

Retro-Reflex Sensor for Clear Glass Recognition

KN88PA3

Part Number

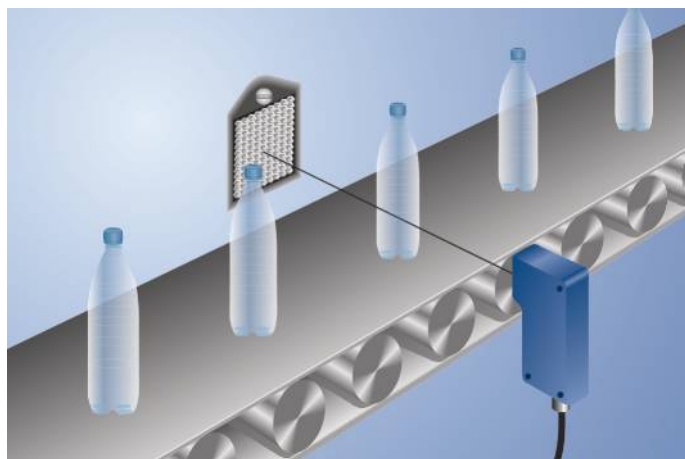


- Foil detection
- Recognition of clear glass
- Recognition of PET bottles

Technical Data

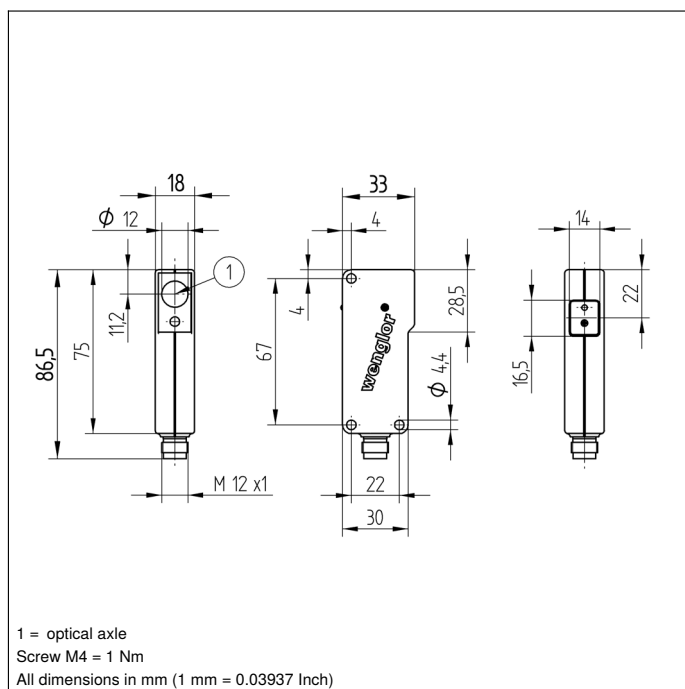
Optical Data	
Range	2600 mm
Reference Reflector/Reflector Foil	RQ100BA
Clear Glass Recognition	yes
Switching Hysteresis	< 5 %
Light Source	Red Light
Polarization Filter	yes
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	3 °
Single-Lens Optic	yes
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 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	
Setting Method	Potentiometer
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.	N1 No1
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	350

Retro-reflex sensors must be used in combination with a reflector and even crystal-clear objects and sheet products can be reliably recognized.

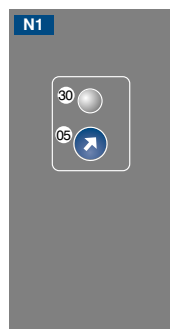


Complementary Products

Dust Extraction Tube STAUBTUBUS-03
PNP-NPN Converter BG2V1P-N-2M
Reflector, Reflector Foil
Set Protective Housing ZSN-NN-02

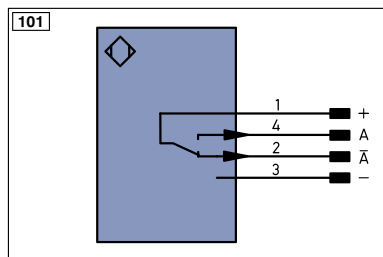
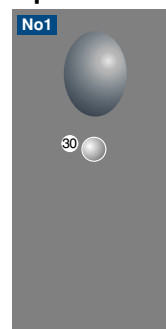


Ctrl. Panel



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

Optic



Legend

+	Supply Voltage +	PT	Platinum measuring resistor
-	Supply Voltage 0 V	nc	not connected
~	Supply Voltage (AC Voltage)	U	Test Input
A	Switching Output (NO)	U	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
Ṽ	Contamination/Error Output (NC)	O	Analog Output
E	Input (analog or digital)	O-	Ground for the Analog Output
T	Teach Input	BZ	Block Discharge
Z	Time Delay (activation)	AWV	Valve Output
S	Shielding	a	Valve Control Output +
RxD	Interface Receive Path	b	Valve Control Output 0 V
TxD	Interface Send Path	SY	Synchronization
RDY	Ready	SY-	Ground for the Synchronization
GND	Ground	E+	Receiver-Line
CL	Clock	S+	Emitter-Line
E/A	Output/Input programmable	±	Grounding
IO-Link	IO-Link	SnR	Switching Distance Reduction
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path
IN	Safety Input	Tx+/-	Ethernet Send Path
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)
Signal	Signal Output	La	Emitted Light disengageable
BI-D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation
EN0 RS422	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation
		EDM	Contacteur Monitoring

ENAR5422	Encoder A/Ā (TTL)
ENBR5422	Encoder B/B̄ (TTL)
ENA	Encoder A
ENB	Encoder B
AMIN	Digital output MIN
AMAX	Digital output MAX
AOK	Digital output OK
SY in	Synchronization In
SY OUT	Synchronization OUT
OLT	Brightness output
M	Maintenance
rsv	reserved
Wire Colors according to DIN IEC 757	
BK	Black
BN	Brown
RD	Red
OG	Orange
YE	Yellow
GN	Green
BU	Blue
VT	Violet
GY	Grey
WH	White
PK	Pink
GNYE	Green/Yellow

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

