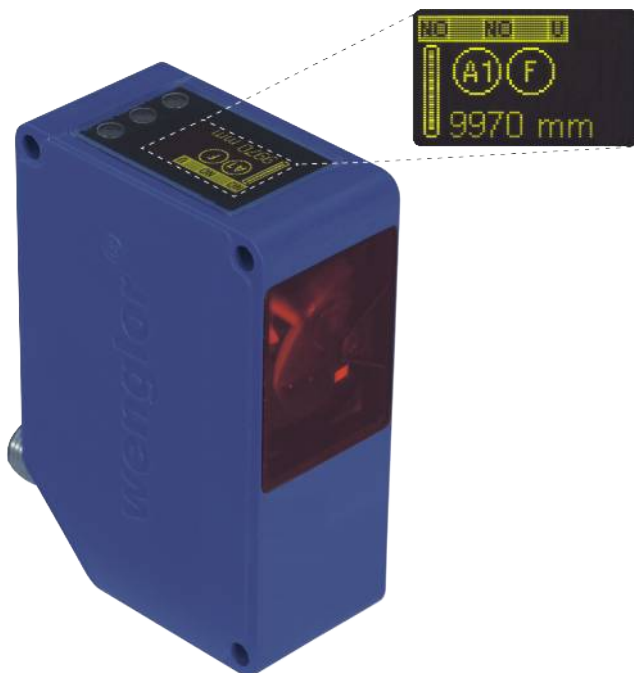


High-Performance Distance Sensor

Y1TA100MHT88S762

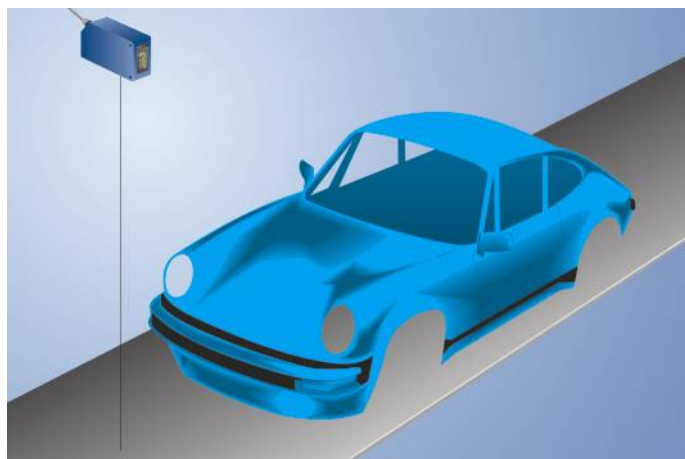
Part Number

LASER



- Analog output (0...10 V/4...20 mA)
- Emitted light disengageable
- Graphical display for easy operation
- Scratch-resistant optic cover

These sensors measure the distance between the sensor and the object. They function in accordance with the principle of transit time measurement. For this reason, the object's color, shape and surface characteristics have practically no influence on measurement results. Even dark objects can be reliably recognized against bright backgrounds. Large working ranges and distances are achieved by these sensors. They are aligned directly to the object.



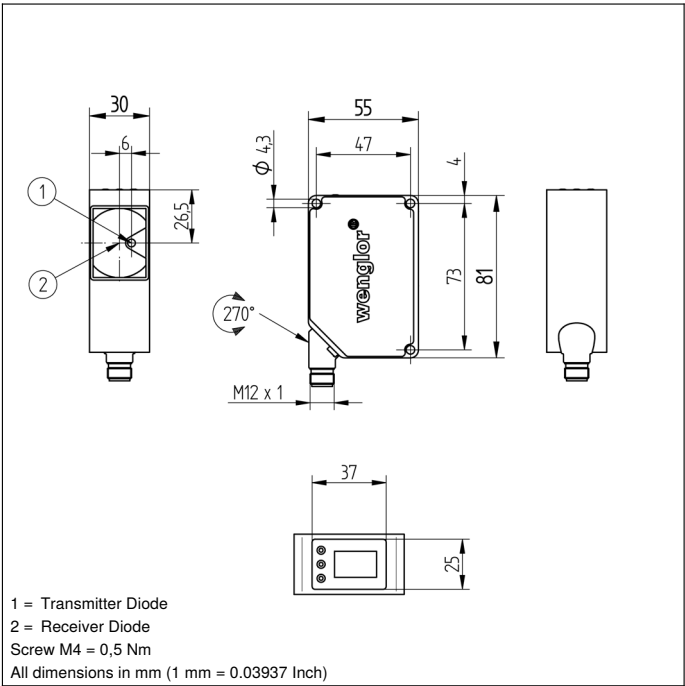
Technical Data

Optical Data	
Working Range	0,1...10,1 m
Measuring Range	10 m
Resolution	1...10 mm
Linearity	0,2 %
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)	2
Max. Ambient Light	10000 Lux
Beam Divergence	< 2 mrad
Spot Diameter	see Table 1
Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption (U _b = 24 V)	< 100 mA
Measuring Rate	1...100 /s
On-/Off-Delay	0...10000 ms
Temperature Drift	0,25 mm/K
Temperature Range	-10...60 °C
Switching Outputs	1
Switching Output Voltage Drop	< 2,5 V
Switching Output/Switching Current	200 mA
Error Output/Switching Current	200 mA
Analog Output	0...10 V/4...20 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Interface	RS-232
Protection Class	III
FDA Accession Number	0710891-002
Mechanical Data	
Setting Method	Menu (OLED)
Housing Material	Plastic
Degree of Protection	IP68
Connection	M12 × 1; 8-pin
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	345,73 a
Error Output	●
Configurable as PNP/NPN/Push-Pull	●
Analog Output	●
RS-232 Interface	●
Connection Diagram No.	517
Control Panel No.	TA1
Suitable Connection Technology No.	80
Suitable Mounting Technology No.	340

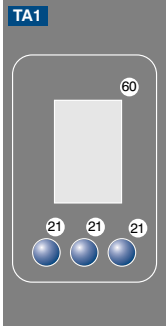
Display brightness may decrease with age. This does not result in any impairment of the sensor function.

Complementary Products

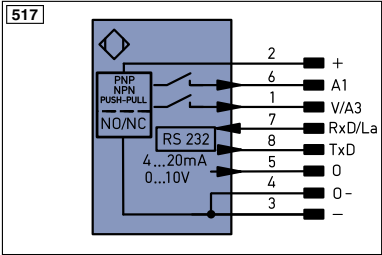
Feldbus Gateways ZAGxxxN01, EPGG001
Protection Housing Set ZST-NN-02



Ctrl. Panel



21 = Mode Button
60 = Display



Legend

+	Supply Voltage +	PT	Platinum measuring resistor
-	Supply Voltage 0 V	nc	not connected
~	Supply Voltage (AC Voltage)	U	Test Input
A	Switching Output (NO)	U	Test Input inverted
Ä	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
Û	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	AwV	Valve Output
Z	Time Delay (activation)	a	Valve Control Output +
S	Shielding	b	Valve Control Output 0 V
RxD	Interface Receive Path	SY	Synchronization
TxD	Interface Send Path	E+	Receiver-Line
RDY	Ready	S+	Emitter-Line
GND	Ground	±	Grounding
CL	Clock	SnR	Switching Distance Reduction
E/A	Output/Input programmable	Rx+/-	Ethernet Receive Path
IO-Link	IO-Link	Tx+/-	Ethernet Send Path
PoE	Power over Ethernet	Bus	Interfaces-Bus A(+)/B(-)
IN	Safety Input	La	Emitted Light disengageable
OSSD	Safety Output	Mag	Magnet activation
Signal	Signal Output	RES	Input confirmation
BI-D+/-	Ethernet Gigabit bidirect. data line (A-D)	EDM	Contact Monitoring
EN0 RS422	Encoder 0-pulse 0-0 (TTL)	ENAR5422	Encoder A/Ä (TTL)
		ENBR5422	Encoder B/B (TTL)

ENa	Encoder A
ENb	Encoder B
AMIN	Digital output MIN
AMAX	Digital output MAX
AOK	Digital output OK
SY In	Synchronization In
SY OUT	Synchronization OUT
OLt	Brightness output
M	Maintenance

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

Table 1

Working Distance	0 m	10 m
Spot Diameter	5 mm	< 20 mm

