

# Through-Beam Sensor for PET Selection

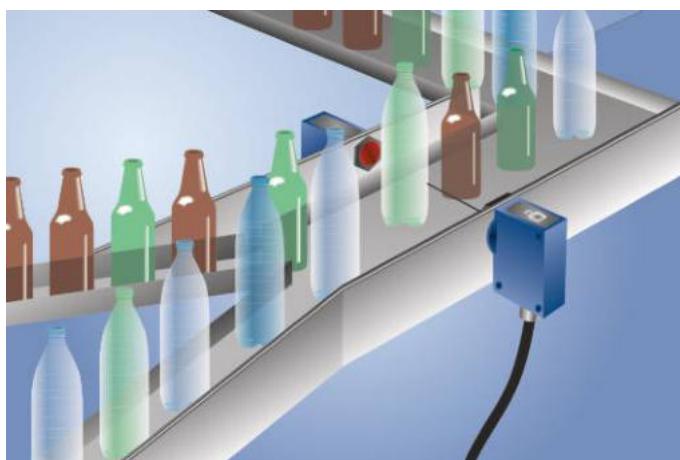
## OERS948

Part Number



- Compact housing
- Direct PET output
- Polarization filter
- Simple installation
- Teach-in and external teach-in

These through-beam sensors distinguish transparent PET from other transparent materials such as glass and opaque objects. They have two switch outputs for representing these two states. The sensor can be tested for its function by means of the test input. Furthermore, several transmitters can be synchronized whereby close sensors do not affect each other. The M18 threaded mounting enables the Sensor to be easily mounted and protected mechanically.



### Technical Data

#### Optical Data

Range	300 mm
Light Source	Red Light
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux

#### Opening Angle

4 °

#### Electrical Data

Sensor Type	Receiver
Supply Voltage	10...30 V DC
Current Consumption (Ub = 24 V)	< 20 mA
Switching Frequency	150 Hz
Response Time	1,8 ms
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Number of Switching Outputs	2
Switching Output Voltage Drop	< 2,5 V
PNP Switching Output/Switching Current	100 mA
Residual Current Switching Output	< 50 µA
Short Circuit and Overload Protection	yes
Reverse Polarity Protection	yes
Protection Class	III

#### Mechanical Data

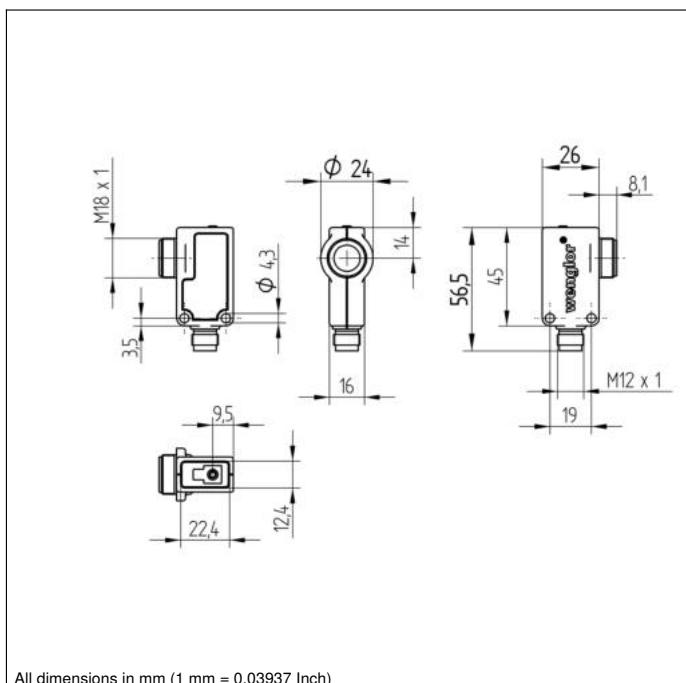
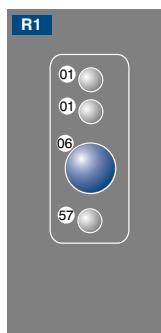
Setting Method	Teach-In
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 x 1; 5-pin
PNP NO	●
Connection Diagram No.	363
Control Panel No.	R1
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	150   370

#### Suitable Emitter

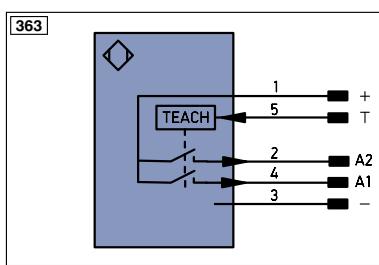
OSRS946

#### Complementary Products

Dust Extraction Tube STAUBTUBUS-01


**Ctrl. Panel**


01 = Switching Status Indicator  
06 = Teach Button  
57 = Alignment


**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)	Ü	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
Ā	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	E-	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
BLD	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/Ā (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

