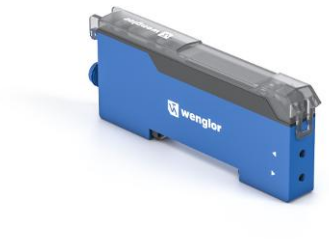
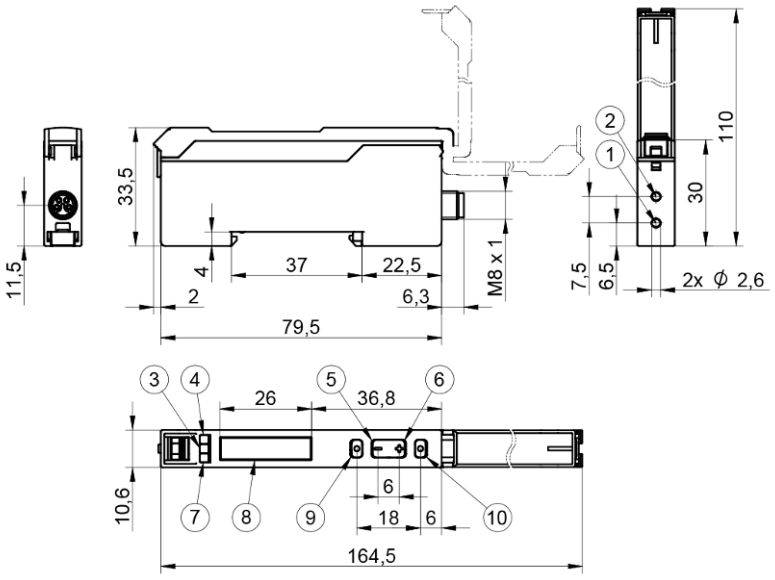
wenglor
the innovative family

Technical Data
P1XD125
Fiber-optic amplifier





Symbol	Key
1	Emitter diode
2	Receiver diode
3	Power LED
4	Switching status indicator O1
5	Minus button
6	Plus button
7	Indicator analog output AO
8	Indicator
9	Teach-in button
10	Mode button

EN

Dimensions in mm
Subject to change without notice
Version 1
www.wenglor.com

Technical data

Optical Data	
Switching Hysteresis	< 15 %
Light Source	LED, blue
Wavelength	455 nm
Service Life (T = +25 °C)	> 100000 h
Max. Ambient Light	10000 Lux

Electrical Data	
Supply Voltage	18...30 V DC
Supply Voltage with IO-Link	18...30 V DC
Current Consumption (Ub = 24 V)	< 40 mA
ADC resolution	14 bit
Digital switching frequency	5 kHz
Analog switching frequency	2 kHz
Digital response time	71 µs
Analog response time	240 µs
On-/Off-Delay	0...10000 ms
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2 V
Switching Output/Switching Current	100 mA
Analog Output	4...20 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Teach Mode	NT, MT, MT with dynamic readjustment, jump detection, DT, BT, WT
IO-Link transmission speed	COM3
Interface	IO-Link V1.1.3
Protection Class	III

Mechanical Data	
Setting Method	NFC Display
Housing Material	Plastic, ABS Plastic, PC Plastic, PA
Degree of Protection	IP50
Connection	M8 × 1; 4-pin
DIN-Rail mounting	35 mm

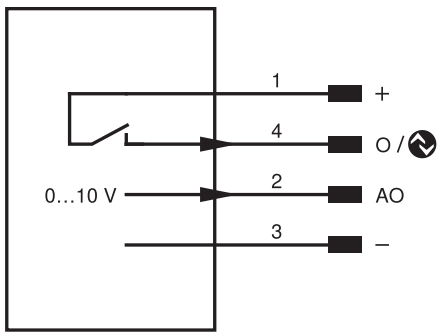
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	640.47 a

General Data	
Scope of delivery	1 × initial start-up instructions 1 × sensor

Adjustable parameters	
Analog output	4...20 mA
Output	NPN PNP
Circuit	inactive Error output NC NC+NO NO
Other parameters	2 switching points Off-delay On-delay Dynamic readjustment Error indicator Error output Filter Hysteresis Switching point Emitted light Sensor localization Adjustable sensor mode Teach mode

BMECat data	
eCl@ss 5.1.4	27-27-09-05 Optical fiber sensor
eCl@ss 6.x	27-27-09-05 Optical fiber sensor
eCl@ss 7.0	27-27-09-05 Optical fiber sensor
eCl@ss 7.1	27-27-09-05 Optical fiber sensor
eCl@ss 8.x	27-27-09-05 Optical fiber sensor
eCl@ss 10.0.1	27-27-09-05 Optical fiber sensor

Technical illustrations



Pin	Pin function	Polarity	Circuit	Signal type
1	Supply Voltage +			
2	Analog output			0...10 V
3	Supply voltage 0 V			
4	Switching output IO-Link	PNP	NO	