

Reflex Sensors

for Measuring Tasks

LASER

YP11MGVL80

Part Number



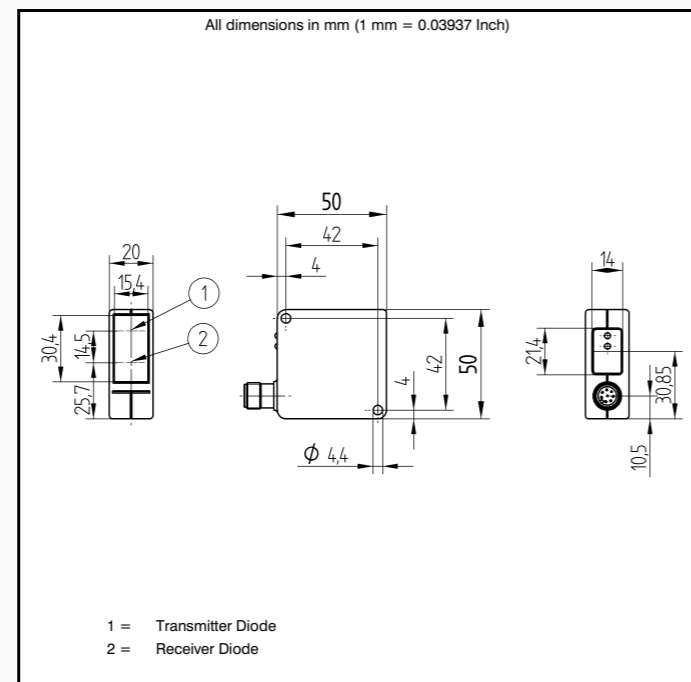
- **Linearity: 0.5%**
- **Measuring Range: 50 mm**
- **Resolution up to 20 μm**

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.



Technical Data

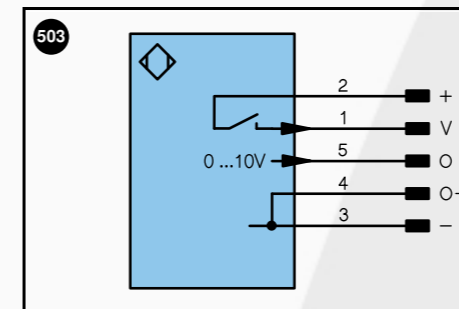
Optical Data	
Working Range	50...100 mm
Measuring Distance	75 mm
Measuring Range	50 mm
Resolution	< 20 μm
Linearity	0.5 %
Light Source	Laser (red)
Wave Length	660 nm
Service Life (T = +25°C)	100000 h
Laser Protection Class (EN 60825-1)	2
max. Ambient Light	10000 Lux
Light Spot Diameter	1 mm
Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption (U _b = 24V)	< 30 mA
Cut-Off Frequency	100 Hz
Response Time	5 ms
Temperature Drift	20 μm/°C
Temperature Drift (+10...40 °C)	10 μm/°C
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
Mechanical Data	
Housing	Plastic
Full Encapsulation	yes
Protection Mode	IP 67
Connection	M 12x1
Protective Insulation, Rated Voltage	50 V



Specifications are subject to change without notice
17/03



Plug Version	
Part Number	YP11MGVL80
Error Output	●
Analog Output	●
Connection Diagram No.	503
Control Panel No.	P 3
Suitable Plug No.	80



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
A	Switching output (1,2,3...)/ NC	YE yellow
V	Contamination / Error output (NO)	GN green
V	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	
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"	
SY	Synchronization	
E+	Receiver-Line	
S+	Emitter-Line	
⊕	Grounding	

Accessories

- Analog Evaluation Unit AW01
- Mounting Bracket WP

Ctrl. Panel



- 03 = Error Indicator
- 12 = Analog Output Indicator

Error of Measurement

Typical characteristic curve based on Kodak white, 90%

