LN89PA3

Part Number

- **Good Positioning Accuracy**
- **Min. clearance to reflector: 0 mm**
- **Single-Lens Optic**
- **Stainless Steel Plug (V2A)**

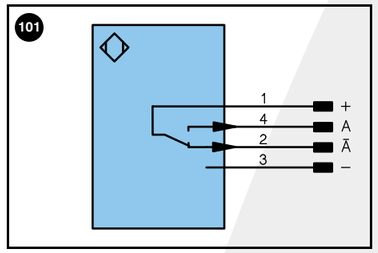
Technical Data

Optical Data	
Range	5500 mm
Reference Reflector/Reflex Foil	RQ100BA
Switching Hysteresis	< 15 %
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 (Ub = 24V)	< 40 mA
Switching Frequency	1 kHz
Response Time	500 µs
Temperature Drift	< 10 %
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
Mechanical Data	
Housing	Plastic
Full Encapsulation	yes
Degree of Protection	IP 67
Connection	M12 x 1
Protective Insulation, Rated Voltage	50 V

Plug Version	
Part Number	LN89PA3
PNP NO/NC antivalent	●
Connection Diagram No.	101
Control Panel No.	N 1 No1
Suitable Plug No.	2

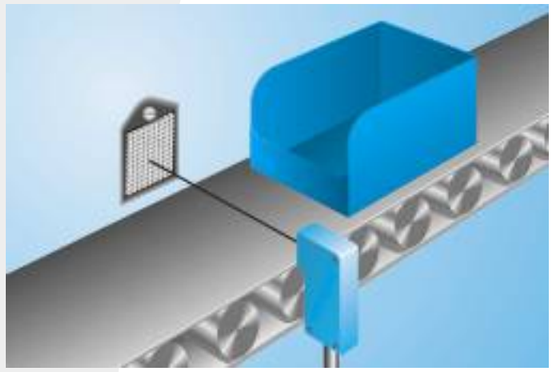
ME 61

50 V

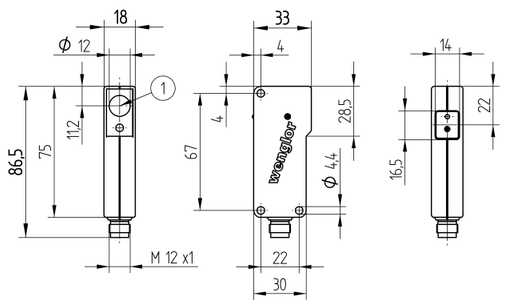


Legend				Wire colors according to DIN IEC 757	
+	Power supply "+"	U	Test input	BK	black
⎓	Power supply "0V"	W	Trigger input	BN	brown
~	Power supply (AC Voltage)	O	Analog output (1,2,3,...)	RD	red
A	Switching output (1,2,3...) / NO	O–	Ground for the analog output	OG	orange
Ā	Switching output (1,2,3...) / NC	BZ	Block discharge	YE	yellow
V	Contamination / Error output (NO)	AMV	Valve output	GN	green
V̄	Contamination / Error output (NC)	a	Valve control output "+"	BU	blue
E	Input (analog or digital)	b	Valve control output "0V"	VT	violet
T	Teach input	SY	Synchronization	GY	grey
Z	Time delay (activation)	E+	Receiver-Line	WH	white
S	Shielding	S+	Emitter-Line	PK	pink
RxD	RS-232 receive path	⏚	Grounding	GNYE	green yellow
TxD	RS-232 send path	SnR	Switching Distance Reduction		
RDY	Ready	USB0+	USB data +		
GND	Ground	USB0–	USB data -		
CL	Clock	Bus	Interfaces-Bus A(+)/B(-)		
E/A	Output/Input programmable	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.



All dimensions in mm (1 mm = 0.03937 Inch)



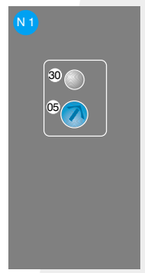
1 = optical axle

Accessories

Mounting Bracket WN

Reflector, Reflector Sheet

Ctrl.Panel



Optic

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

Feasible reflector distance

Reflektor type, mounting distance

RQ100BA	0...5.5 m	RE3220BM	0...1.5 m
RE18040BA	0...2.7 m	RE6210BM	0...1.4 m
RQ84BA	0...4.5 m	RR25DM	0...1.7 m
RR84BA	0...4.5 m	RR25KP	0...1.1 m
RE9538BA	0...1.4 m	RR21KM	0...1.2 m
RE6151BM	0...4 m	RE6151BH	0...2.2 m
RR50_A	0...3.5 m	RF505	0...1.6 m
RE6040BA	0...4 m	RF255	0...1.3 m
RE8222BA	0...1.7 m	RF508	0...1.6 m
RR34_M	0...2.4 m	RF258	0...1.4 m

Specifications are subject to change without notice