

High-Performance Distance Sensor

OY1P303P0102

LASER

WinTec

Part Number

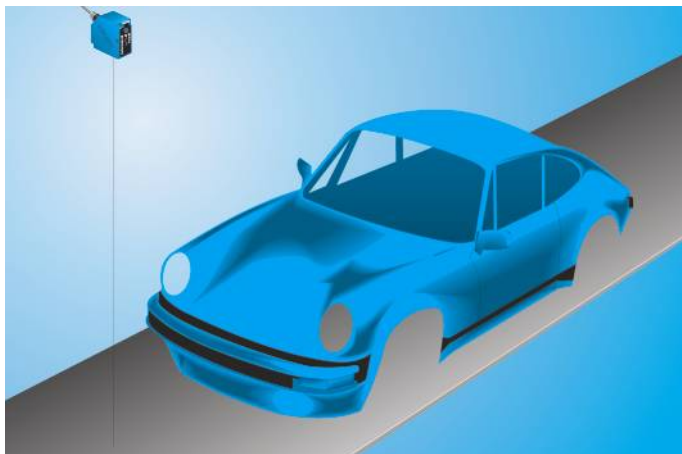


- Analog output (0...10 V/4...20 mA)
- Graphical display for easy operation
- Reliable in case of glossy objects with WinTec
- Secure detection of black objects also in extremely inclined positions with WinTec
- Two mutually independent switching outputs

These sensors have scratch-resistant optics and the emitted light can be switched off. They use the transit time measurement principle to measure the distance between the sensor and the object.

wenglor interference-free technology (WinTec) has revolutionized sensor technology:

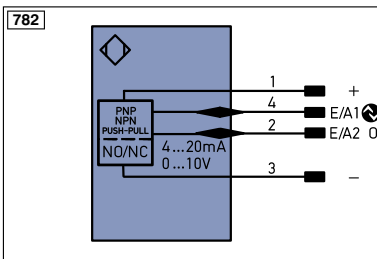
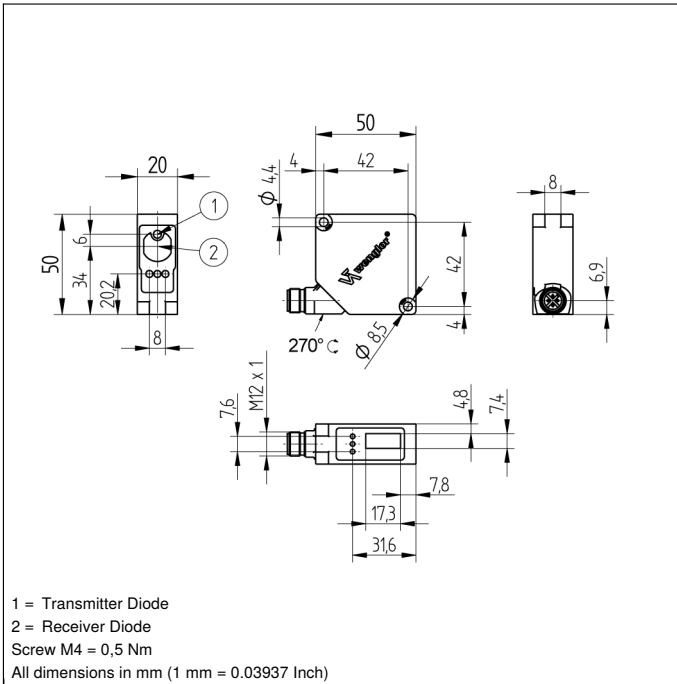
It makes it possible to mount several sensors directly next to, or opposite each other without the sensors influencing each other. The sensors reach a very high switching frequency and use laser class 1, which is safe for the human eye.



Technical Data

Optical Data	
Working Range	50...3050 mm
Measuring Range	3000 mm
Reproducibility maximum	1 mm
Linearity Deviation (200...3050 mm)	7 mm
Linearity Deviation (50...200 mm)	15 mm
Switching Hysteresis	3...20 mm
Light Source	Laser (red)
Wave Length	660 nm
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	1
Max. Ambient Light	10000 Lux
Beam Divergence	< 2 mrad
Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption (U _b = 24 V)	< 70 mA
Switching Frequency	250 Hz
Measurement Rate	1...500 /s
On-/Off-Delay	0...10000 ms
Temperature Drift	< 0,4 mm/K
Temperature Range	-40...50 °C
Switching Outputs	2
Switching Output Voltage Drop	< 2,5 V
Switching Output/Switching Current	100 mA
Analog Output	0...10 V/4...20 mA
Short Circuit Protection	yes
Reverse Polarity and Overload Protection	yes
Teach Mode	HT, VT, FT, TP
Interface	IO-Link
IO-Link Version	1.1
Protection Class	III
Mechanical Data	
Adjustment	Teach-In
Housing Material	Plastic
Optic Cover	PMMA
Degree of Protection	IP68
Connection	M12 × 1; 4-pin
Error Output	●
Contamination Output	●
Configurable as PNP/NPN/Push-Pull	●
Analog Output	●
IO-Link	●
Connection Diagram No.	782
Control Panel No.	X2
Suitable Connection Technology No.	2
Suitable Mounting Technology No.	380





Legend		
+	Supply Voltage +	nc not connected
-	Supply Voltage 0 V	U Test Input
~	Supply Voltage (AC Voltage)	Ū Test Input inverted
A	Switching Output (NO)	W Trigger Input
Ā	Switching Output (NC)	O Analog Output
V	Contamination/Error Output (NO)	O- Ground for the Analog Output
Ṽ	Contamination/Error Output (NC)	BZ Block Discharge
E	Input (analog or digital)	AWV Valve Output
T	Teach Input	a Valve Control Output +
Z	Time Delay (activation)	b Valve Control Output 0 V
S	Shielding	SY Synchronization
RxD	Interface Receive Path	E+ Receiver-Line
TxD	Interface Send Path	S+ Emitter-Line
RDY	Ready	≠ Grounding
GND	Ground	S _n R Switching Distance Reduction
CL	Clock	Rx+/- Ethernet Receive Path
E/A	Output/Input programmable	Tx+/- Ethernet Send Path
	IO-Link	Bus Interfaces-Bus A(+)/B(-)
PoE	Power over Ethernet	La Emitted Light disengageable
IN	Safety Input	Mag Magnet activation
OSSD	Safety Output	RES Input confirmation
Signal	Signal Output	EDM Contactor Monitoring

Wire Colors according to DIN IEC 757	
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

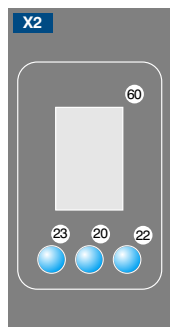
Complementary Products

IO-Link Master
Protection Housing Set ZSP-NN-02
Protection Housing ZSV-0x-01

Table 1

Working Distance	0 m	3 m
Light Spot Diameter	5 mm	9 mm

Ctrl. Panel



- 20 = Enter Button
- 22 = UP Button
- 23 = Down Button
- 60 = Display