

Fiber-Optic Cable Sensor

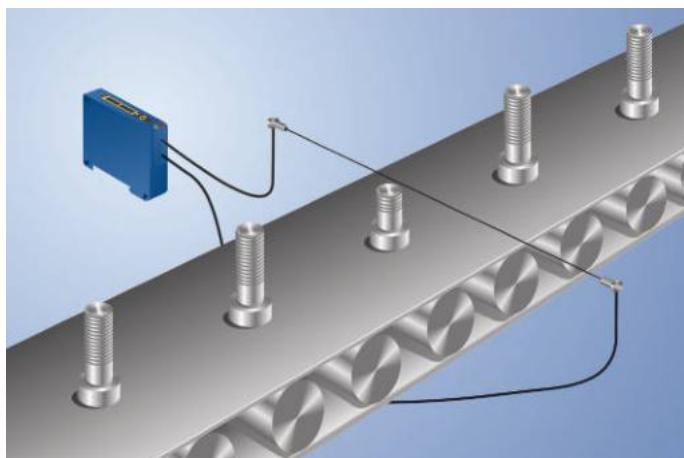
ODX402P0007

Part Number



- External teach-in
- Menu-driven settings
- Recognition of transparent objects
- Reflex and through-beam operation mode are possible
- Teach-in

wenglor fiber-optic cables are connected to these sensors. The graphic display assures easy, menu-driven sensor setup. Signal strengths and the switching threshold can be read from the display as numeric values or as a bar graph. Convenient programming and quick diagnosis is possible via the IO-Link interface.



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	18...30 V DC
Current Consumption (Ub = 24 V)	< 40 mA
Switching Frequency	4 kHz
Response Time	125 µs
On-/Off-Delay	0...10000 ms
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2,5 V
Switching Output/Switching Current	100 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Teach Mode	NT, MT, ZT, DT, FT, HT, TP
Interface	IO-Link V1.0
IO-Link Parameter	> 12
Protection Class	III

Mechanical Data

Setting Method	Menu (OLED)
Housing Material	Plastic
Degree of Protection	IP65
Connection	M8 x 1; 4-pin
DIN-Rail mounting	35 mm

Safety-relevant Data

MTTFd (EN ISO 13849-1)	849,77 a
Selectable menu language	●
Password Protection	●
Configurable as PNP/Push-Pull	●
Switchable to NC/NO	●
IO-Link	●
Connection Diagram No.	774
Control Panel No.	X4
Suitable Connection Equipment No.	7
Suitable Fiber-Optic Cable Adapter No.	03

Display brightness may decrease with age. This does not result in any impairment of the sensor function.

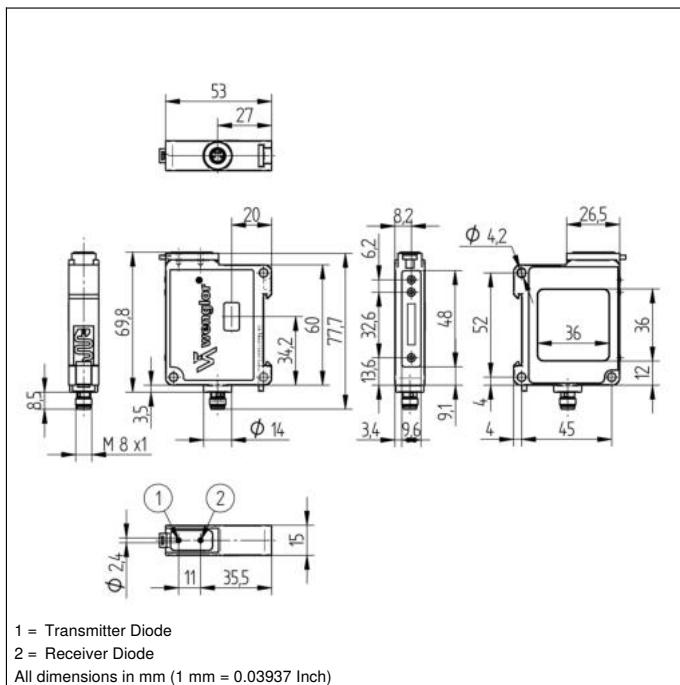
Complementary Products

Glass Fiber-Optic Cable

IO-Link Master

Plastic Fiber-Optic Cable

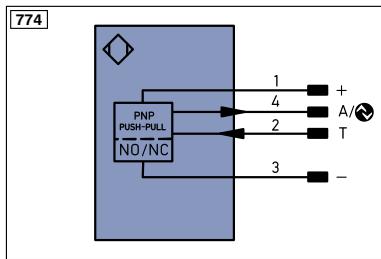
Software



1 = Transmitter Diode

2 = Receiver Diode

All dimensions in mm (1 mm = 0.03937 Inch)



Legend

+	Supply Voltage +	PT	Platinum measuring resistor	EN _{AI/} _{A22}	Encoder A/A (TTL)
-	Supply Voltage 0 V	nc	not connected	EN _{AI/} _{B22}	Encoder B/B (TTL)
-	Supply Voltage (AC Voltage)	U	Test Input	EN _A	Encoder A
A	Switching Output (NO)	Ü	Test Input inverted	EN _B	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	AMIN	Digital output MIN
V	Contamination/Error Output (NO)	W -	Ground for the Trigger Input	AMAX	Digital output MAX
Ā	Contamination/Error Output (NC)	O	Analog Output	AOK	Digital output OK
E	Input (analog or digital)	O -	Ground for the Analog Output	SY IN	Synchronization In
T	Teach Input	BZ	Block Discharge	SY OUT	Synchronization OUT
Z	Time Delay (activation)	Aw	Valve Output	OLT	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	SnR	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	La	Emitted Light disengageable	GY	Grey
Bi,D/+	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN _{AI/} _{A22}	Encoder A/pulse 0-0 (TTI)	RES	Input confirmation	PK	Pink
		EDM	Contactor Monitoring	GN/YE	Green/Yellow

