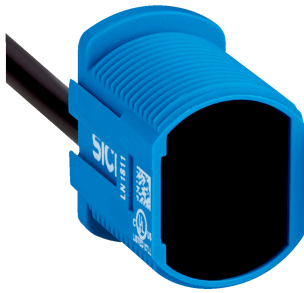


ZTB18-9AB1G1D04

SimpleSense

HYBRID PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
ZTB18-9AB1G1D04	1095804

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

Illustration may differ



Detailed technical data

Features

Sensor/ detection principle	Photoelectric proximity sensor, Background suppression
Dimensions (W x H x D)	14.4 mm x 20.5 mm x 23 mm
Housing design (light emission)	Hybrid
Thread diameter (housing)	M18
Mounting system type	M18, ball / dovetail groove mounting with base
Housing color	Blue
Sensing range max.	≥ 0.1 m
Sensing range	≥ 0.1 m
Type of light	Infrared light
Light source	PinPoint LED
Light spot size (distance)	10 mm (150 mm)
Wave length	850 nm

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	< 10 %
Power consumption	15 mA ¹⁾
Switching output Q1	PUSH/PULL, Light switching
Switching output Q2	PUSH/PULL, Dark switching
Output current I_{max.}	100 mA

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.

⁷⁾ Reference voltage: 50 V DC.

Response time	$\leq 1 \mu\text{s}$ ²⁾
Switching frequency	500 Hz ³⁾
Connection type	Cable open end, 4-wire, 2,000 mm
Cable material	PVC
Conductor cross-section	0.13 mm ²
Circuit protection	A ⁴⁾ B ⁵⁾ D ⁶⁾
Protection class	III ⁷⁾
Weight	2.49 g
Housing material	Plastic, ABS
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	-40 °C ... +55 °C
Ambient storage temperature	-40 °C ... +70 °C
UL File No.	E189383
Mounting system type	M18, ball / dovetail groove mounting with base

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.

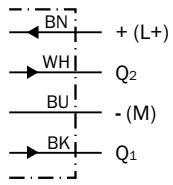
7) Reference voltage: 50 V DC.

Classifications

ECl@ss 5.0	27270904
ECl@ss 5.1.4	27270904
ECl@ss 6.0	27270904
ECl@ss 6.2	27270904
ECl@ss 7.0	27270904
ECl@ss 8.0	27270904
ECl@ss 8.1	27270904
ECl@ss 9.0	27270904
ETIM 5.0	EC002719
ETIM 6.0	EC002719
UNSPSC 16.0901	39121528

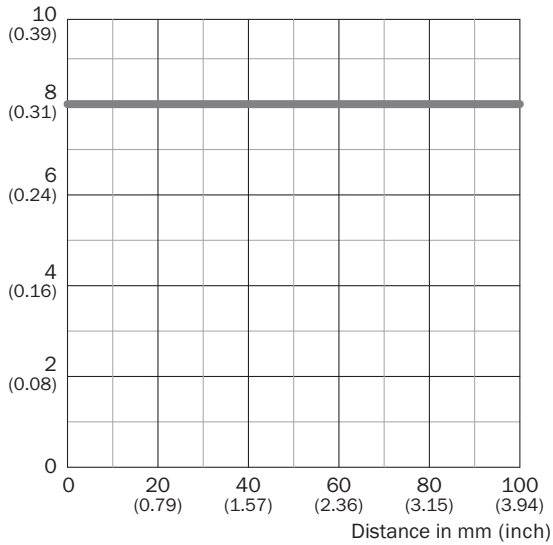
Connection diagram

Cd-297

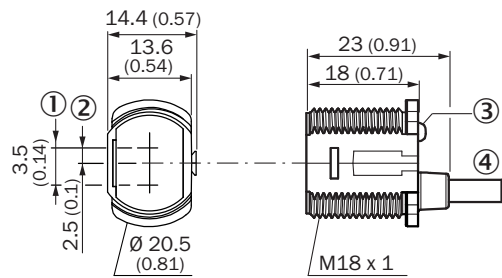


Light spot size

Spot size in mm (inch)





Dimensional drawing (Dimensions in mm (inch))



- ① Optical axis, sender
- ② Optical axis, receiver
- ③ Teach-in button
- ④ Connection

Recommended accessories

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

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: male connector, M8, 4-pin, straight Head B: - Cable: unshielded	STE-0804-G	6037323
	Head A: male connector, M12, 4-pin, straight Head B: - Cable: unshielded	STE-1204-G	6009932

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