

# Fiber-Optic Cable Sensor

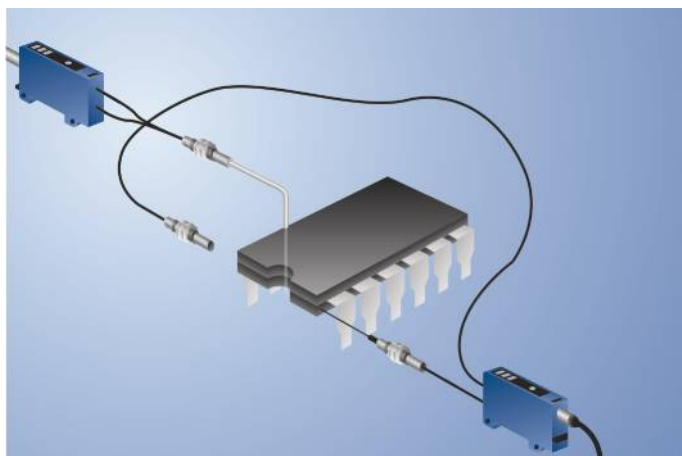
## ODX202P0007

Part Number



- External teach-in
- Key potentiometer, teach-in
- Large detection and working range
- Recognition of transparent objects
- Reflex and through-beam operation mode are possible

wenglor fiber-optic cables are connected to these sensors. The easy to use teach-in function allows for fine sensor adjustment, so that even transparent objects can be reliably recognized in through-beam mode operation. The scanning width is automatically adapted to each individual application via external teach-in. The sensors can be easily mounted to standard DIN rails.

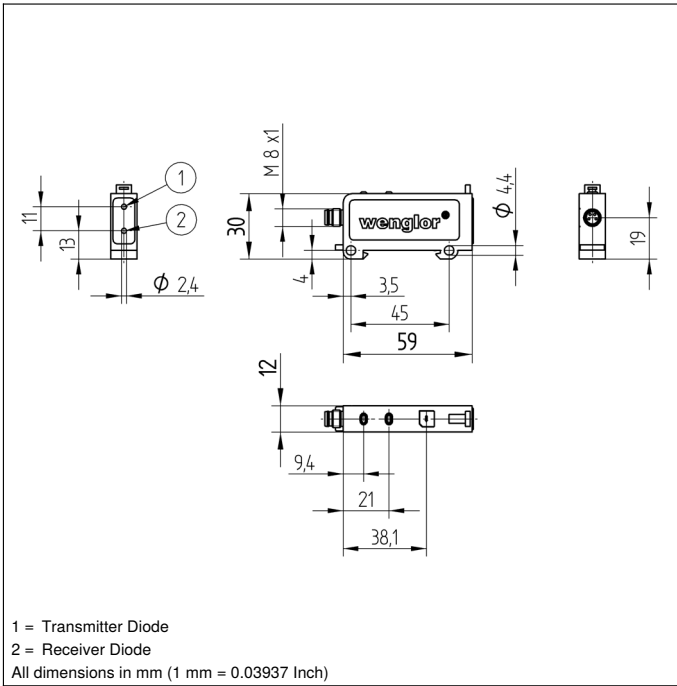


### Technical Data

Optical Data	
Switching Hysteresis	< 15 %
Light Source	Red Light
Wavelength	660 nm
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U <sub>b</sub> = 24 V)	< 40 mA
Switching Frequency	2 kHz
Response Time	250 μs
On-/Off-Delay	0...200 ms
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2,5 V
Switching Output/Switching Current	200 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Teach Mode	NT, MT, ZT, DT, TP
Protection Class	III
Mechanical Data	
Setting Method	Teach-In
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP65
Connection	M8 × 1; 4-pin
DIN-Rail mounting	35 mm
Configurable as PNP/NPN/Push-Pull	●
Switchable to NC/NO	●
Connection Diagram No.	770
Control Panel No.	X1
Suitable Connection Equipment No.	7
Suitable Fiber-Optic Cable Adapter No.	03

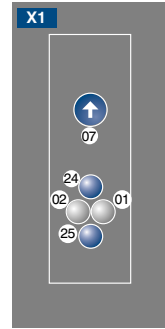
### Complementary Products

- Glass Fiber-Optic Cable
- Plastic Fiber-Optic Cable

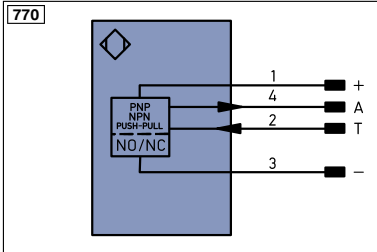


1 = Transmitter Diode  
 2 = Receiver Diode  
 All dimensions in mm (1 mm = 0.03937 Inch)

### Ctrl. Panel



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



### Legend

+	Supply Voltage +	PT	Platinum measuring resistor	EN <sup>A/RS422</sup>	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	not connected	EN <sup>B/RS422</sup>	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 <sup>MIN</sup>	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	A <sup>MAX</sup>	Digital output MAX
Ṽ	Contamination/Error Output (NC)	O	Analog Output	A <sup>OK</sup>	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY <sup>In</sup>	Synchronization In
T	Teach Input	BZ	Block Discharge	SY <sup>OUT</sup>	Synchronization OUT
Z	Time Delay (activation)	A <sup>MV</sup>	Valve Output	OL <sup>T</sup>	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance
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 <sup>nR</sup>	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 <sup>a</sup>	Emitted Light disengageable	GY	Grey
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN <sup>0/RS422</sup>	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contacting Monitoring	GNYE	Green/Yellow

