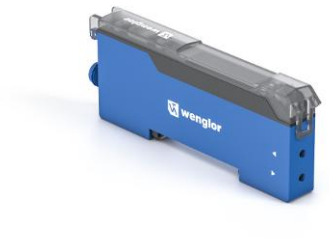
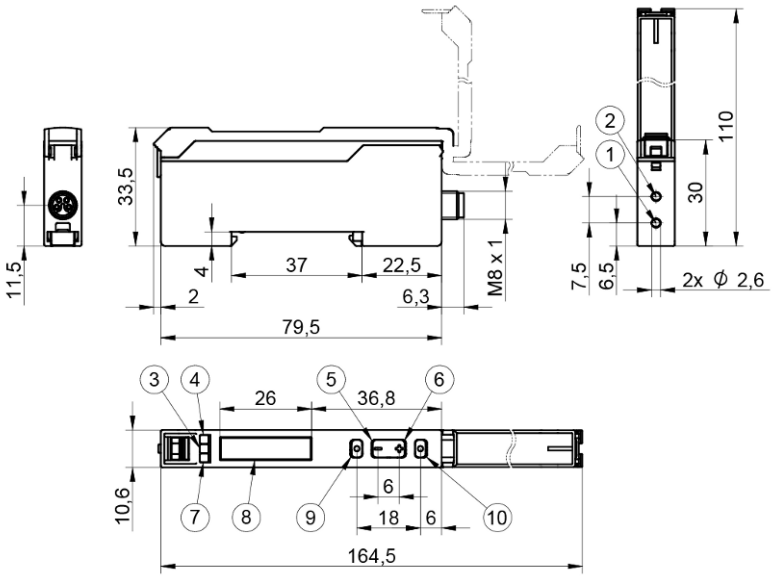
wenglor
the innovative family

Technical Data
P1XD116
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, red
Wavelength	633 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	4 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	0...10 V
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

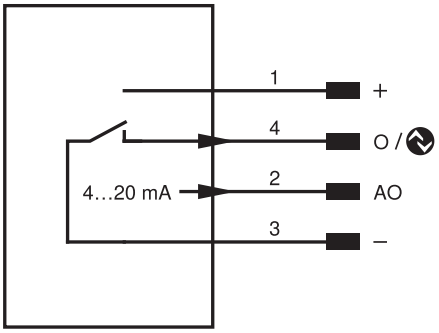
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	640.47 a

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

Adjustable parameters	
Analog output	0...10 V
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			4...20 mA
3	Supply voltage 0 V			
4	Switching output IO-Link	NPN	NO	