wenglor
the innovative family

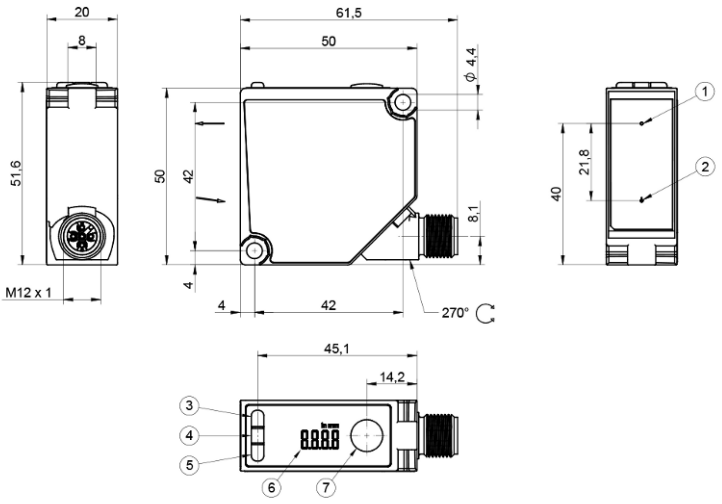
Technical Data

P1PC012

Laser Distance Sensor

Triangulation





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

EN

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

Technical data

Optical Data	
Working Range	30...80 mm
Measuring Range	30...80 mm
Reproducibility maximum	30 µm
Reproducibility: 1 Sigma	3 µm
Linearity Deviation	80 µm
Switching Hysteresis	< 0.5 %
Light Source	Laser, red
Wavelength	655 nm
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	1
Max. Ambient Light	10000 Lux
Light Spot Diameter	see table 1

Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption (Ub = 24 V)	< 35 mA
Switching Frequency	650 Hz
Measuring Rate	2500 /s
Response Time	< 0.77 ms
Temperature Drift	< 7.5 µm/K
Temperature Range	-25...50 °C
Number of Switching Outputs	1
Switching Output Voltage Drop	< 1.5 V
Switching Output/Switching Current	100 mA
Analog Output	0...10 V
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Interface	IO-Link V1.1
IO-Link Version	1.1.4
IO-Link transmission speed	COM3
Protection Class	III
FDA Accession Number	2512215-000

Mechanical Data	
Setting Method	Teach-In NFC
Housing Material	Plastic, ABS
Degree of Protection	IP67 IP68
Connection Type	Plug variant
Connection	M12 × 1; 5-pin
Optic Cover	Plastic, PMMA

Safety-relevant Data	
MTTFd (EN ISO 13849-1)	566.57 a

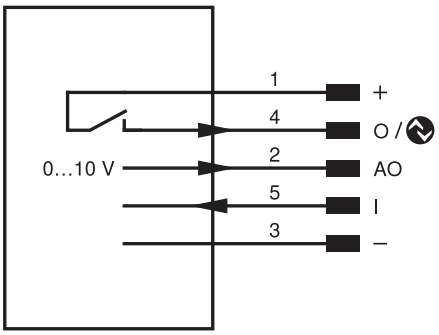
General Data	
Scope of delivery	1 × Z1PE002 mounting set 1 × initial start-up instructions 1 × sensor

Adjustable parameters	
Output	Error Output Push-pull NPN PNP
Circuit	NC NC/NO NO
Other parameters	Exposure time Laser light Switching hysteresis Teach-in mode Off-delay On-delay

All other parameters can be found in the product documentation.

BMECat data	
eCl@ss 5.1.4	27-27-09-04 Light scanner w. background masking
eCl@ss 6.x	27-27-09-04 Light scanner w. background masking
eCl@ss 7.0	27-27-09-04 Light scanner w. background masking
eCl@ss 7.1	27-27-09-04 Light scanner w. background masking
eCl@ss 8.x	27-27-09-04 Light scanner w. background masking
eCl@ss 10.0.1	27-27-09-04 Light scanner w. background masking

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	
5	Switchable emitted light	High active		

Table 1			
Working Distance	30 mm	50 mm	80 mm
Spot Size	0,8 × 2,1 mm	0,5 × 1,7 mm	1,0 × 2,0 mm