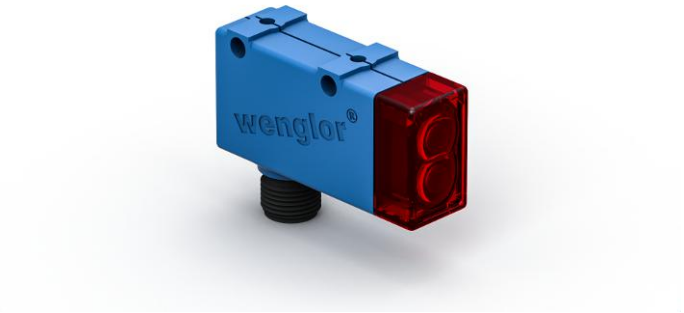
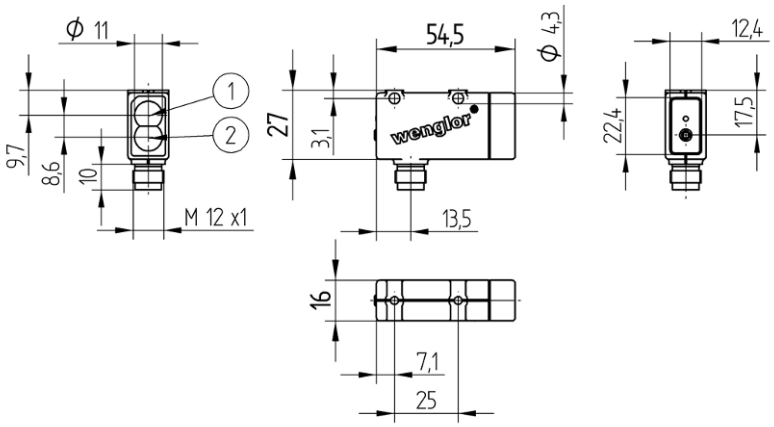
wenglor
the innovative family

Technical Data
P1MM001
Reflex Light Barrier





Symbol	Key
1	Emitter diode
2	Receiver diode
3	Switching status indicator/contamination warning
4	Teach-in button

EN

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

Technical data

Optical Data	
Range	500 mm
Reference Background	Stainless Steel
Switching Hysteresis	< 5 %
Light Source	LED, red
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	3 °
Light Spot Diameter	see table 1

Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (Ub = 24 V)	< 40 mA
Switching Frequency	500 Hz
Response Time	1 ms
Temperature Drift	< 5 %
Temperature Range	-40...60 °C
Switching Output Voltage Drop	< 2.5 V
PNP Switching Output/Switching Current	200 mA
Residual Current Switching Output	< 50 µA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Lockable	yes
Teach Mode	HT
Protection Class	III

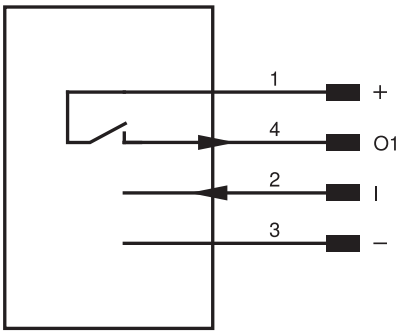
Mechanical Data	
Setting Method	Teach-In
Housing Material	Plastic, PBT
Full Encapsulation	yes
Degree of Protection	IP67
Connection Type	Plug variant
Connection	M12 × 1; 4-pin

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

Adjustable parameters	
Circuit	NC NC/NO NO

All other parameters can be found in the product documentation.

Technical illustrations



Pin	Pin function	Polarity	Circuit
1	Supply Voltage +		
2	Teach-in input	High active	
3	Supply voltage 0 V		
4	Switching output	PNP	NO

Table 1			
Range	0 mm	250 mm	500 mm
Light Spot Diameter	7 mm	35 mm	50 mm

Reflector data	
white (90 %)	30...200 mm
grey (18 %)	30...150 mm
black (6 %)	30...100 mm
Stainless Steel	30...500 mm

Reference material, range