

Retro-Reflex Sensors

for Clear Glass Recognition

LM89NCT2

Part Number



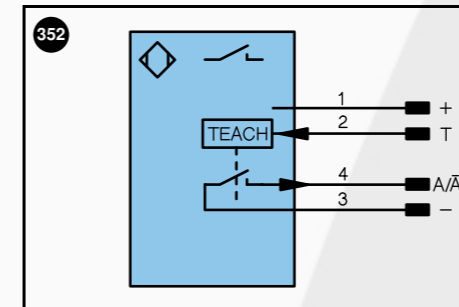
- Low-Cost
- Recognition of Clear Glass
- Teach-In, external Teach-In, RS-232 Interface



Technical Data

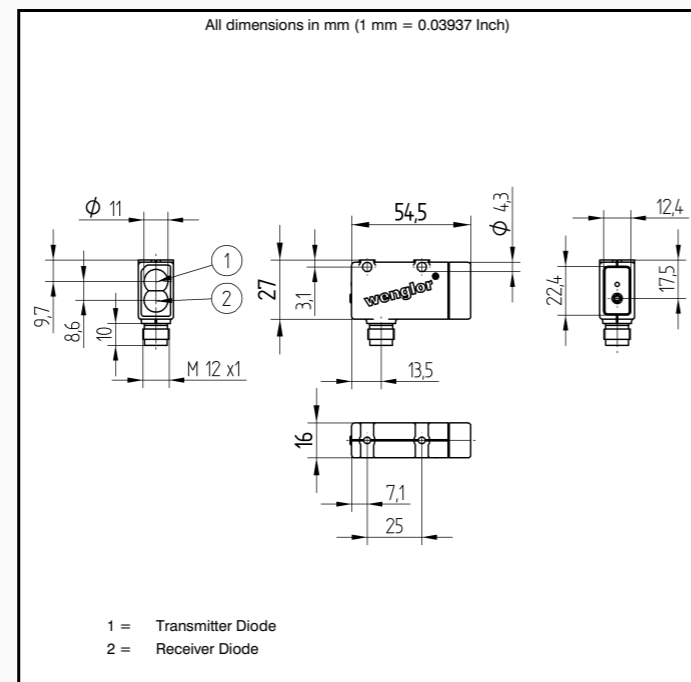
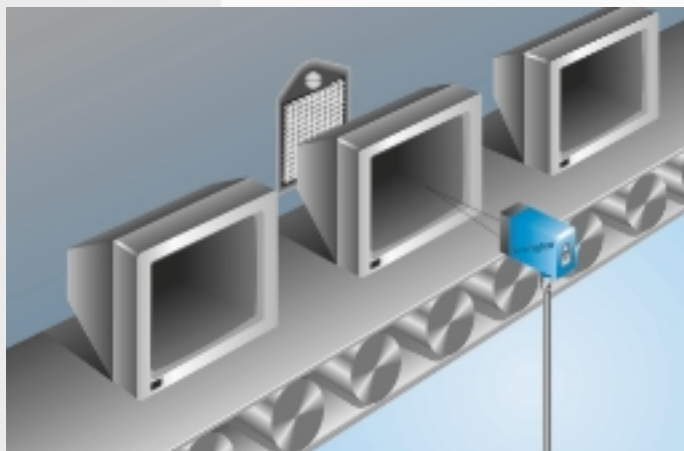
Optical Data	
Range	6500 mm
Reference Reflector	RQ100BA
Clear Glass Recognition	yes
Switching Hysteresis	< 5 %
Light Source	Red Light
Polarization Filter	yes
Service Life (T = +25°C)	100000 h
max. Ambient Light	10000 Lux
Opening Angle	5 °
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24V)	< 40 mA
Switching Frequency	2 kHz
Response Time	250 μs
Temperature Drift	< 5 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2.5 V
NPN Switching Output/Switching Current	100 mA
Residual Current Switching Output	< 50 μA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Lockable	yes
Teach Mode	NT,MT
Mechanical Data	
Adjustment	Teach-In
Housing	Plastic
Full Encapsulation	yes
Protection Mode	IP 67
Connection	M 12x1
Protective Insulation, Rated Voltage	50 V

Part Number	Plug Version
LM89NCT2	
NPN NO/NC switchable	●
RS-232 with Adapterbox	●
Connection Diagram No.	352
Control Panel No.	M 3
Suitable Plug No.	1



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 (NO)	GN green
V	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	
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	
S+	Emitter-Line	
⊕	Grounding	

A reflector must be used in combination with these sensors. wenglor has the right retro-reflex light barrier for every application. Even crystal-clear objects and sheet products can be reliably recognized.

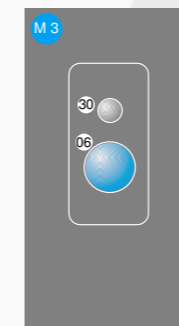


Specifications are subject to change without notice
38/03

Accessories

- Adapterbox A232
- Mounting Bracket WM2
- Reflector, Reflector Tape

Ctrl. Panel



- 06 = Teach Button
- 30 = Switching Status/Contamination Warning