

# XK89PB8

Part Number



- Accurate Edge Detection
- Smallest Recognizable Part: 0.1 mm
- Spot Diameter: 1 mm

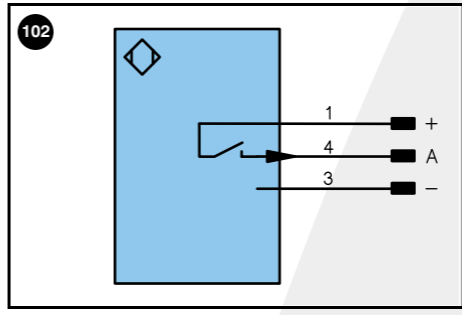
### Technical Data

Optical Data	
Range	6000 mm
Reference Reflector/Reflex Foil	RQ100BA
Smallest Recognizable Part	> 100 μm
Switching Hysteresis	< 15 %
Light Source	Laser (red)
Wave Length	655 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	2 °
Light Spot Diameter	1 mm
Focus Distance	150...300 mm
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U <sub>b</sub> = 24V)	< 30 mA
Switching Frequency	3 kHz
Response Time	166 μs
Temperature Drift	< 10 %
Temperature Range	-10...60 °C
Switching Output Voltage Drop	< 2.5 V
PNP Switching Output/Switching Current	100 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Mechanical Data	
Housing	Plastic
Full Encapsulation	yes
Protection Mode	IP 67
Connection	M8 x 1
Protective Insulation, Rated Voltage	50 V

Part Number	Plug Version
XK89PB8	
PNP NO	●
Connection Diagram No.	102
Control Panel No.	K 4
Suitable Plug No.	8

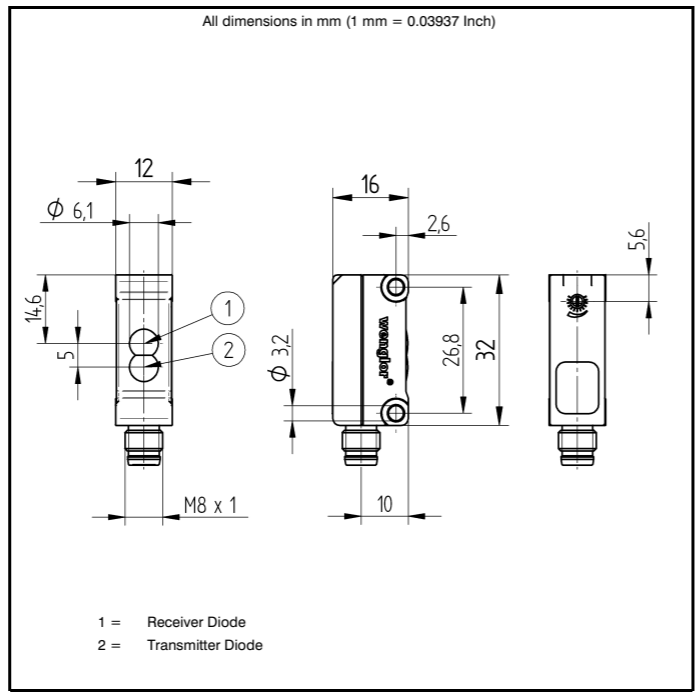
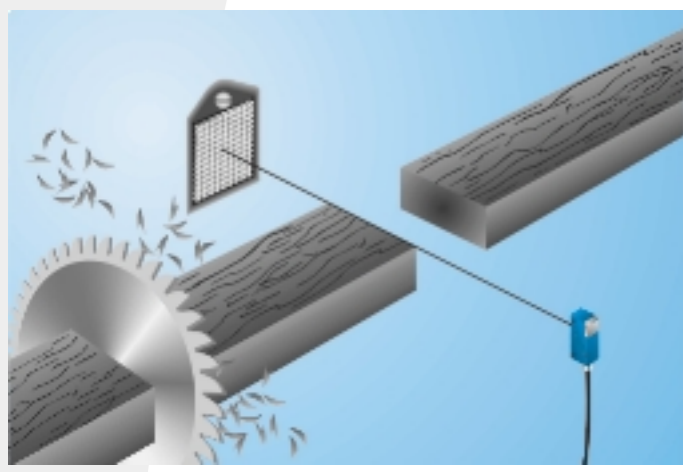
Table 1

Working Distance	0,3 m	2 m	4 m
Light Spot Diameter	< 3 mm	< 30 mm	< 60 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	Switching output (1,2,3...) / NC	BZ yellow
V	Contamination / Error output (NC)	GN green
V	Contamination / Error output (NC)	BU blue
E	Input (analog or digital)	YT 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	
⊖	Switching Distance Reduction	
USB+	USB data +	
USB-	USB data -	
B+	Interfaces-Bus A(+)/B(-)	
La	Emitted light disengageable	

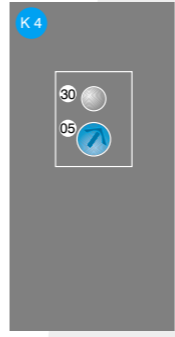
A reflector must be used in combination with these sensors. They can be installed in all kinds of industrial environments thanks to ample functional reserve. Even reflective objects can be reliably recognized through the use of polarized light.



### Accessories

- Fixation System WKS12
- Mounting Bracket WK
- Reflector, Reflector Sheet

### Ctrl. Panel



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

### Feasible reflector distance

Reflector type, mounting distance			
RQ100BA	0.4...7 m	RE3220BM	0.4...2.5 m
RE18040BA	0.4...4 m	RE6210BM	0.35...2 m
RQ84BA	0.5...5 m	RR25DM	0.3...2.5 m
RR84BA	0.4...6 m	RR25KP	0.25...1.5 m
RE9538BA	0.4...3 m	RR21KM	0.4...2 m
RE6151BM	0.3...5 m	RE6151BH	0.35...2.5 m
RR50_A	0.4...5 m	RF505	0.35...1.1 m
RE6040BA	0.4...6 m	RF255	0.35...1.1 m
RE8222BA	0.4...3 m	RF508	0.35...1.1 m
RR34_M	0.4...3 m	RF258	0.35...1.1 m