



ZTB18-7AZOC1S62

Z18 Simple Sense

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
ZTB18-7AZ0C1S62	1130649

Other models and accessories → www.sick.com/Z18_Simple_Sense

Illustration may differ



Detailed technical data

Features

Functional principle	Photoelectric proximity sensor
Functional principle detail	Background suppression
Dimensions (W x H x D)	13.6 mm x 31 mm x 22.4 mm
Housing design (light emission)	Hybrid
Mounting system type	Side (24.1 ... 25.4 mm)
Housing color	Blue
Sensing range max.	5 mm ... 100 mm
Sensing range	5 mm ... 50 mm
Type of light	Infrared light
Light source	PinPoint LED
Light spot size (distance)	Ø 8 mm (100 mm)
Wave length	850 nm

Mechanics/electronics

Supply voltage U_B	10 V DC ... 30 V DC
Ripple	< 10 %
Current consumption	≤ 15 mA ¹⁾
Switching output	Push-pull: PNP/NPN
Switching mode	Light switching

¹⁾ Without load.²⁾ Signal transit time with resistive load.³⁾ With light/dark ratio 1:1.⁴⁾ A = V_S connections reverse-polarity protected.⁵⁾ B = inputs and output reverse-polarity protected.⁶⁾ D = outputs overcurrent and short-circuit protected.

Switching output detail	
	Switching output Q1
	Push-pull: PNP/NPN, Light switching
Output current $I_{max.}$	
Switching output Q2	
Not connected	
Output current $I_{max.}$	
100 mA	
Response time	
$\leq 1 \text{ ms}$ ²⁾	
Switching frequency	
500 kHz ³⁾	
Connection type	
300 mm	
Cable material	
Plastic, PVC	
Conductor cross section	
0.13 mm ²	
Circuit protection	
A ⁴⁾ B ⁵⁾ D ⁶⁾	
Protection class	
III	
Weight	
9.4 g	
Housing material	
Plastic, ABS	
Optics material	
Plastic, PMMA	
Enclosure rating	
IP67	
Ambient operating temperature	
-40 °C ... +55 °C	
Ambient temperature, storage	
-40 °C ... +70 °C	
UL File No.	
E189383	

1) Without load.

2) Signal transit time with resistive load.

3) With light/dark ratio 1:1.

4) A = V_S connections reverse-polarity protected.

5) B = inputs and output reverse-polarity protected.

6) D = outputs overcurrent and short-circuit protected.

Connection type/pinouts

Connection type	
300 mm	
Connection type Detail	
Conductor cross section	0.13 mm ²
Cable material	Plastic
Pinouts	
BN 1	+(L+)
WH 2	Not connected
BU 3	-(M)
BK 4	Q ₁

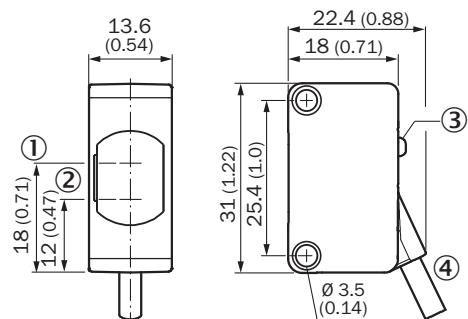
Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China-RoHS	✓

Classifications

ECLASS 5.0	27270904
ECLASS 5.1.4	27270904
ECLASS 6.0	27270904
ECLASS 6.2	27270904
ECLASS 7.0	27270904
ECLASS 8.0	27270904
ECLASS 8.1	27270904
ECLASS 9.0	27270904
ECLASS 10.0	27270904
ECLASS 11.0	27270904
ECLASS 12.0	27270903
ETIM 5.0	EC002719
ETIM 6.0	EC002719
ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

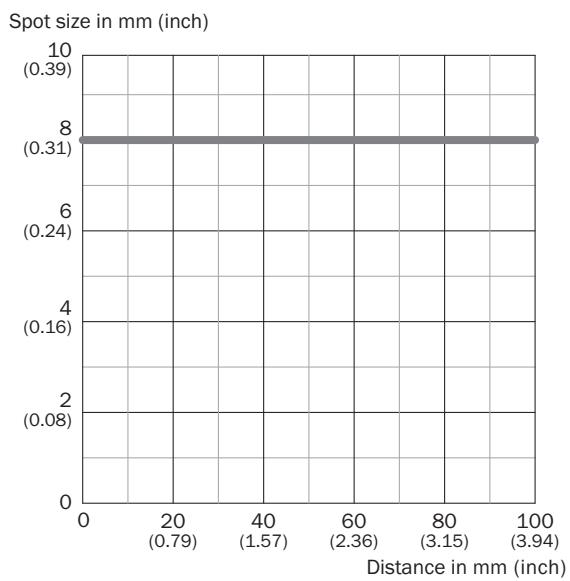
Dimensional drawing



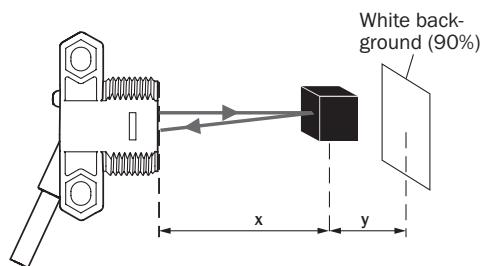
Dimensions in mm (inch)

- ① optical axis, sender
- ② optical axis, receiver
- ③ LED status indicator
- ④ Connection

Light spot size



Sensing range on black, 6% remission factor



ZTB18-xxxxxD02: x = 47 mm / y = 4 mm

ZTB18-xxxxxD04: x = 93 mm / y = 8 mm

ZTB18-xxxxxD06: x = 139 mm / y = 12 mm

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

WORLDWIDE PRESENCE:

Contacts and other locations www.sick.com