

# Retro-Reflex Sensor for Clear Glass Recognition



## KN88PA3

Part Number

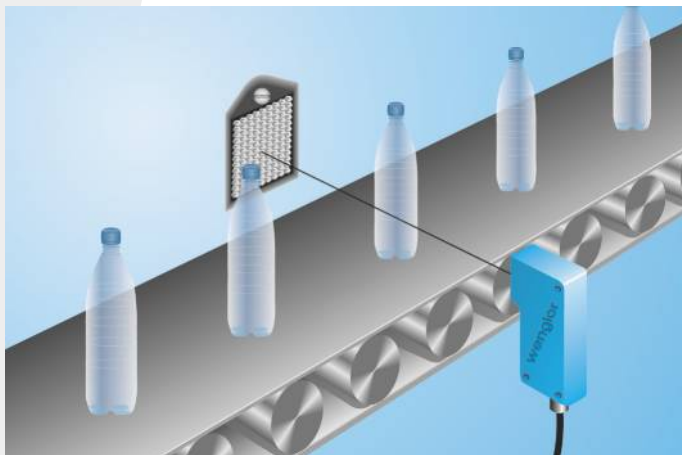


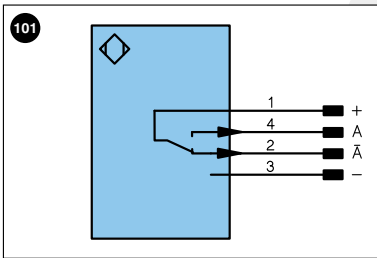
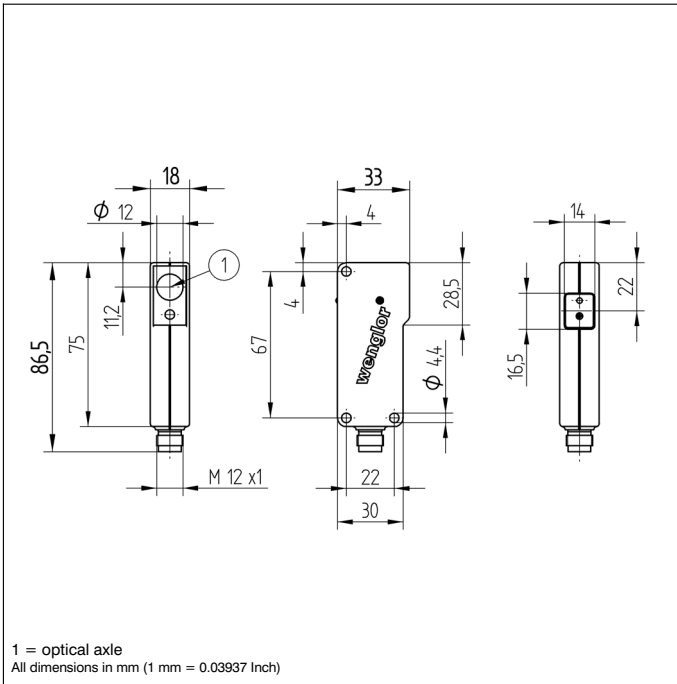
- Foil detection
- Recognition of Clear Glass
- Recognition of PET bottles

### Technical Data

Optical Data	
Range	2600 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	3 °
Single-Lens Optic	yes
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U <sub>b</sub> = 24 V)	< 40 mA
Switching Frequency	2500 Hz
Response Time	200 μs
Temperature Drift	< 3 %
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
Protection Class	III
Mechanical Data	
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin
PNP NO/NC antivalent	●
Connection Diagram No.	101
Control Panel No.	N 1 No1
Suiting Connection Technology No.	2
Suiting Mounting Technology No.	350

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.



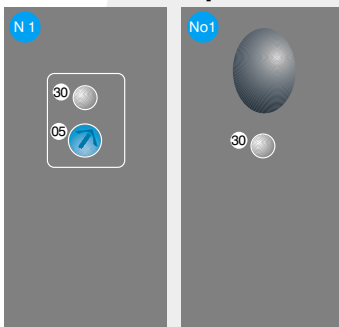


Legend					
+	Supply Voltage +	U	Test Input	PeE	Power over Ethernet
-	Supply Voltage 0 V	Ū	Test Input inverted		
~	Supply Voltage (AC Voltage)	W	Trigger Input		
A	Switching Output (NO)	O	Analog Output		
Ā	Switching Output (NC)	O-	Ground for the Analog Output		Wire Colors according to DIN IEC 757
V	Contamination/Error Output (NO)	BZ	Block Discharge	BK	Black
V̄	Contamination/Error Output (NC)	AwV	Valve Output	BN	Brown
E	Input (analog or digital)	a	Valve Control Output +	RD	Red
T	Teach Input	b	Valve Control Output 0 V	OG	Orange
Z	Time Delay (activation)	SY	Synchronization	YE	Yellow
S	Shielding	E+	Receiver-Line	GN	Green
RxD	Interface Receive Path	S+	Emitter-Line	BU	Blue
TxD	Interface Send Path	±	Grounding	VT	Violet
RDY	Ready	SnR	Switching Distance Reduction	GY	Grey
GND	Ground	Rx +/-	Ethernet Receive Path	WH	White
CL	Clock	Tx +/-	Ethernet Send Path	PK	Pink
E/A	Output/Input programmable	Bus	Interfaces-Bus A(+)/B(-)	GNYE	Green Yellow
	IO-Link	La	Emitted Light disengageable		

### Complementary Products

Dust extraction tube STAUBTUBUS-03
Protection Housing Set ZSN-NN-02
Reflector, Reflex Foil

### Ctrl.Panel Optic



05 = Switching Distance Adjuster  
30 = Switching Status/Contamination Warning

### Feasible reflector distance

Reflector type, mounting distance

RQ100BA	0...2,6 m	RR25_M	0...1 m
RE18040BA	0...1,4 m	RR25KP	0...0,7 m
RQ84BA	0...2,4 m	RR21_M	0...0,75 m
RR84BA	0...2,3 m	ZRAE02B01	0...1,2 m
RE9538BA	0...0,9 m	ZRME01B01	0...0,4 m
RE6151BM	0...2,3 m	ZRME03B01	0...1 m
RR50_A	0...2,3 m	ZRMR02K01	0...0,5 m
RE6040BA	0...2,5 m	ZRMS02_01	0...0,6 m
RE8222BA	0...0,95 m	RF505	0...0,8 m
RR34_M	0...1,3 m	RF508	0...0,8 m
RE3220BM	0...0,9 m	RF258	0...0,6 m
RE6210BM	0...0,75 m	ZRDF_K01	0...1,8 m

Specifications are subject to change without notice