

XN96PA3

Part Number



- Min. clearance to reflector: 0 mm
- Single-Lens Optic
- Smallest Recognizable Part: 0.25 mm
- Stainless Steel Plug (V2A)

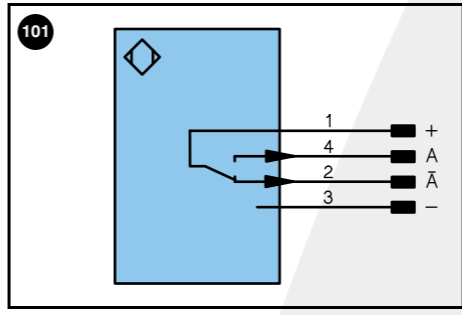
Technical Data

Optical Data	
Range	9500 mm
Reference Reflector/Reflex Foil	RQ100BA
max. Distance on Reflector	0 mm
Smallest Recognizable Part	> 250 μm
Switching Hysteresis	< 15 %
Light Source	Laser (red)
Wave Length	650 nm
Polarization Filter	yes
Service Life (T = +25°C)	100000 h
Laser Protection Class (EN 60825-1)	2
max. Ambient Light	10000 Lux
Opening Angle	0.6 °
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24V)	< 30 mA
Switching Frequency	2500 Hz
Response Time	200 μs
Temperature Drift	< 10 %
Temperature Range	-25...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
Mechanical Data	
Housing	Plastic
Full Encapsulation	yes
Protection Mode	IP 67
Connection	M 12x1
Protective Insulation, Rated Voltage	50 V

Plug Version	Part Number
PNP NO/NC antivalent	●
Connection Diagram No.	101
Control Panel No.	N 1 No1
Suitable Plug No.	2

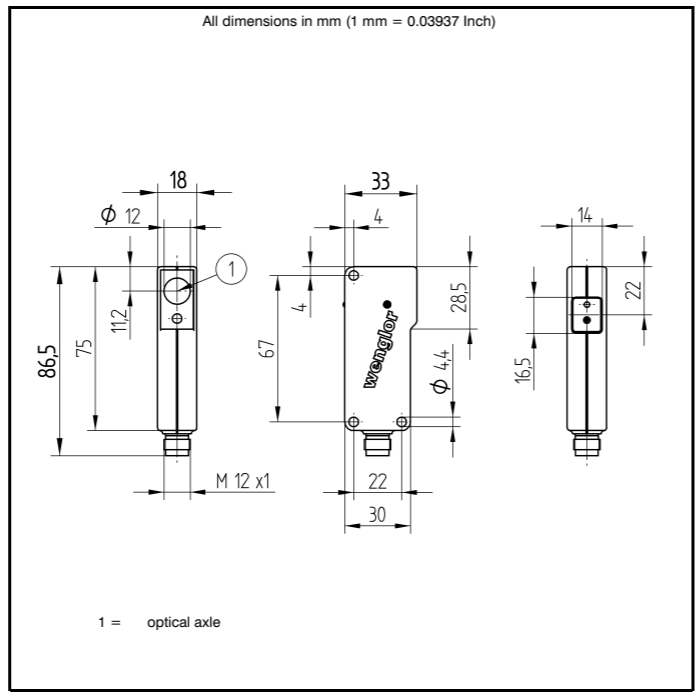
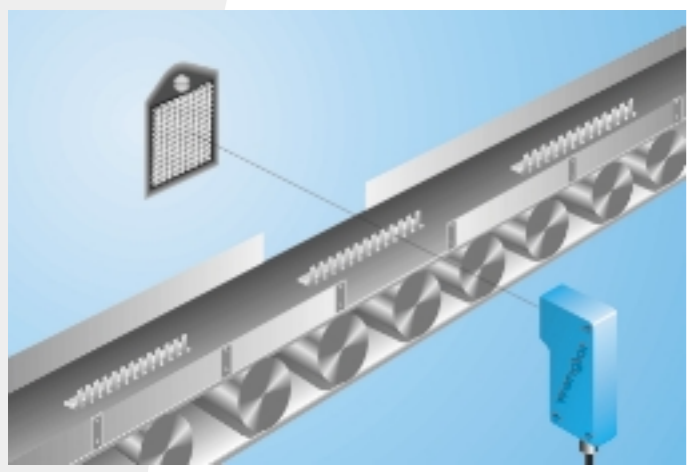
Table 1

Working Distance	0,2 m	3 m	6 m
Light Spot Diameter	3 mm	45 mm	90 mm



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 (NC)	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	GNVE 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	
E-	Emitter-Line	
⊕	Grounding	
⊖	Grounding	
S+R	Switching Distance Reduction	
USB+	USB data +	
USB-	USB data -	
B+	Interfaces-Bus A(+)/B(-)	
B-	Interfaces-Bus A(+)/B(-)	
La	Emitted light disengageable	

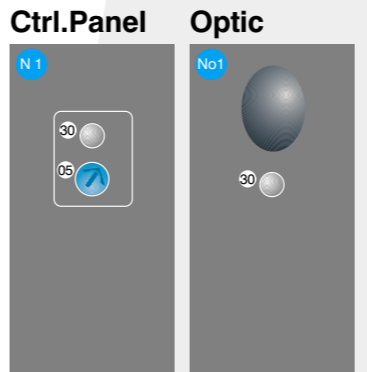
A reflector must be used in combination with these sensors. They can be installed in all kinds of industrial environments thanks to ample functional reserve. Even reflective objects can be reliably recognized through the use of polarized light.



Specifications are subject to change without notice
14/06

Accessories

- Mounting Bracket WN
- Reflector, Reflector Sheet



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

Feasible reflector distance

Reflektor type, mounting distance			
RQ100BA	0...9.5 m	RE3220BM	0...3.5 m
RE18040BA	0...6 m	RE6210BM	0...2.5 m
RQ84BA	0...7 m	RR25DM	0...3.5 m
RR84BA	0...9.5 m	RR25KP	0...1.5 m
RE9538BA	0...2.5 m	RR21KM	0...1.4 m
RE6151BM	0...8.5 m	RE6151BH	0...3 m
RR50_A	0...6.5 m	RF505	0...2.3 m
RE6040BA	0...8.5 m	RF255	0...1.8 m
RE8222BA	0...3.5 m	RF508	0...2 m
RR34_M	0...3.5 m	RF258	0...1.8 m