

Fiber-optic amplifier

ODX202P0107

Part Number



- Key potentiometer, teach-in
- Large detection and working range
- Mount for fiber optic cable adapter 3
- 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 (U _b = 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

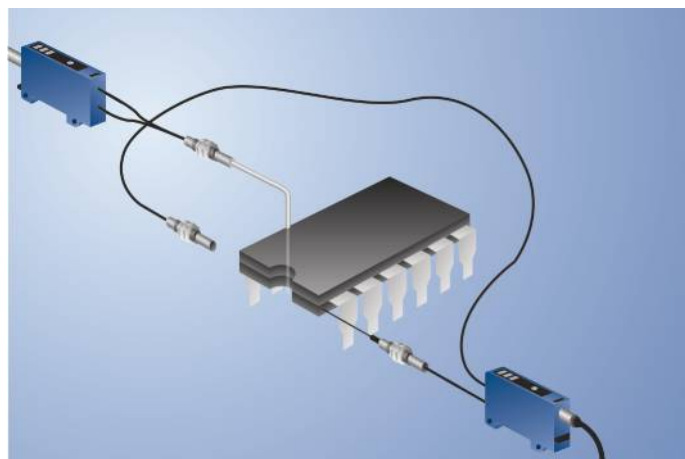
Mechanical Data

Setting Method	Teach-In
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP65
Connection	M8 × 1; 4-pin
DIN-Rail mounting	35 mm

Safety-relevant Data

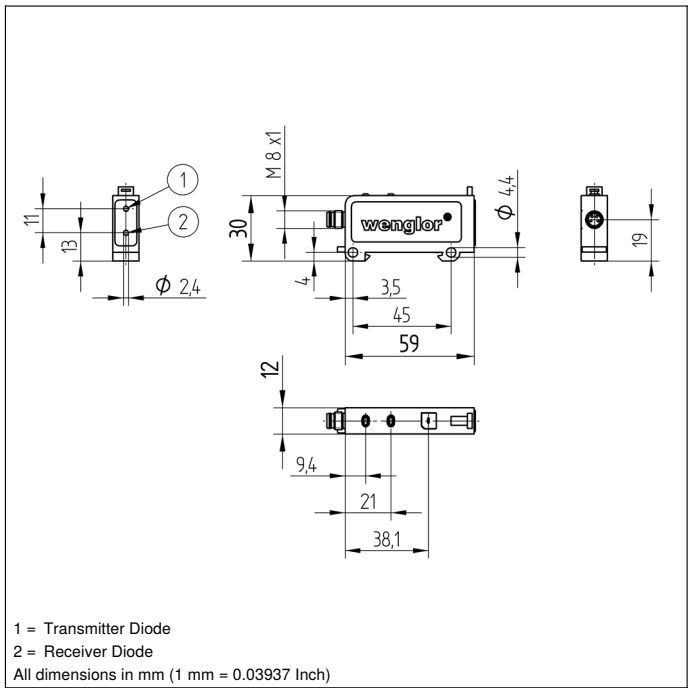
MTTFd (EN ISO 13849-1)	1494,72 a
Contamination Output	●
PNP NO	●
Connection Diagram No.	771
Control Panel No.	X1
Suitable Connection Equipment No.	7
Suitable Fiber-Optic Cable Adapter No.	003

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.

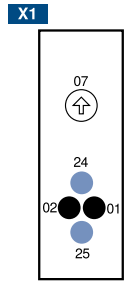


Complementary Products

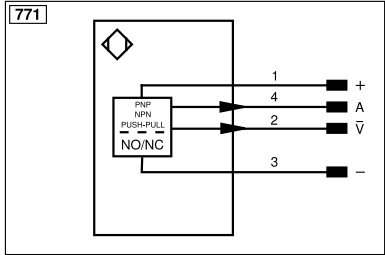
Glass Fiber-Optic Cable
Plastic Fiber-Optic Cable



Ctrl. Panel



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



Legend			
+	Supply Voltage +	nc	Not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ā	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
Ū	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	Amv	Valve Output
Z	Time Delay (activation)	a	Valve Control Output +
S	Shielding	b	Valve Control Output 0 V
RxD	Interface Receive Path	SY	Synchronization
TxD	Interface Send Path	SY-	Ground for the Synchronization
RDY	Ready	E+	Receiver-Line
GND	Ground	S+	Emitter-Line
CL	Clock	±	Grounding
E/A	Output/Input programmable	SnR	Switching Distance Reduction
IO-Link	IO-Link	Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
OSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
BL_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contact Monitoring
PT	Platinum measuring resistor	ENARs422	Encoder A/Ā (TTL)
		ENBRs422	Encoder B/Ē (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 60757	
		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