

Transit Time Sensors

for Measuring Tasks

LASER

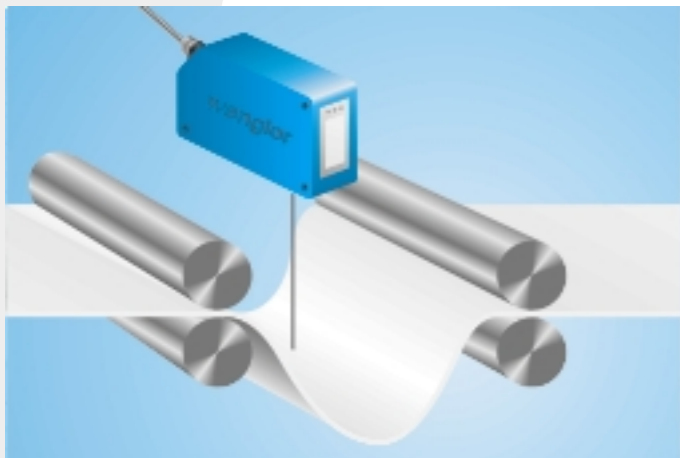
Y1TA100QXVT80

Part Number



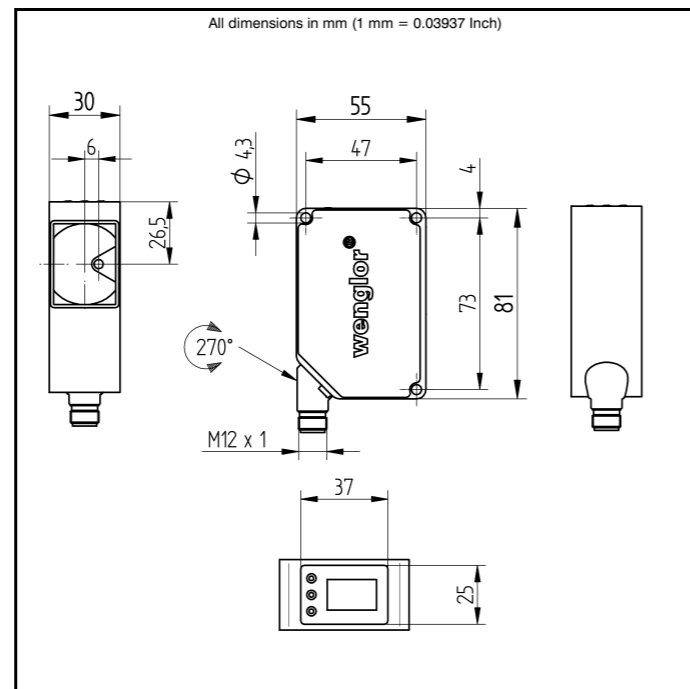
- **Emitted light disengageable**
- **graphical display for easy operation**
- **Scratch-resistant optic cover**
- **Two mutually independent switching outputs**

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 colour, shape and surface characteristics have practically no influence on measurement results. 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	0,1...10.1 m
Measuring Range	10 m
Linearity	0.2 %
Switching Hysteresis	3...20 mm
Light Source	Laser (red)
Wave Length	660 nm
Service Life (T = +25°C)	100000 h
Laser Protection Class (EN 60825-1)	2
Beam Divergence	< 2 mrad
Light Spot Diameter	see Table 1
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	0,25 mm/K
Temperature Range	-10...60 °C
Switching Outputs	2
Switching Output Voltage Drop	< 2.5 V
Switching Output / Switching Current	200 mA
Error Output/Switching Current	200 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Interface	RS-232
Protocol	8 N 1
Resolution	1...10 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

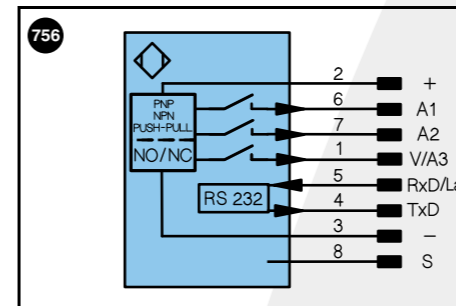
Plug Version

Part Number	Plug Version
Y1TA100QXVT80	
Error Output	●
Configurable as PNP/NPN/Push-Pull	●
RS-232 Interface	●
Connection Diagram No.	756
Control Panel No.	TA1
Suitable Plug No.	80



Table 1

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

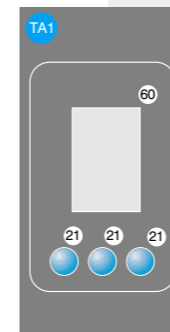


Legend		Wire colors according to DIN IEC 757
+	Power supply "+"	BK black
-	Power supply "0V"	BN brown
-	Power supply (AC Voltage)	RD red
A	Switching output (1,2,3...)/ NO	OG orange
A	Switching output (1,2,3...)/ NC	YE yellow
V	Contamination / Error output (NC)	GN green
V	Input (analog or digital)	BU blue
E	Teach input	VT violet
T	Time delay (activation)	GY grey
S	Shielding	WH white
RxD	RS-232 receive path	PK pink
TxD	RS-232 send path	GNYE green yellow
CL	Clock	
U	Test input	
W	Trigger input	
O	Analog output (1,2,3...)	
O-	Ground for the analog output	
BZ	Block discharge	
AW	Valve output	
a	Valve control output "+"	
b	Valve control output "0V"	
SY	Synchronization	
E+	Receiver-Line	
E+	Emitter-Line	
+	Grounding	
S+R	Switching Distance Reduction	
USB+	USB data +	
USB-	USB data -	
Bus+	Interfaces-Bus A(+)/B(-)	
La	Emitted light disengageable	

Accessories

- Mounting Bracket WTA
- Serial Interface Adapter S232W3

Ctrl. Panel



21 = Mode Button
60 = Display