

Retro-Reflex Sensors

for Clear Glass Recognition

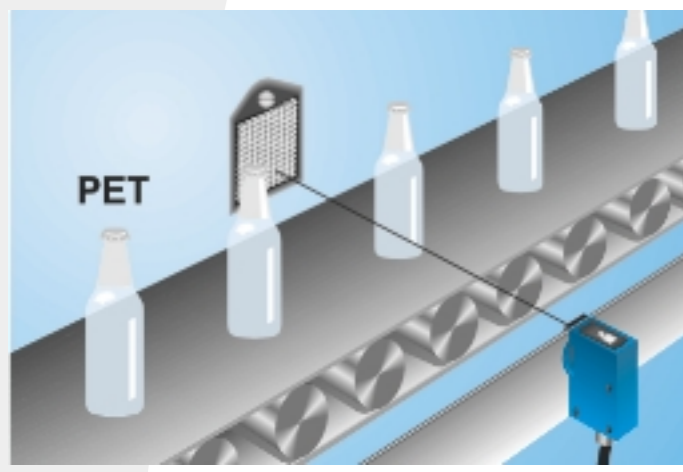
K1R87PCT2

Part Number



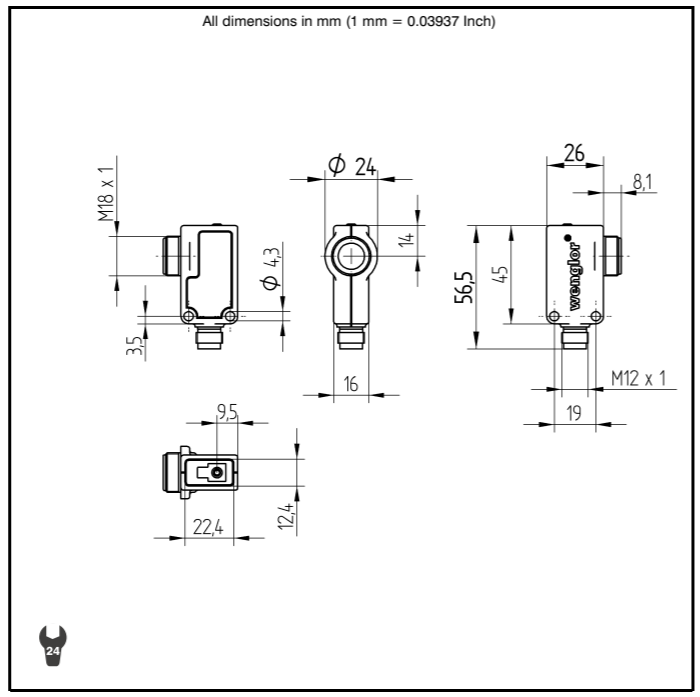
- Dynamic readjustment of the switching threshold
- Easy to install
- Recognition of Clear Glass
- Teach-In, external Teach-In, RS-232 Interface

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. The sensor is easy to install with its integrated M18 threaded fixation, and can be easily protected as well. Time delay can be activated by RS-232 interface.



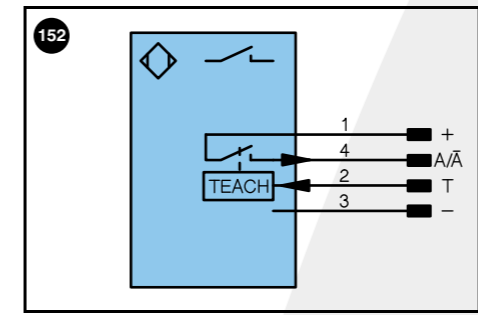
Technical Data

Optical Data	
Range	4000 mm
Reference Reflector/Reflex Foil	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
On-/Off-Delay (RS-232)	0...5 s
Temperature Drift	< 5 %
Temperature Range	-10...60 °C
Switching Output Voltage Drop	< 2.5 V
PNP Switching Output/Switching Current	200 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



Specifications are subject to change without notice
28/06

Plug Version	Part Number
PNP NO/NC switchable	●
RS-232 with Adapterbox	●
Connection Diagram No.	152
Control Panel No.	M 3
Suitable Plug No.	2

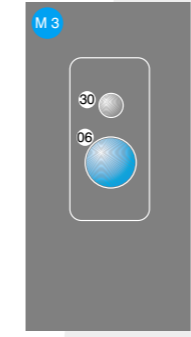


Legend		Wire colors according to DIN IEC 757
+	Power supply "+"	BK black
-	Power supply "0V"	BN brown
-	Power supply (AC Voltage)	RD red
A	Switching output (1,2,3...) / NO	OG orange
Ā	Switching output (1,2,3...) / NC	YE yellow
V	Contamination / Error output (NC)	GN green
∅	Contamination / Error output (NO)	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	
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	
SdR	Switching Distance Reduction	
USB+	USB data +	
USB-	USB data -	
Ba	Interfaces-Bus A(+)/B(-)	
La	Emitted light disengageable	

Accessories

- Adapterbox A232
- Mounting Bracket W18
- Reflector, Reflector Sheet

Ctrl. Panel



06 = Teach Button
30 = Switching Status/Contamination Warning

Feasible reflector distance

Reflektor type, mounting distance			
RQ100BA	0...4 m	RE3220BM	0...1.8 m
RE18040BA	0...2.7 m	RE6210BM	0...1.2 m
RQ84BA	0...3.3 m	RR25DM	0...1.4 m
RR84BA	0...4 m	RR25KP	0...1 m
RE9538BA	0...1.5 m	RR21KM	0...1 m
RE6151BM	0...3.6 m	RE6151BH	0...1 m
RR50_A	0...2.8 m	RF505	0...1.2 m
RE6040BA	0...3 m	RF255	0...1 m
RE8222BA	0...2 m	RF508	0...1 m
RR34_M	0...1.5 m	RF258	0...1 m