

# Retro-Reflex Sensors

for Clear Glass Recognition

## KN88NA3

Part Number



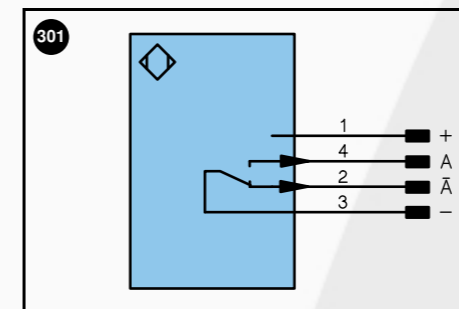
- Recognition of Clear Glass
- Recognition of PET bottles
- Sheet products



### Technical Data

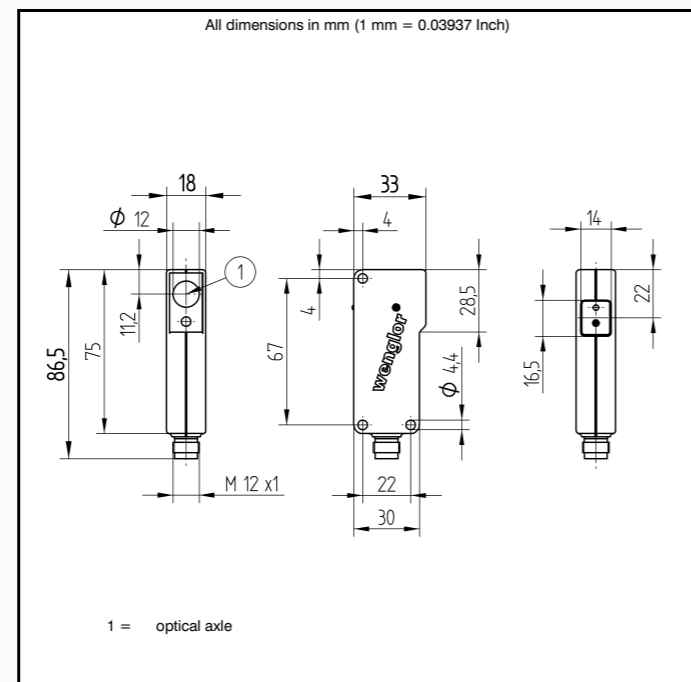
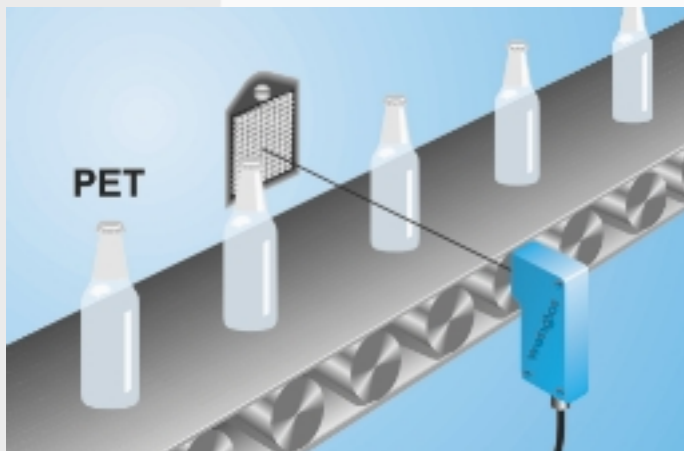
Optical Data	
Range	2600 mm
Reference Reflector	RQ100BA
Clear Glass Recognition	yes
Switching Hysteresis	< 5 %
Light Source	Red Light
Polarization Filter	yes
Service Life (T = +25°C)	100000 h
max. Ambient Light	10000 Lux
Opening Angle	3 °
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U <sub>b</sub> = 24V)	< 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
NPN Switching Output/Switching Current	100 mA
Residual Current Switching Output	< 50 μA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Mechanical Data	
Housing	Plastic
Full Encapsulation	yes
Protection Mode	IP 67
Connection	M 12x1
Protective Insulation, Rated Voltage	50 V

Plug Version	
Part Number	KN88NA3
NPN NO/NC antivalent	●
Connection Diagram No.	301
Control Panel No.	N 1 No 1
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-bar	Switching output (1,2,3...)/ NC	YE yellow
V	Contamination / Error output (NO)	GN green
V-bar	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	
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	

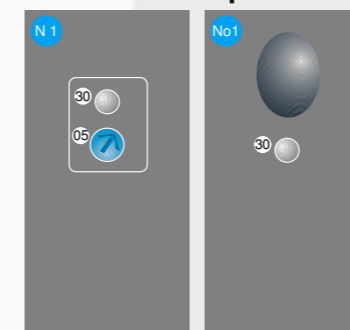
A reflector must be used in combination with these sensors. wenglor has the right retro-reflex light barrier for every application. Even crystal-clear objects and sheet products can be reliably recognized.



### Accessories

- Mounting Bracket WN
- Reflector, Reflector Tape

### Ctrl. Panel Optic



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