

Laser Distance Sensor

Time of Flight

P1PY218

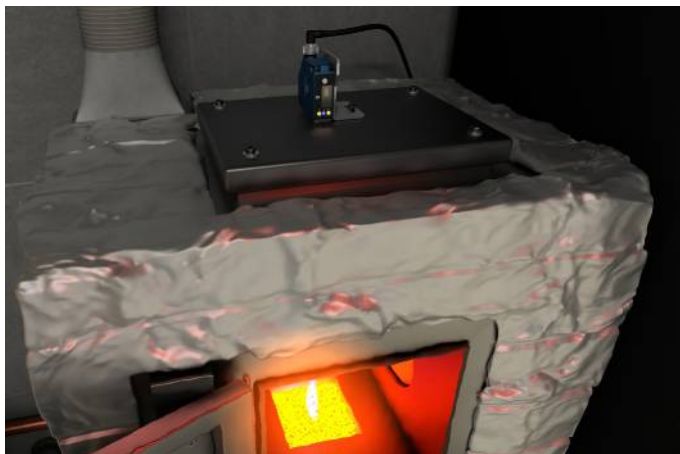
Part Number

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 time-of-flight measurement with blue laser class. The wintec, equipped with dynamic sensitivity technology (DS), enables a previously unattainable reception sensitivity even with very weak signals. The blue laser light provides improved performance on challenging surfaces. The large, rectangular light spot guarantees stable measurement results on uneven surfaces, grid structures or bulk solids. Extensive condition monitoring functions also enable predictive maintenance and trouble-free operation. Settings are entered via the easy-to-read OLED display or via Bluetooth using the weCon app.



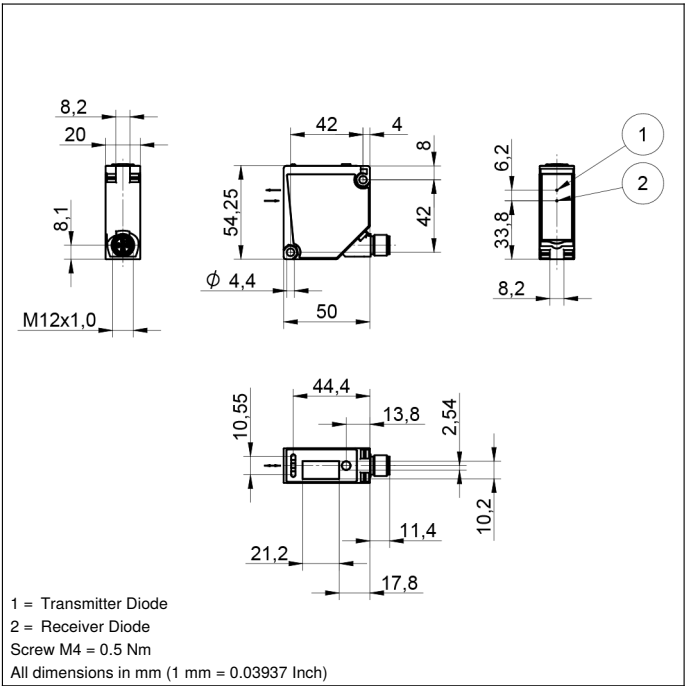
Technical Data

Optical Data	
Working Range	0...5000 mm
Measuring Range	50...5000 mm
Reproducibility maximum	3 mm*
Linearity Deviation	15 mm*
Light Source	Laser (blue)
Wavelength	445 nm
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	2
Max. Ambient Light	100000 Lux
Light Spot Diameter	see Table 1
Reflector required	no
Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption (Ub = 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
IO-Link transmission speed	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
Degree of Protection	IP68
Connection	M12 × 1; 5-pin
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	352,09 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

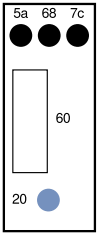
Complementary Products

IO-Link Master
Protective Screen
Software

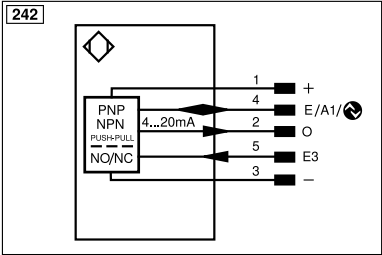


Ctrl. Panel

X6



20 = Enter key
5a = Switching Status Indicator, A1
60 = display
68 = Power LED
7c = Analog Output Indicator, O



- = supply voltage 0 V
+ = supply voltage +
E/A1 = programmable input/output / IO-Link
E3 = input
O = analog output

Mode	White working range	Gray working range	Black working range	Measuring rate	Maximum reproducibility	Linearity deviation	Low signal detection
Speed	0...5000 mm	0...5000 mm	0...5000 mm	500/s	5 mm	15 mm	+
Precision (default)	0...5000 mm	0...5000 mm	0...5000 mm	100/s	3 mm	15 mm	++
Precision Plus	0...5000 mm	0...5000 mm	0...5000 mm	50/s	3 mm	15 mm	+++

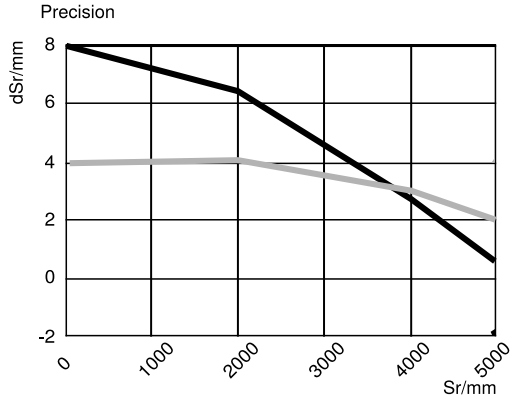
Table 2

Table 1

Working Distance	0 m	2,5 m	5 m
Spot Size	2,5 × 5 mm	25 × 60 mm	65 × 160 mm

Switching Distance Deviation

Typical characteristic curve based on white, 90 % remission



Sr = Switching Distance
dSr = Switching Distance Change

