

Transit Time Sensors

for Measuring Tasks LASER

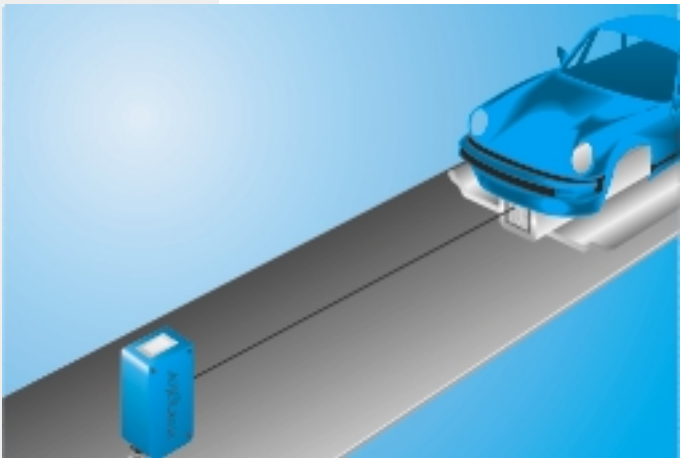
X1TA101MHT88

Part Number



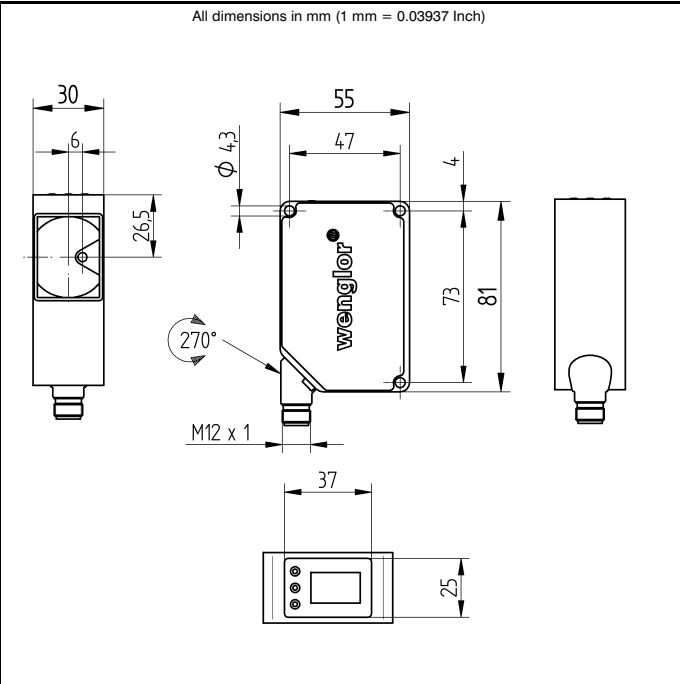
- Analog Output can be set to 0...10 V or 4...20 mA
- Emitted light disengageable
- graphical display for easy operation
- Scratch-resistant optic cover

These sensors measure the distance between the sensor and the object. They function in accordance with the principle of reflection time measurement. They have large measuring ranges and recognise objects at great distances. A reflector or a reflector sheet is required. The size of the reflector must be adapted to the respective application. They are aligned directly to the object. Settings are selected by means of a menu, and can be protected with a password.



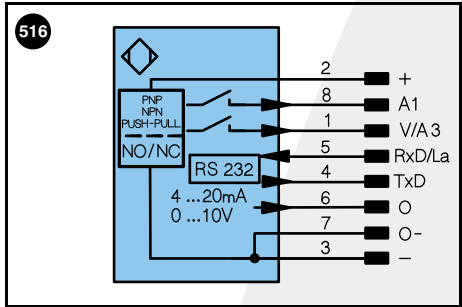
Technical Data

Optical Data	
Working Range	0,2...100.2 m
Measuring Range	100 m
Reference Reflector/Reflex Foil	4 x RQ100BA
Linearity	0.05 %
Switching Hysteresis	15...40 mm
Light Source	Laser (red)
Wave Length	660 nm
Service Life (T = +25°C)	100000 h
Laser Protection Class (EN 60825-1)	1
Beam Divergence	< 2 mrad
Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption (U _b = 24V)	< 100 mA
Measurement Rate	1...100 /s
On-/Off-Delay	0...10000 ms
Temperature Drift	0,5 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
Analog Output	4...20 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Interface	RS-232
Resolution	10...25 mm
Mechanical Data	
Adjustment	Teach-In
Housing	Plastic
Protection Mode	IP 68
Connection	M12 x 1
Protective Insulation, Rated Voltage	50 V



Specifications are subject to change without notice
22/07

Plug Version	
Part Number	X1TA101MHT88
Error Output	●
Configurable as PNP/NPN/Push-Pull	●
Analog Output	●
RS-232 Interface	●
Connection Diagram No.	516
Control Panel No.	TA1
Suitable Plug No.	88



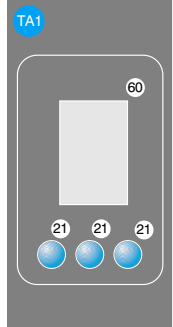
Legend			
+	Power supply "+"	U	Test input
-	Power supply "0V"	W	Trigger input
~	Power supply (AC Voltage)	O	Analog output (1,2,3,...)
A	Switching output (1,2,3,...) / NO	O-	Ground for the analog output
A	Switching output (1,2,3,...) / NC	BZ	Block discharge
V	Contamination / Error output (NO)	Aw	Valve output
V	Contamination / Error output (NC)	a	Valve control output "+"
E	Input (analog or digital)	b	Valve control output "0V"
T	Teach input	SY	Synchronization
Z	Time delay (activation)	E+	Receiver-Line
S	Shielding	S+	Emitter-Line
RxD	RS-232 receive path	+	Grounding
TxD	RS-232 send path	SxR	Switching Distance Reduction
RDY	Ready	USBD+	USB data +
GND	Ground	USBD-	USB data -
CL	Clock	Ra	Interfaces-Bus A(+)/B(-)
		La	Emitted light disengageable

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
GYE	green yellow

Accessories

- Analog Evaluation Unit AW02
- Mounting Bracket WTA
- Reflector, Reflector Sheet
- Serial Interface Adapter S232W3

Ctrl.Panel



21 = Mode Button
60 = Display

Table 1

Working Distance	0 m	40 m	100 m
Light Spot Diameter	5 mm	80 mm	< 200 mm

Feasible reflector distance

Reflektor type, mounting distance

RQ100BA	5...100 m	
RF505	0.2...40 m	
RF255	0.2...40 m	
RF508	0.2...40 m	
RF258	0.2...40 m	
RF4050	0.2...40 m	