

Laser Distance Sensor

Time of Flight

P1PY208

Part Number

der wintec.



- **Analog output: 4...20 mA**
- **Graphical display for easy operation**
- **Wide working range and precise detection thanks to DS technology**
- **Wireless settings via Bluetooth**

The sensors function in accordance with the principle of transit time measurement with laser class 1. wintec with Dynamic Sensitivity technology (DS) enables previously unattainable reception sensitivity even with very weak signals. As a result, the sensors have a large working range of up to 10 m and can reliably detect dark or shiny objects even at extreme angles. wintec also works very reliably in adverse ambient conditions, such as those caused by ambient light or contamination. Extensive condition monitoring functions additionally enable predictive maintenance and trouble-free operation. Settings are entered via the easy-to-read OLED display or via Bluetooth using the weCon app.



Technical Data

Optical Data	
Working Range	0...10000 mm
Measuring Range	50...10000 mm
Reproducibility maximum	3 mm*
Linearity Deviation	10 mm*
Light Source	Laser (red)
Wavelength	660 nm
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	1
Beam Divergence	< 2 mrad
Max. Ambient Light	100000 Lux
Light Spot Diameter	see Table 1
Reflector required	no
Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption (U _b = 24 V)	< 60 mA
Measuring Rate	100 /s*
Measuring Rate (max.)	500 /s*
Temperature Drift	< 0,4 mm/K
Temperature Range	-40...50 °C**
Analog Output	4...20 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Interface	IO-Link V1.1.3
Baud Rate	COM3
Protection Class	III
FDA Accession Number	2412451-000
Mechanical Data	
Setting Method	(OLED)/Bluetooth menu
Housing Material	Plastic, ABS
Optic Cover	Plastic, PMMA
Degree of Protection	IP67
Connection	M12 × 1; 4/5-pin
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	353,85 a
PNP NO	●
Analog Output	●
IO-Link	●
Connection Diagram No.	242
Control Panel No.	X6
Suitable Connection Equipment No.	2 35
Suitable Mounting Technology No.	380

* Depends on mode, see table 2

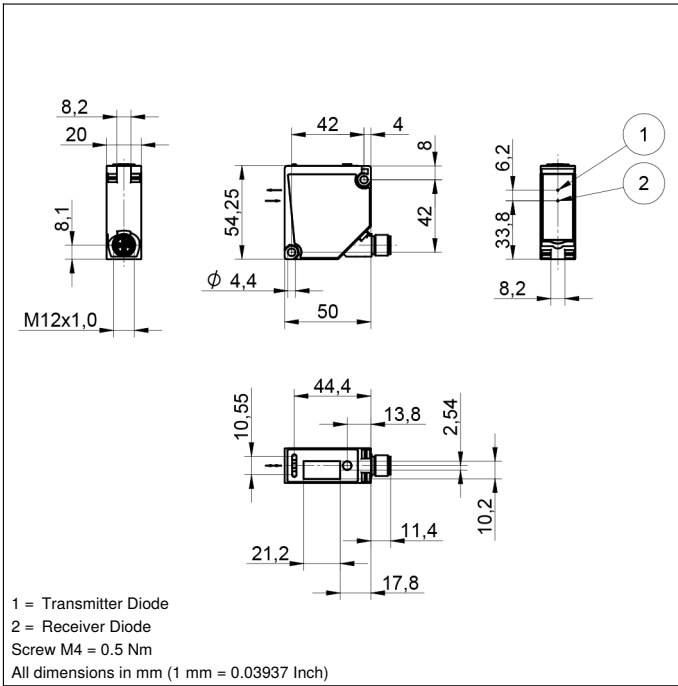
** At max. 10,000 lux ambient light and min. 500 ohm load at analog output

Complementary Products

IO-Link Master

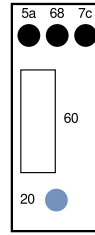
Protective Screen

Software

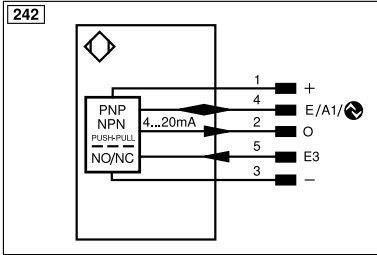


Ctrl. Panel

X6



- 20 = Enter key
- 5a = Switching Status Indicator, A1
- 60 = display
- 68 = supply voltage indicator
- 7c = Analog Output Indicator, O



Legend					
+	Supply Voltage +	nc	Not connected	EN _{BR2422}	Encoder B/B̄ (TTL)
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted	EN _B	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ā	Switching Output (NC)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	AOK	Digital output OK
V̄	Contamination/Error Output (NC)	O-	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT
T	Teach Input	Amv	Valve Output	OLT	Brightness output
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved
RxD	Interface Receive Path	SY	Synchronization	Wire Colors according to DIN IEC 60757	
TxD	Interface Send Path	SY-	Ground for the Synchronization	BK	Black
RDY	Ready	E+	Receiver-Line	BN	Brown
GND	Ground	S+	Emitter-Line	RD	Red
CL	Clock	±	Grounding	OG	Orange
E/A	Output/Input programmable	SnR	Switching Distance Reduction	YE	Yellow
IO-Link	IO-Link	Rx+/-	Ethernet Receive Path	GN	Green
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path	BU	Blue
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey
Signal	Signal Output	Mag	Magnet activation	WH	White
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
EN _{o RS422}	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contact Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	EN _{AR2422}	Encoder A/Ā (TTL)		

Table 1

Working Distance	0 m	5 m	10 m
Light Spot Diameter	5 mm	10 mm	15 mm

