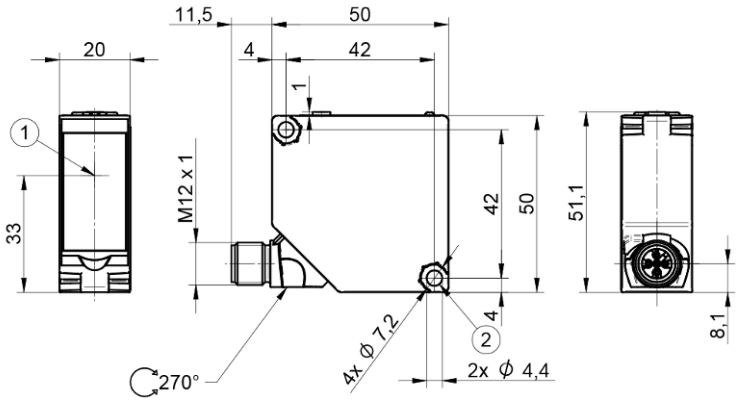
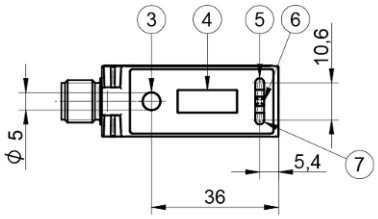
wenglor
the innovative family

Technical Data
P1PW006
Contrast Sensor







Symbol	Key
1	Optical axis
2	Wrench width 7
3	Teach-in button
4	Indicator
5	Switching status indicator O1
6	Power LED
7	Mode display

EN

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

Technical data

Optical Data	
Working Range	30...40 mm
Working Distance	35 mm
Resolution (Gray Scale)	100
Switching Hysteresis	< 1 %
Light Source	LED, white
Wavelength	400...700 nm
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Light Spot Diameter	1.1 × 3.5 mm

Electrical Data	
Supply Voltage	10...30 V
Supply Voltage with IO-Link	18...30 V
Current Consumption (Ub = 24 V)	< 50 mA
Switching Frequency	50 kHz
Response Time	13 µs
Jitter	5 µs
Temperature Drift	< 6 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	1.5 V
Switching Output/Switching Current	100 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Lockable	yes
Mode of operation	Color
Interface	IO-Link V1.1
IO-Link transmission speed	COM2
Protection Class	III
IO-Link Version	1.1

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

Safety-relevant Data	
MTTFd (EN ISO 13849-1)	719.27 a

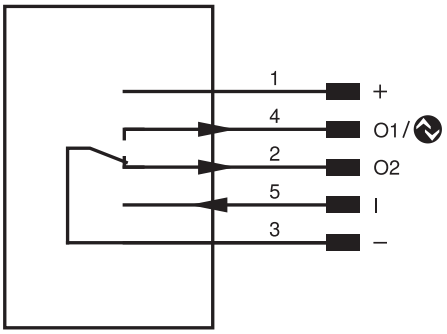
General Data	
Scope of delivery	1 × Z1PE002 mounting set 1 × initial start-up instructions 1 × sensor

Adjustable parameters	
Other parameters	Off-delay On-delay

All other parameters can be found in the product documentation.

BMECat data	
eCl@ss 5.1.4	27-27-09-06 Contrast scanner
eCl@ss 6.x	27-27-09-06 Contrast scanner
eCl@ss 7.0	27-27-09-06 Contrast scanner
eCl@ss 7.1	27-27-09-06 Contrast scanner
eCl@ss 8.x	27-27-09-06 Contrast scanner
eCl@ss 10.0.1	27-27-09-06 Contrast scanner

Technical illustrations



Pin	Pin function	Polarity	Circuit
1	Supply Voltage +		
2	Switching Output 2	NPN	Antivalent
3	Supply voltage 0 V		
4	Switching Output 1 IO-Link	NPN	NO
5	Teach-in input	High active	

Illustration 1: Ideal Working Distance

