

Through-Beam Sensor

ZK1008 LASER

Part Number



- Miniature design
- Rugged design with full encapsulation
- Test input

Technical Data

Optical Data

Range	10000 mm
Light Source	Laser (red)
Wave Length	655 nm
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	2
Beam Divergence	10 mrad
Focus Distance	200 mm

Electrical Data

Sensor Type	Emitter
Supply Voltage	10...30 V DC
Current Consumption (Ub = 24 V)	< 20 mA
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Reverse Polarity Protection	yes
Test input	PNP
Protection Class	III
FDA Accession Number	0810249-000

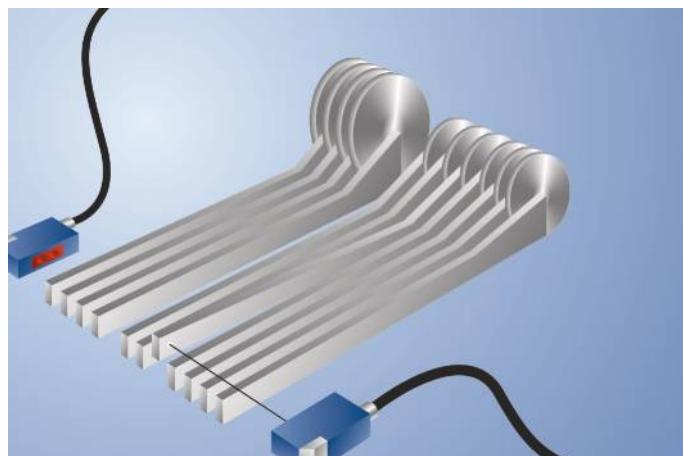
Mechanical Data

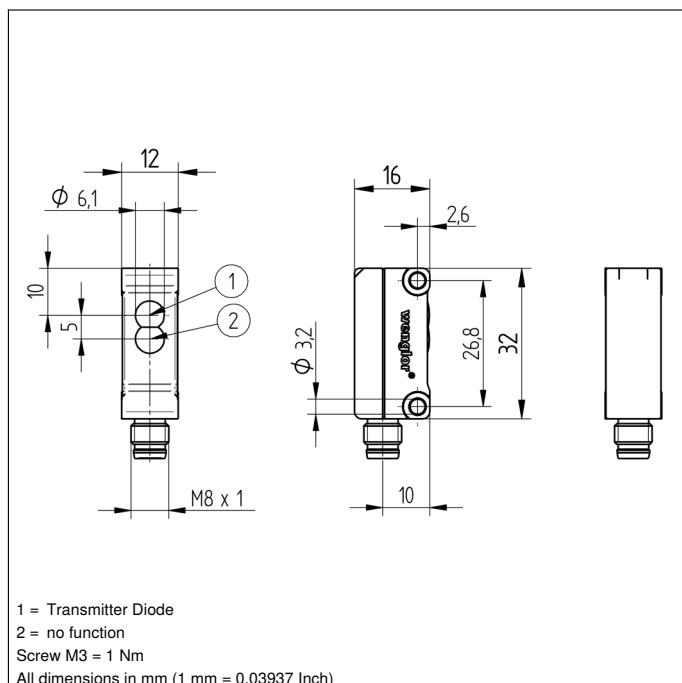
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M8 × 1; 3-pin
Connection Diagram No.	703
Control Panel No.	K3
Suitable Connection Technology No.	8
Suitable Mounting Technology No.	400

Suitable Receiver

ZK100VD8

These through beam sensors are best suited for use in industrial environments. Thanks to their large working range, the devices demonstrate excellent functional reliability in highly contaminated environments. The sensors can be checked for correct functioning via the test input.



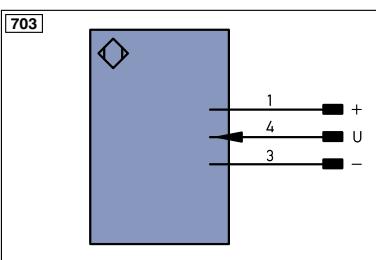


1 = Transmitter Diode

2 = no function

Screw M3 = 1 Nm

All dimensions in mm (1 mm = 0.03937 Inch)

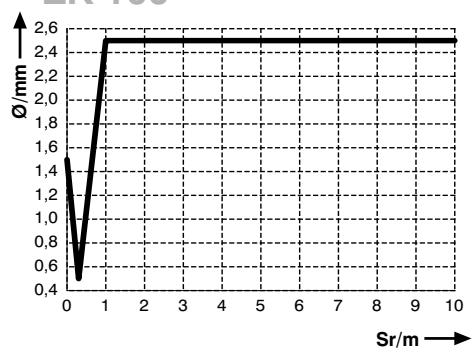


Legend	
+	Supply Voltage +
-	Supply Voltage 0 V
~	Supply Voltage (AC Voltage)
A	Switching Output (NO)
Ā	Switching Output (NC)
V	Contamination/Error Output (NO)
Ā	Contamination/Error Output (NC)
E	Input (analog or digital)
T	Teach Input
Z	Time Delay (activation)
S	Shielding
RxD	Interface Receive Path
TxD	Interface Send Path
RDY	Ready
GND	Ground
CL	Clock
E/A	Output/Input programmable
 IO-Link	
PoE	Power over Ethernet
IN	Safety Input
OSSD	Safety Output
Signal	Signal Output
M	Maintenance
PT	Platinum measuring resistor
nc	not connected
U	Test Input
Ū	Test Input inverted
W	Trigger Input
O	Analog Output
O-	Ground for the Analog Output
BZ	Block Discharge
AMV	Valve Output
a	Valve Control Output +
b	Valve Control Output 0 V
SY	Synchronization
E+	Receiver-Line
S+	Emitter-Line
±	Grounding
SnR	Switching Distance Reduction
Rx+/-	Ethernet Receive Path
Tx+/-	Ethernet Send Path
B ₊	Interfaces-Bus A(+)/B(-)
La	Emitted Light disengageable
Mag	Magnet activation
RES	Input confirmation
EDM	Contactor Monitoring
ENa	Encoder A
ENb	Encoder B
AM N	Digital output MIN
AMAX	Digital output MAX
Aok	Digital output OK
SY In	Synchronization In
SY OUT	Synchronization OUT
O _L t	Brightness output
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

Smallest Recognizable Part

Based on the Distance between Emitter and Receiver

ZK 100



Sr = Switching Distance

\emptyset = Diameter, Smallest Recognizable Part

