Reflex Sensor

wenglor®
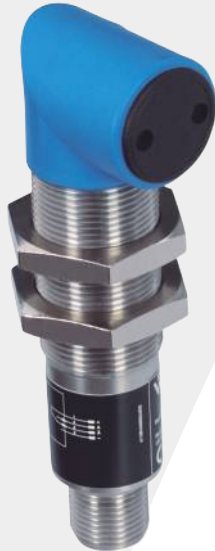
TW66PA3
Part Number

- **Adjustable Detection Range**
- **Large Detection Range**
- **Stainless Steel Housing**

Technical Data

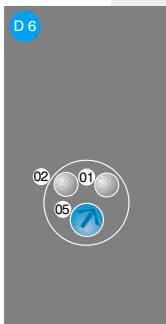| Optical Data	
Range	1000 mm
Switching Hysteresis	< 15 %
Light Source	Infrared Light
Wave Length	880 nm
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	12 °
Electrical Data	
Supply Voltage	10...30 V
Current Consumption (Ub = 24 V)	< 40 mA
Switching Frequency	250 Hz
Response Time	2 ms
Temperature Drift	< 10 %
Temperature Range	-25...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
Protection Class	III
Mechanical Data	
Housing Material	Stainless Steel
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin
PNP NO/NC antivalent	●
Connection Diagram No.	101
Control Panel No.	D 6
Suiting Connection Technology No.	2
Suiting Mounting Technology No.	150

The transmitter and the receiver are integrated into a single housing. The sensor evaluates transmitted light reflected back from the object. The output is switched as soon as an object passes the selected range. Bright objects reflect more light than dark objects, and can thus be recognized from greater distances.

CE PCT ME 61 RoHS III UL LISTED

1 = Transmitter Diode
2 = Receiver Diode
All dimensions in mm (1 mm = 0.03937 Inch)

24

101

1   +
4   A
2   Ā
3   −
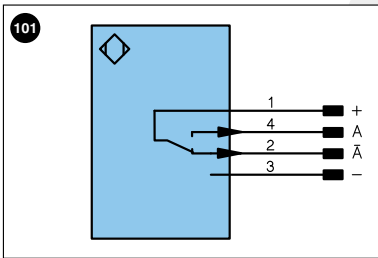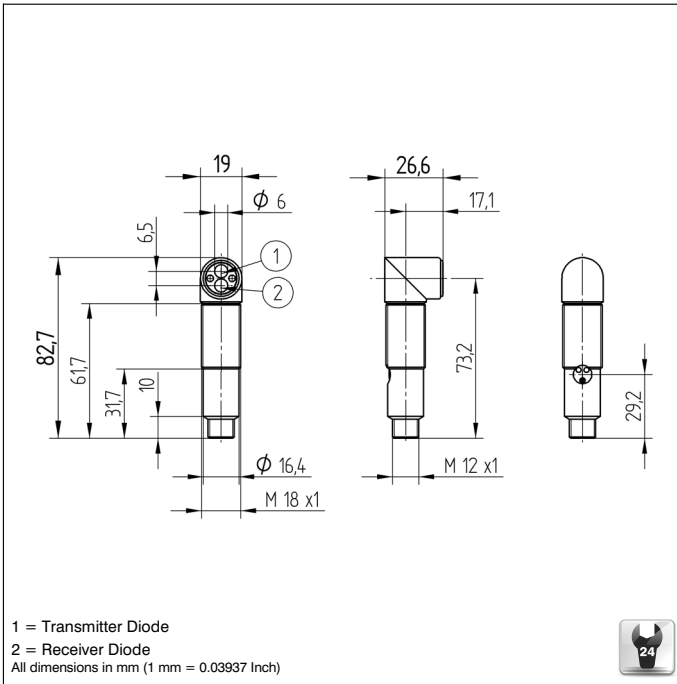
Legend

+	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		Wire Colors according to DIN IEC 757
Ā	Switching Output (NC)	O−	Ground for the Analog Output		
V	Contamination/Error Output (NO)	BZ	Block Discharge	BK	Black
V̄	Contamination/Error Output (NC)	AₘW	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		

Ctrl.Panel

D 6

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