

Transit Time Sensor



OY2TA403AT235

Part Number

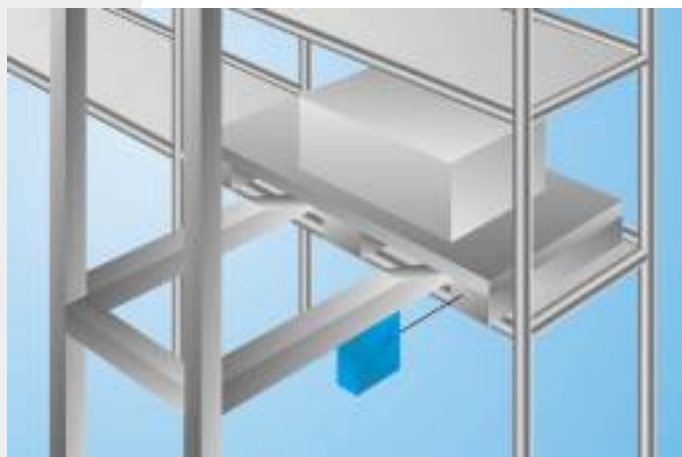


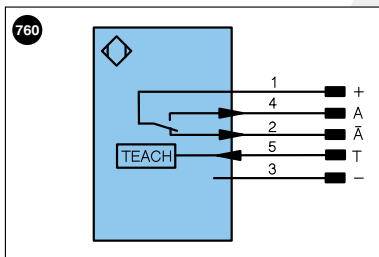
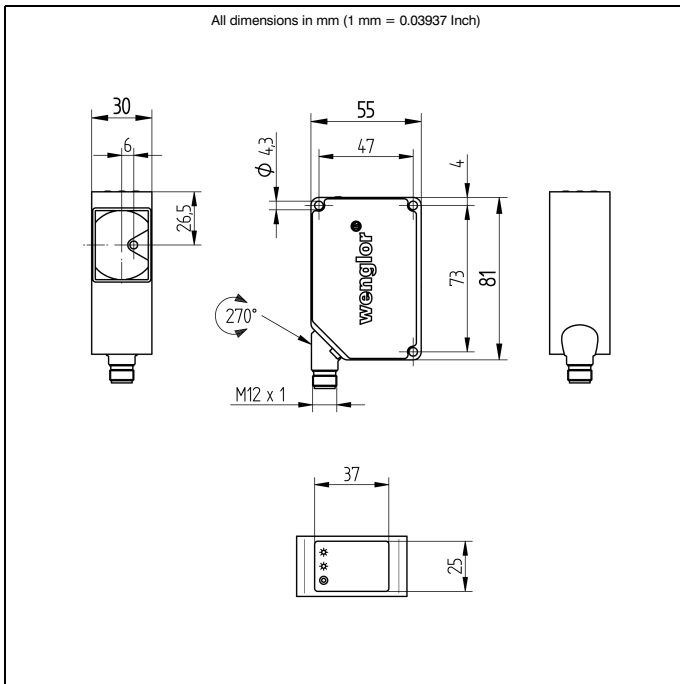
- Scratch-resistant optic cover
- Very high Switching Frequency
- Working Range up to 4 m

Technical Data

Optical Data	
Working Range	0...4000 mm
Adjustable Range	250...4000 mm
Switching Hysteresis	< 25 mm
Light Source	Laser (red)
Wave Length	660 nm
Service Life (T = +25°C)	100000 h
Laser Class (EN 60825-1)	2
Beam Divergence	< 2 mrad
max. Ambient Light	10000 Lux
Light Spot Diameter	see Table 1
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24V)	< 70 mA
Switching Frequency	1 kHz
Response Time	500 μs
Temperature Drift	< 2 %
Temperature Range	-25...60 °C
Switching Outputs	2
Switching Output Voltage Drop	< 2,5 V
Switching Output / Switching Current	200 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Mechanical Data	
Adjustment	Teach-In
Housing	Plastic
Degree of Protection	IP 68
Connection	M12 x 1
Protective Insulation, Rated Voltage	50 V
PNP NO/NC antivalent	●
Connection Diagram No.	760
Control Panel No.	TA2
Suitable Plug No.	2 35

These sensors have scratch-resistant optics and measure the distance between the sensor and the object in accordance with the principle of transit time measurement. The sensor reaches a very high Switching Frequency. Artificial light (e.g. energy saving lamp) or the background does not influence the correct sensor function. The Working Range is also valid for dark objects.



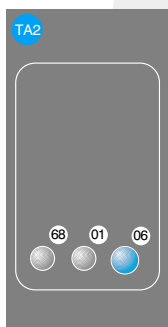


Legend		Wire colors according to DIN IEC 757
+	Power supply "+"	BK black
-	Power supply "0V"	BN brown
~	Power supply (AC Voltage)	RD red
A	Switching output (1,2,3...) / NO	OG orange
Ā	Switching output (1,2,3...) / NC	YE yellow
V	Contamination / Error output (NO)	GN green
V̄	Contamination / Error output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

Accessories

Mounting Bracket WTA

Ctrl. Panel



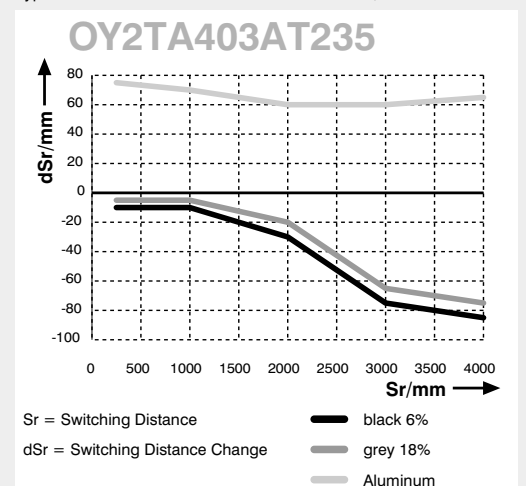
- 01 = Switching Status Indicator
- 06 = Teach Button
- 68 = Supply Voltage Indicator

Table 1

Working Distance	0 m	4 m
Light Spot Diameter	5 mm	< 8 mm

Switching Distance Deviation

Typical characteristic curve based on Kodak white, 90%



Specifications are subject to change without notice