

Reflex Sensors

with Background Suppression **LASER**

YD24PBV3

Part Number

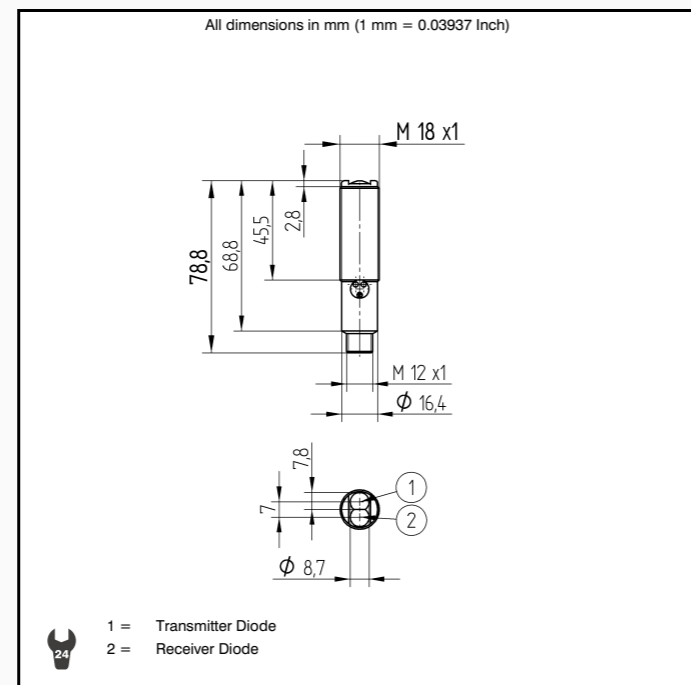
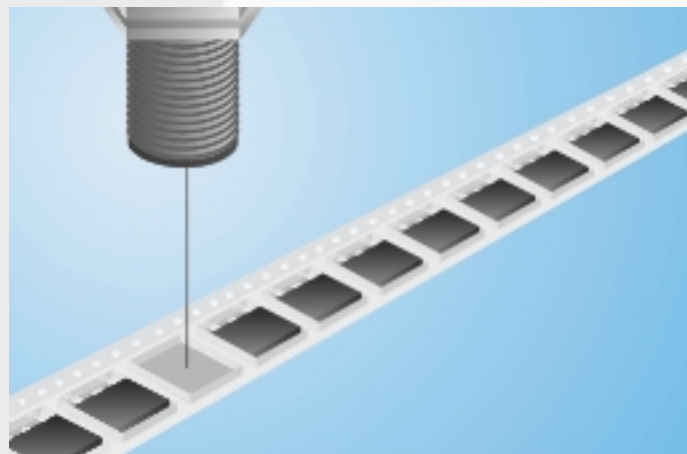


Technical Data

Optical Data	
Range	150 mm
Switching Hysteresis	< 5 %
Light Source	Laser (red)
Wave Length	655 nm
Service Life (T = +25°C)	100000 h
Laser Protection Class (EN 60825-1)	2
max. Ambient Light	10000 Lux
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24V)	< 25 mA
Switching Frequency	1 kHz
Response Time	500 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	Stainless Steel
Full Encapsulation	yes
Protection Mode	IP 67
Connection	M 12x1
Protective Insulation, Rated Voltage	50 V

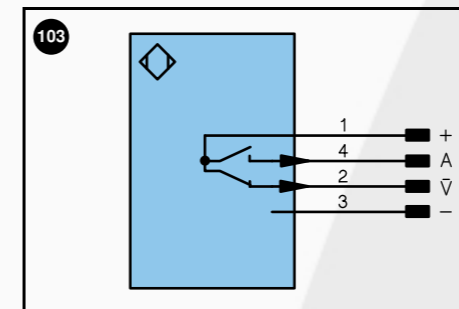
- Spot Diameter: 0.5 mm
- Stainless Steel Housing
- Switching Frequency: 1 kHz

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
17/03

Plug Version	
Part Number	YD24PBV3
Contamination Output	●
PNP NO	●
Connection Diagram No.	103
Control Panel No.	D 6
Suitable Plug No.	1



Legend				
+	Power supply "+"	U	Test input	Wire colors according to DIN IEC 757
-	Power supply "0V"	W	Trigger input	
~	Power supply (AC Voltage)	O	Analog output (1,2,3,...)	
A	Switching output (1,2,3...) / NO	O-	Ground for the analog output	
A	Switching output (1,2,3...) / NC	BZ	Block discharge	
V	Contamination / Error output (NO)	Aw	Valve output	
V	Contamination / Error output (NC)	a	Valve control output "+"	
E	Input (analog or digital)	b	Valve control output "0V"	
T	Teach input	SY	Synchronization	
Z	Time delay (activation)	E+	Receiver-Line	
S	Shielding	S+	Emitter-Line	
RxD	RS-232 receive path	⊕	Grounding	
TxD	RS-232 send path	BK	black	
		BN	brown	
		RD	red	
		OG	orange	
		YE	yellow	
		GN	green	
		BU	blue	
		VT	violet	
		GY	grey	
		WH	white	
		PK	pink	
		GNYE	green yellow	

Table 1

Range	50 mm	100 mm	150 mm
Light Spot Diameter	1,2 mm	< 0,5 mm	1,5 mm

Accessories

- Mounting Clamp BSM18B
- Mounting Bracket W18

Ctrl. Panel



- 01 = Switching Status Indicator
- 02 = Contamination Warning
- 05 = Switching Distance Adjuster

Switching Distance Deviation

Typical characteristic curve based on Kodak white, 90%

