

Reflex Sensors

with Background Suppression **LASER**

YM22PA2

Part Number



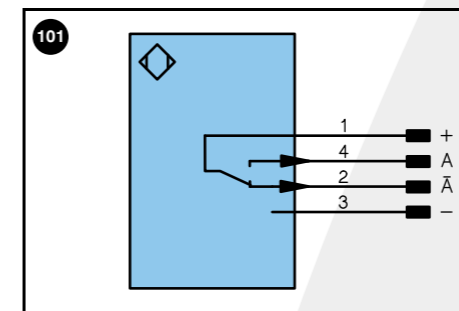
- Good black & white characteristics
- High Switching Frequency
- Large Detection Range



Technical Data

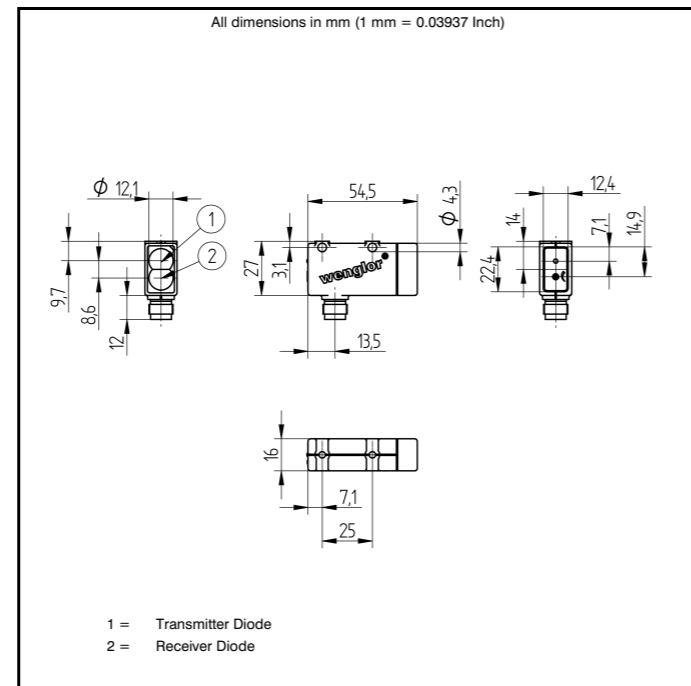
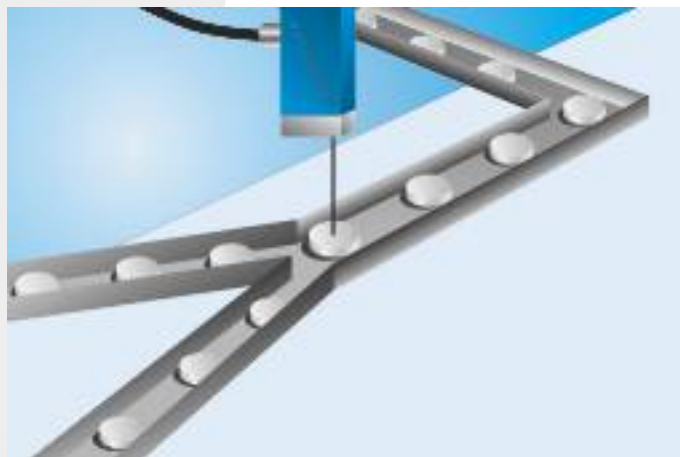
Optical Data	
Range	200 mm
Adjustable Range	35...200 mm
Switching Hysteresis	5 mm
Light Source	Laser (red)
Wave Length	650 nm
Service Life (T = +25°C)	100000 h
Laser Protection Class (EN 60825-1)	2
max. Ambient Light	10000 Lux
Light Spot Diameter at a Distance of	1 mm
	120 mm
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24V)	< 20 mA
Switching Frequency	1600 Hz
Response Time	313 μs
Temperature Drift	< 5 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2.5 V
PNP Switching Output/Switching Current	200 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Mechanical Data	
Housing	Plastic
Full Encapsulation	yes
Degree of Protection	IP 67
Connection	M12 x 1
Protective Insulation, Rated Voltage	50 V

Plug Version	
Part Number	YM22PA2
PNP NO/NC antivalent	●
Connection Diagram No.	101
Control Panel No.	M 4
Suitable Plug No.	2



Legend		Wire colors according to DIN IEC 757
+	Power supply "+"	BK black
-	Power supply "0V"	BN brown
-	Power supply (AC Voltage)	RD red
A	Switching output (1,2,3...) / NO	OG orange
A̅	Switching output (1,2,3...) / NC	YE yellow
V	Contamination / Error output (NO)	GN green
V̅	Contamination / Error output (NC)	BU blue
E	Input (analog or digital)	VT violet
T	Teach input	GY grey
Z	Time delay (activation)	WH white
S	Shielding	PK pink
RxD	RS-232 receive path	GNYE green yellow
TxD	RS-232 send path	
RDY	Ready	
GND	Ground	
CL	Clock	
E/A	Output/Input programmable	
U	Test input	
W	Trigger input	
O	Analog output (1,2,3,...)	
O-	Ground for the analog output	
BZ	Block discharge	
AW	Valve output	
a	Valve control output "+"	
b	Valve control output "0V"	
SV	Synchronization	
E+	Receiver-Line	
S+	Emitter-Line	
⊕	Grounding	
Sr	Switching Distance Reduction	
USB+	USB data +	
USB-	USB data -	
Ba	Interfaces-Bus A(+)/B(-)	
La	Emitted light disengageable	

These sensors are particularly well suited for recognizing objects in front of any type of background. The color, shape and surface characteristics of the object have practically no influence on sensor switching performance.

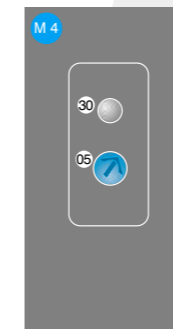


Specifications are subject to change without notice
22/08

Accessories

Mounting Bracket WM2

Ctrl. Panel



05 = Switching Distance Adjuster
30 = Switching Status/Contamination Warning

Switching Distance Deviation

Typical characteristic curve based on Kodak white, 90%

