

Fiber-Optic Cable Sensor

ODX202P0008

Part Number



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

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 (Ub = 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

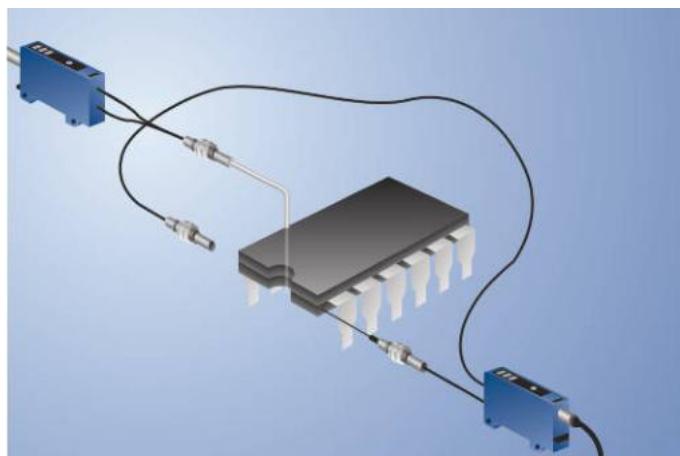
Mechanical Data

Setting Method	Teach-In
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP65
Connection	M8 x 1; 3-pin
DIN-Rail mounting	35 mm

Safety-relevant Data

MTTFd (EN ISO 13849-1)	1499,88 a
Configurable as PNP/NPN/Push-Pull	●
Switchable to NC/NO	●
Connection Diagram No.	772
Control Panel No.	X1
Suitable Connection Equipment No.	8
Suitable Fiber-Optic Cable Adapter No.	03

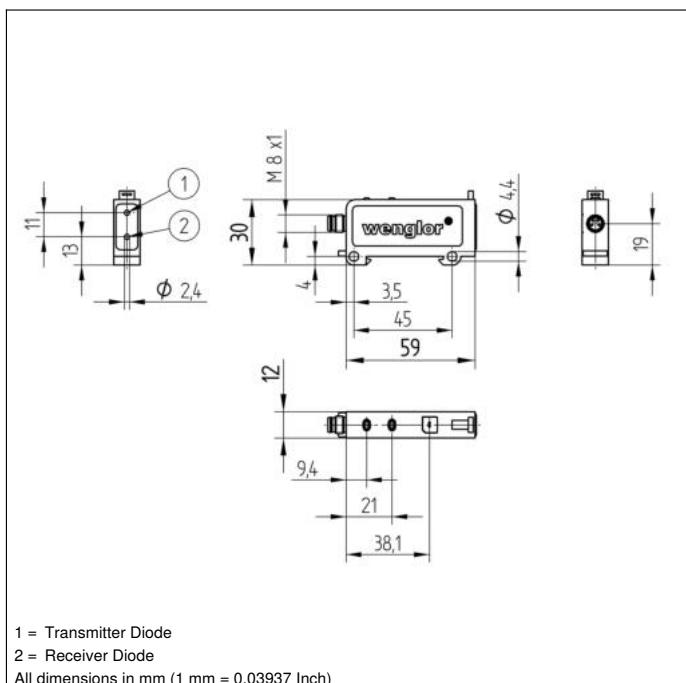
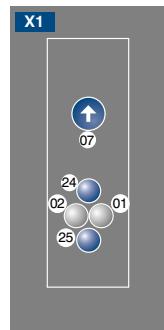
wenglor fiber-optic cables are connected to these sensors. The easy to use teach-in function allows for fine sensor adjustment, so that even transparent objects can be reliably recognized in through-beam mode operation. The scanning width is automatically adapted to each individual application via external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



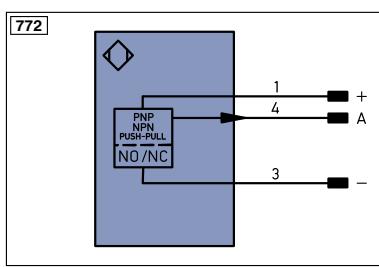
Complementary Products

Glass Fiber-Optic Cable

Plastic Fiber-Optic Cable


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
-	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
SSD	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

