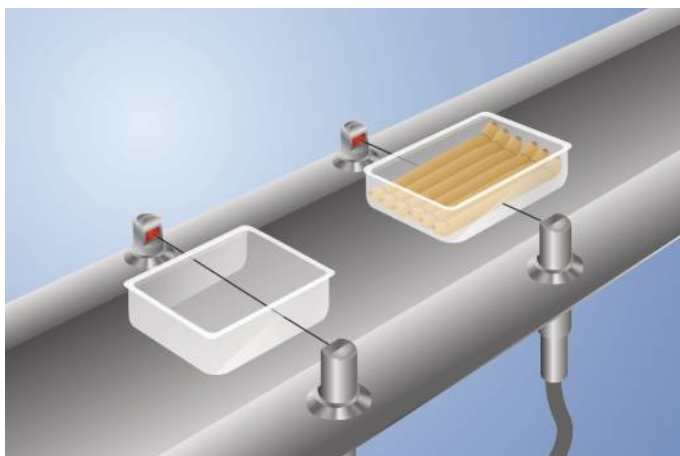
Technical Data

| Optical Data	
Range	4000 mm
Switching Hysteresis	< 15 %
Light Source	Red Light
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	3 °
Electrical Data	
Sensor Type	Receiver
Supply Voltage	10...30 V DC
Current Consumption (Ub = 24 V)	< 40 mA
Switching Frequency	500 Hz
Response Time	1 ms
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2,5 V
PNP Switching Output/Switching Current	200 mA
Residual Current Switching Output	< 50 μA
Short Circuit and Overload Protection	yes
Reverse Polarity Protection	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)
PNP NO/NC switchable	●
RS-232 with Adapterbox	●
Connection Diagram No.	152
Control Panel No.	II1
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	140 490

Suitable Emitter
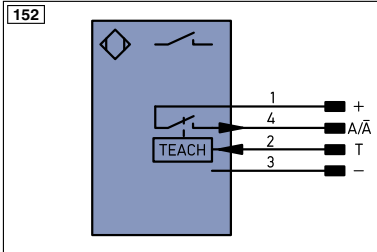
OSII403Z0203

Complementary Products

Adapterbox A232
PNP-NPN Converter BG2V1P-N-2M
Software

1 = no function
2 = Receiver
All dimensions in mm (1 mm = 0.03937 Inch)

Ctrl. Panel

II1
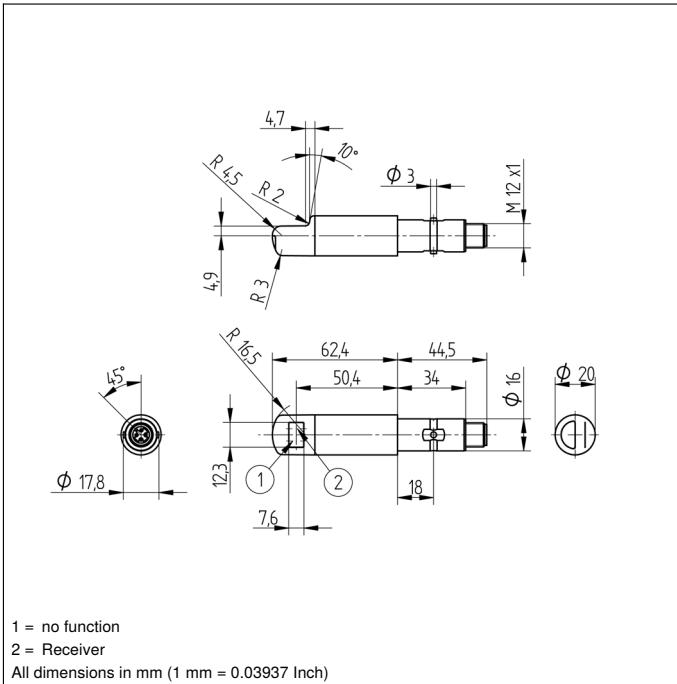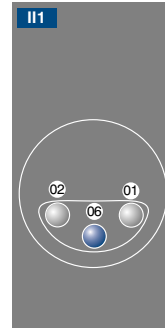
01 = Switching Status Indicator
02 = Contamination Warning
06 = Teach Button

152

1 +
4 A/Ā
2 T
3 −

TEACH

Legend

+	Supply Voltage +
−	Supply Voltage 0 V
~	Supply Voltage (AC Voltage)
A	Switching Output (NO)
Ā	Switching Output (NC)
V	Contamination/Error Output (NO)
V̄	Contamination/Error Output (NC)
E	Input (analog or digital)
T	Teach Input
Z	Time Delay (activation)
S	Shielding
RxD	Interface Receive Path
TxD	Interface Send Path
RDY	Ready
GND	Ground
CL	Clock
E/A	Output/Input programmable
⬧	IO-Link
PoE	Power over Ethernet
IN	Safety Input
OSSD	Safety Output
Signal	Signal Output
BI_D+/−	Ethernet Gigabit bidirect. data line (A-D)
EN0RS422	Encoder 0-pulse 0-0̄ (TTL)

PT	Platinum measuring resistor
nc	not connected
U	Test Input
Ū	Test Input inverted
W	Trigger Input
W−	Ground for the Trigger Input
O	Analog Output
O−	Ground for the Analog Output
BZ	Block Discharge
AMW	Valve Output
a	Valve Control Output +
b	Valve Control Output 0 V
SY	Synchronization
SY−	Ground for the Synchronization
E+	Receiver-Line
S+	Emitter-Line
⏚	Grounding
SnR	Switching Distance Reduction
Rx+/−	Ethernet Receive Path
Tx+/−	Ethernet Send Path
Bus	Interfaces-Bus A(+)/B(−)
La	Emitted Light disengageable
Mag	Magnet activation
RES	Input confirmation
EDM	Contactor Monitoring

ENARS422	Encoder A/Ā (TTL)
ENBRS422	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