

ZT2-P5238

Z-Sensor

CYLINDRICAL PHOTOELECTRIC SENSORS





## Ordering information

Туре	Part no.
ZT2-P5238	1045485

Other models and accessories → www.sick.com/Z-Sensor

Illustration may differ



#### Detailed technical data

#### **Features**

Sensor/ detection principle	Photoelectric proximity sensor, Energetic
Dimensions (W x H x D)	13.6 mm x 41.9 mm x 31.7 mm
Housing design (light emission)	Hybrid
Thread diameter (housing)	M18 x 1
Sensing range max.	5 mm 155 mm <sup>1)</sup>
Sensing range	5 mm 155 mm
Type of light	Infrared light
Light source	LED <sup>2)</sup>
Light spot size (distance)	Ø 31 mm (100 mm)
Wave length	880 nm
Adjustment	None

<sup>&</sup>lt;sup>1)</sup> Object with 90 % reflectance (referred to standard white, DIN 5033).

#### Mechanics/electronics

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Supply voltage	10 V DC 30 V DC <sup>1)</sup>
Ripple	< 5 V <sub>pp</sub> <sup>2)</sup>
Power consumption	20 mA <sup>3)</sup>
Switching output	PNP
Switching mode	Light switching
Output current I <sub>max.</sub>	50 mA

<sup>1)</sup> Limit values

<sup>&</sup>lt;sup>2)</sup> Average service life: 100,000 h at  $T_U$  = +25 °C.

 $<sup>^{2)}\,\</sup>mbox{May}$  not exceed or fall below  $\mbox{U}_{\mbox{\scriptsize V}}$  tolerances.

<sup>3)</sup> Without load.

<sup>&</sup>lt;sup>4)</sup> With light/dark ratio 1:1.

 $<sup>^{5)}</sup>$  A =  $V_S$  connections reverse-polarity protected.

<sup>6)</sup> D = outputs overcurrent and short-circuit protected.

<sup>&</sup>lt;sup>7)</sup> Reference voltage: 50 V DC.

Switching frequency	200 Hz <sup>4)</sup>
Connection type	Male connector M8, 4-pin
Circuit protection	A <sup>5)</sup> D <sup>6)</sup>
Protection class	III <sup>7)</sup>
Housing material	Plastic, Glass fiber reinforced ABS plastic
Enclosure rating	IP67
Items supplied	Mounting nut M18
Ambient operating temperature	-25 °C +50 °C
Ambient storage temperature	-40 °C +70 °C
UL File No.	NRKH.E189383 & NRKH7.E189383

<sup>1)</sup> Limit values.

## Safety-related parameters

MTTF <sub>D</sub>	2,279 years
DC <sub>avg</sub>	0%

#### Classifications

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

## Connection diagram

Connection diagram

<sup>2)</sup> May not exceed or fall below U<sub>v</sub> tolerances.

<sup>&</sup>lt;sup>3)</sup> Without load.

 $<sup>^{4)}</sup>$  With light/dark ratio 1:1.

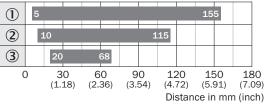
 $<sup>^{5)}</sup>$  A = V<sub>S</sub> connections reverse-polarity protected.

<sup>6)</sup> D = outputs overcurrent and short-circuit protected.

<sup>7)</sup> Reference voltage: 50 V DC.

## Sensing range diagram

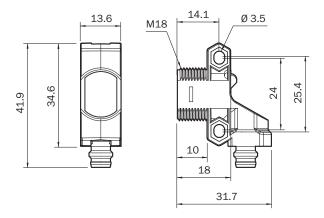
#### ZT1, 155 mm



- Sensing range
- Sensing range max.
- ① Sensing range on white, 90% remission
- 3 Sensing range on black, 6% remission

## Dimensional drawing (Dimensions in mm (inch))

#### ZT2, ZL2, Connector M8, 4-pin



#### Recommended accessories

Other models and accessories → www.sick.com/Z-Sensor

	Brief description	Туре	Part no.	
Plug connectors and cables				
	Head A: female connector, M8, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF8U14- 050VA3XLEAX	2095889	
	Head A: male connector, M8, 4-pin, straight Head B: - Cable: unshielded	STE-0804-G	6037323	

# 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:**

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