

Retro-Reflex Sensor



LK89PD8

Part Number

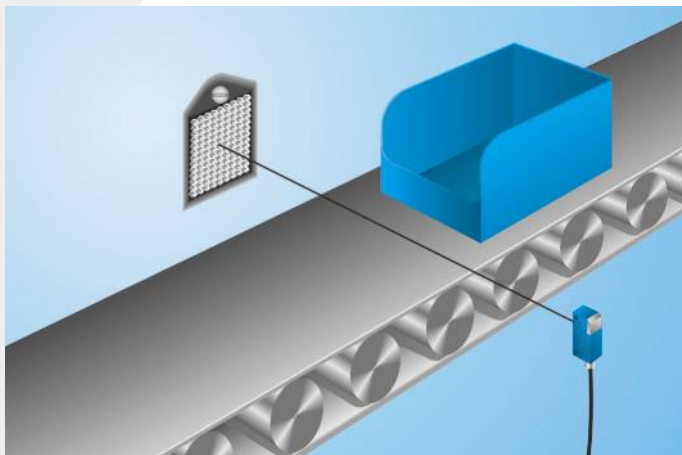


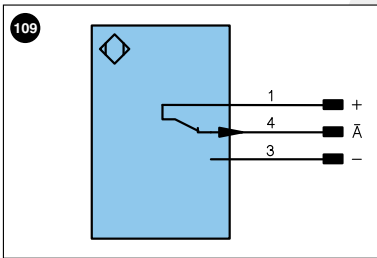
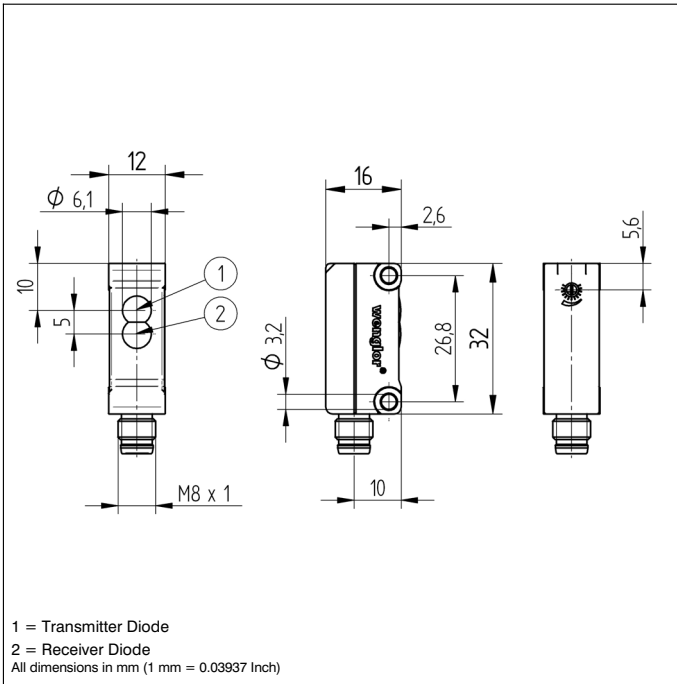
- Metal Plug
- Miniature Design
- Red Light

Technical Data

Optical Data	
Range	4500 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 °
Light Spot Diameter	see Table 1
Two-Lens Optic	yes
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 30 mA
Switching Frequency	1 kHz
Response Time	500 μs
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2,5 V
PNP Switching Output/Switching Current	100 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	M8 × 1; 3-pin
PNP NC	
Connection Diagram No.	
Control Panel No.	
Suiting Connection Technology No.	
Suiting Mounting Technology No.	

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.





Legend			
+	Supply Voltage +	U	Test Input
-	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
V	Contamination/Error Output (NO)	BZ	Block Discharge
V̄	Contamination/Error Output (NC)	AWV	Valve Output
E	Input (analog or digital)	a	Valve Control Output +
T	Teach Input	b	Valve Control Output 0 V
Z	Time Delay (activation)	SY	Synchronization
S	Shielding	E+	Receiver-Line
RxD	Interface Receive Path	S+	Emitter-Line
TxD	Interface Send Path	±	Grounding
RDY	Ready	SnR	Switching Distance Reduction
GND	Ground	Rx +/-	Ethernet Receive Path
CL	Clock	Tx +/-	Ethernet Send Path
E/A	Output/Input programmable	Bus	Interfaces-Bus A(+)/B(-)
	IO-Link	La	Emitted Light disengageable
		PoE	Power over Ethernet
		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

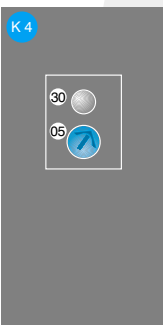
Table 1

Working Distance	0,2 m	0,5 m	4 m
Light Spot Diameter	14 mm	40 mm	250 mm

Complementary Products

Reflector, Reflex Foil

Ctrl. Panel



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

Feasible reflector distance

Reflector type, mounting distance

RQ100BA	0,02...4,5 m	RR25_M	0,015...1,1 m
RE18040BA	0,04...3,5 m	RR25KP	0,04...0,8 m
RQ84BA	0,02...4 m	RR21_M	0,02...1,1 m
RR84BA	0,03...4 m	ZRAE02B01	0,03...1,6 m
RE9538BA	0,03...2 m	ZRME01B01	0,04...0,5 m
RE6151BM	0,01...4 m	ZRME03B01	0,03...1,6 m
RR50_A	0,02...2,8 m	ZRMR02K01	0,03...0,6 m
RE6040BA	0,015...3,2 m	ZRMS02_01	0,03...0,7 m
RE8222BA	0,01...2,1 m	RF505	0,06...1,1 m
RR34_M	0,02...1,6 m	RF508	0,06...1,3 m
RE3220BM	0,015...1,5 m	RF258	0,06...1,1 m
RE6210BM	0,01...1 m	ZRDF_K01	0,06...2,5 m

Specifications are subject to change without notice