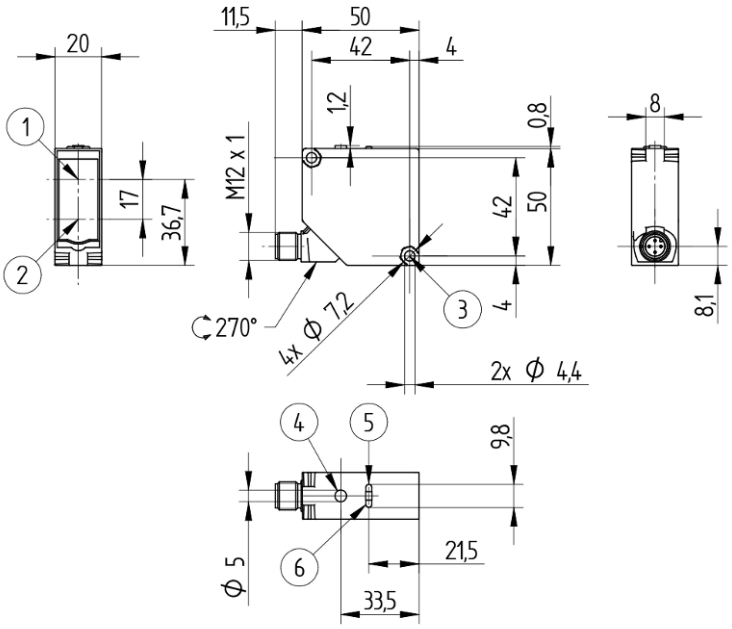
wenglor
the innovative family

Technical Data
P1PM104
Reflex Light Barrier





Symbol	Key
1	Emitter diode
2	Receiver diode
3	Wrench width 7
4	Teach-in button
5	Power LED
6	Switching status indicator/contamination warning

EN

Dimensions in mm
Subject to change without notice
Version 0
www.wenglor.com

Technical data

Optical Data	
Range	1000 mm
Reference Background	White, 90% remission
Switching Hysteresis	< 5 %
Light Source	LED, red
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Light Spot Diameter	see table 1
Optics	Two-Lens Optic
Optical axis	Aligned
Switching point	Calibrated

Electrical Data	
Supply Voltage	15...30 V DC
Supply Voltage with IO-Link	18...30 V DC
Current Consumption (Ub = 24 V)	< 30 mA
Switching Frequency	900 Hz
Switching Frequency (interference-free mode)	450 Hz
Response Time	0.6 ms
Response time (interference-free mode)	1.1 ms
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2 V
PNP Switching Output/Switching Current	100 mA
Residual Current Switching Output	< 50 µA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Lockable	yes
Teach Mode	moving background
Interface	IO-Link V1.1
IO-Link Version	1.1
Protection Class	III

Mechanical Data	
Setting Method	Teach-In
Housing Material	Plastic, ABS/PC
Degree of Protection	IP67 IP68
Connection Type	Plug variant
Connection	M12 × 1; 4-pin
Optic Cover	Plastic, PMMA

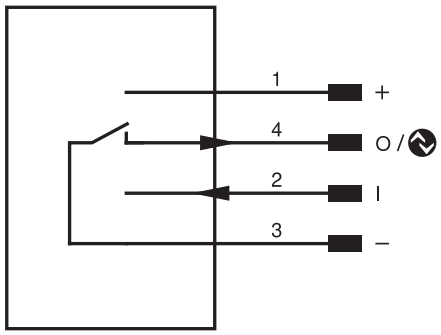
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	803.65 a

General Data	
Scope of delivery	1 × Z1PE002 mounting set 1 × initial start-up instructions 1 × sensor

Adjustable parameters	
Output	Push-pull NPN PNP
Circuit	NC NC+NO NO
Other parameters	Off-delay On-delay Dynamic readjustment Error output Filter Hysteresis Emitted light Teach mode

All other parameters can be found in the product documentation.

Technical illustrations



Pin	Pin function	Polarity	Circuit
1	Supply Voltage +		
2		High activ	
3	Supply voltage 0 V		
4	Switching output IO-Link	NPN	NO

Table 1			
Range	100 mm	500 mm	1000 mm
Light Spot Diameter	16 mm	22 mm	33 mm

Reflector data	
white (90 %)	0.1...1 m
grey (18 %)	0.1...0.7 m
black (6 %)	0.1...0.45 m
Stainless Steel	0.1...1 m

Background type, mounting distance