

Reflex Sensor for Measuring Tasks



YP05MGVL80 LASER

Part Number

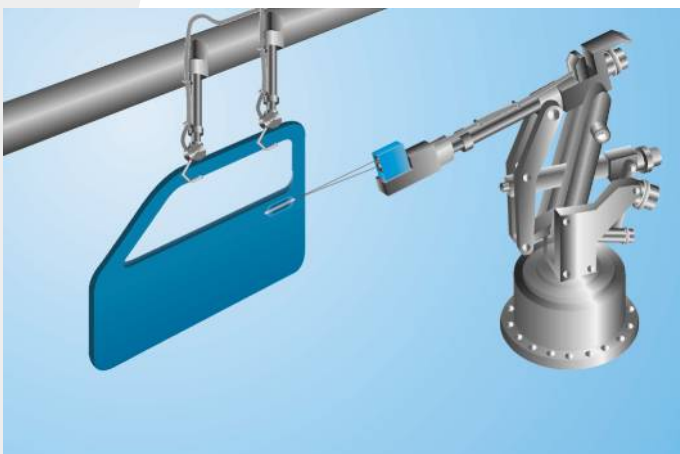


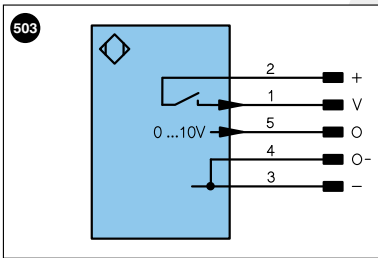
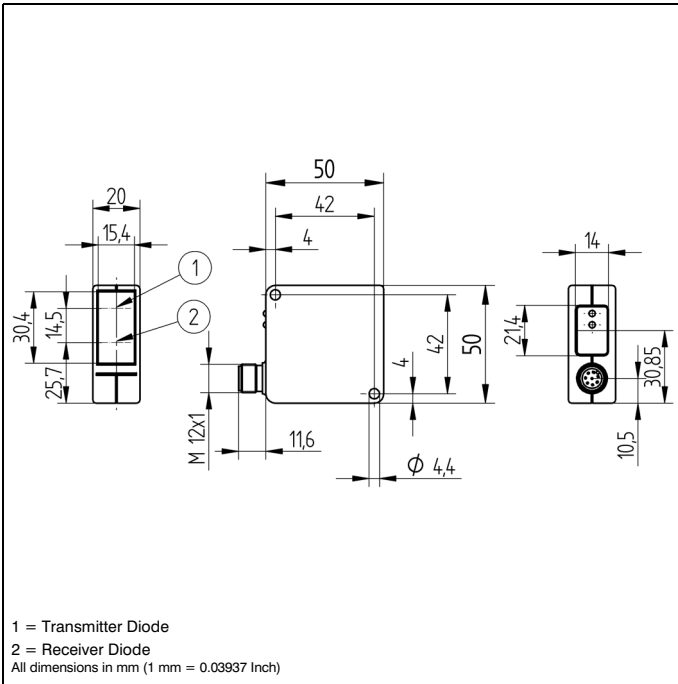
- **Linearity: 0,5 %**
- **Measuring Range: 10 mm**
- **Resolution up to 2 μm**

Technical Data

Optical Data	
Working Range	43...53 mm
Measuring Distance	48 mm
Measuring Range	10 mm
Resolution	< 4 μm
Linearity	0,5 %
Light Source	Laser (red)
Wave Length	660 nm
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	2
max. Ambient Light	10000 Lux
Light Spot Diameter	0,5 mm
Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption (U _b = 24 V)	< 30 mA
Cut-Off Frequency	100 Hz
Response Time	5 ms
Temperature Drift (T _u < 10 °C, T _u > 40 °C)	5 $\mu\text{m}/\text{K}$
Temperature Drift (10 °C < T _u < 40 °C)	5 $\mu\text{m}/\text{K}$
Temperature Range	-10...60 °C
Error Output Voltage Drop	< 2,5 V
PNP Error Output/Switching Current	200 mA
Analog Output	0...10 V
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Protection Class	III
Mechanical Data	
Housing	Plastic
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 8-pin
Error Output	●
Analog Output	●
Connection Diagram No.	503
Control Panel No.	P-3
Suiting Connection Technology No.	80
Suiting Mounting Technology No.	380

These sensors are equipped with an analog output and can thus be utilized for measuring tasks. The output signal is practically independent of the object's color. High resolution and a wide variety of measuring ranges allow for use in innumerable applications.



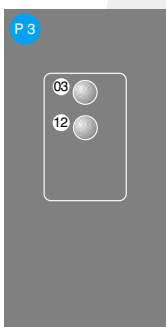


Legend					
+	Supply Voltage +	U	Test Input	PoE	Power over Ethernet
-	Supply Voltage 0 V	Ū	Test Input inverted		
~	Supply Voltage (AC Voltage)	W	Trigger Input		
A	Switching Output (NO)	O	Analog Output		
Ā	Switching Output (NC)	O-	Ground for the Analog Output		Wire Colors according to DIN IEC 757
V	Contamination/Error Output (NO)	BZ	Block Discharge	BK	Black
V̄	Contamination/Error Output (NC)	AwV	Valve Output	BN	Brown
E	Input (analog or digital)	a	Valve Control Output +	RD	Red
T	Teach Input	b	Valve Control Output 0 V	OG	Orange
Z	Time Delay (activation)	SY	Synchronization	YE	Yellow
S	Shielding	E+	Receiver-Line	GN	Green
RxD	Interface Receive Path	S+	Emitter-Line	BU	Blue
TxD	Interface Send Path	±	Grounding	VT	Violet
RDY	Ready	SnR	Switching Distance Reduction	GY	Grey
GND	Ground	Rx +/-	Ethernet Receive Path	WH	White
CL	Clock	Tx +/-	Ethernet Send Path	PK	Pink
E/A	Output/Input programmable	Bus	Interfaces-Bus A(+)/B(-)	GNYE	Green Yellow
	IO-Link	La	Emitted Light disengageable		

Complementary Products

- Analog Evaluation Unit AW02
- Protection Housing Set ZSP-NN-02
- Protection Housing ZSV-0x-01

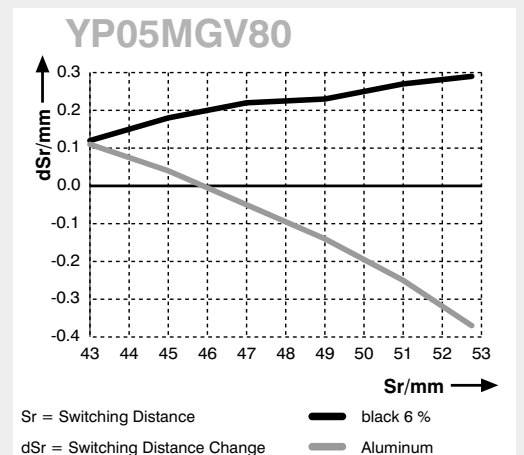
Ctrl. Panel



03 = Error Indicator
12 = Analog Output Indicator

Error of Measurement

Typical characteristic curve based on Kodak white, 90 %



Specifications are subject to change without notice