



# ZLD18-2PZ1G8

Z18 Simple Sense

PHOTOELECTRIC SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	part no.
ZLD18-2PZ1G8	1145332

Included in delivery: BEF-MU-M18\*1 (2)

Other models and accessories → [www.sick.com/Z18\\_Simple\\_Sense](http://www.sick.com/Z18_Simple_Sense)

### Detailed technical data

#### Features

<b>Functional principle</b>	Photoelectric retro-reflective sensor
<b>Functional principle detail</b>	With minimum distance to reflector (dual lens system)
<b>Dimensions (W x H x D)</b>	13.6 mm x 34.8 mm x 21.9 mm
<b>Housing design (light emission)</b>	Hybrid
<b>Mounting system type</b>	M18, head/side (24.1 ... 25.4 mm)
<b>Housing color</b>	Blue
<b>Sensing range max.</b>	0 m ... 5 m <sup>1)</sup>
<b>Sensing range</b>	0 m ... 4.2 m <sup>1)</sup>
<b>Type of light</b>	Visible red light
<b>Light source</b>	LED
<b>Light spot size (distance)</b>	Ø 125 mm (1,000 mm)
<b>Wave length</b>	625 nm

<sup>1)</sup> Reflector PL80A.

#### Mechanics/electronics

<b>Supply voltage U<sub>B</sub></b>	10 V DC ... 30 V DC
<b>Ripple</b>	< 10 %
<b>Current consumption</b>	≤ 15 mA <sup>1)</sup>
<b>Switching output</b>	PNP

<sup>1)</sup> Without load.

<sup>2)</sup> Signal transit time with resistive load.

<sup>3)</sup> With light/dark ratio 1:1.

<sup>4)</sup> A = V<sub>S</sub> connections reverse-polarity protected.

<sup>5)</sup> B = inputs and output reverse-polarity protected.

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

Switching mode	Light switching
Switching output detail	
Switching output Q1	PNP, Light switching
Switching output Q2	Not connected
Output current I <sub>max.</sub>	100 mA
Response time	≤ 500 µs <sup>2)</sup>
Switching frequency	1,000 kHz <sup>3)</sup>
Connection type	Cable open end, 4-wire, 2 m
Cable material	Plastic, PVC
Conductor cross section	0.13 mm <sup>2</sup>
Circuit protection	A <sup>4)</sup> B <sup>5)</sup> D <sup>6)</sup>
Protection class	III
Weight	4.54 g
Polarizing filter	✓
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<sub>S</sub> connections reverse-polarity protected.
- 5) B = inputs and output reverse-polarity protected.
- 6) D = outputs overcurrent and short-circuit protected.

Connection type/pinouts

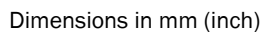
Connection type	
	Cable open end, 4-wire, 2 m
Connection type Detail	
Cable material	Plastic
Conductor cross section	0.13 mm <sup>2</sup>
Pinouts	
BN	+ (L+)
WH	Q <sub>2</sub>
BU	- (M)
BK	Q <sub>1</sub>

Certificates

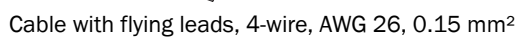
EU declaration of conformity	✓
UK declaration of conformity	✓

## Classifications

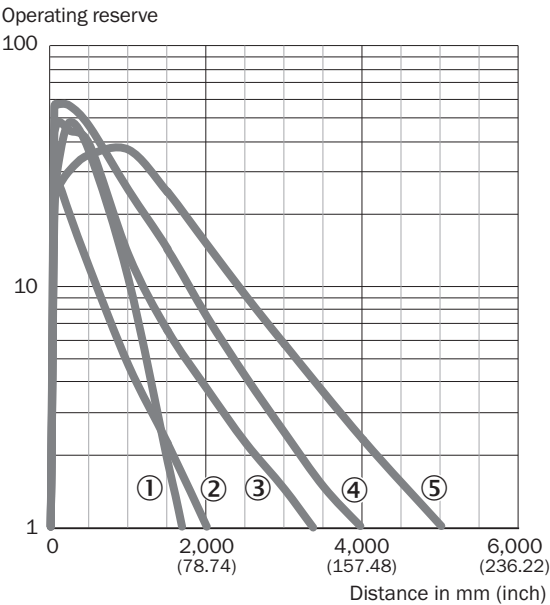
## Dimensional drawing



- Pinouts, see table Technical data: Connection type/pinouts

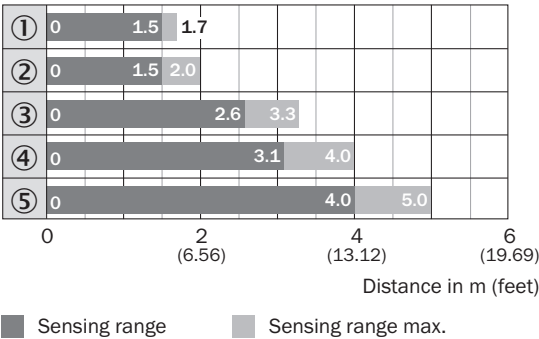


Characteristic curve



- ① Reflector PL23 FT
- ② Reflector PL20A
- ③ Reflector PL250
- ④ Reflector PL40A
- ⑤ Reflector PL80A




Sensing range diagram



- ① Reflector PL23 FT
- ② Reflector PL20A
- ③ Reflector PL250
- ④ Reflector PL40A
- ⑤ Reflector PL80A

Recommended accessories

Other models and accessories → [www.sick.com/Z18\\_Simple\\_Sense](http://www.sick.com/Z18_Simple_Sense)

	Brief description	Type	part no.
Mounting systems			
	<ul style="list-style-type: none"><li>• <b>Description:</b> Universal mounting bracket for reflectors</li><li>• <b>Dimensions (W x H x L):</b> 85 mm x 90 mm x 35 mm</li><li>• <b>Material:</b> Steel</li><li>• <b>Details:</b> Steel, zinc coated</li><li>• <b>Suitable for:</b> C110A, P250, PL20, PL30A, PL40A, PL80A</li></ul>	BEF-WN-REFX	2064574
	<ul style="list-style-type: none"><li>• <b>Description:</b> Mounting bracket for M18 sensors</li><li>• <b>Material:</b> Steel</li><li>• <b>Details:</b> Steel, zinc coated</li><li>• <b>Items supplied:</b> Without mounting hardware</li><li>• <b>Suitable for:</b> GR18, V180-2, V18, W15, Z1, Z2</li></ul>	BEF-WN-M18	5308446
reflectors and optics			
	<ul style="list-style-type: none"><li>• <b>Description:</b> Rectangular, screw connection</li><li>• <b>Dimensions:</b> 51 mm 61 mm</li><li>• <b>Ambient operating temperature:</b> -30 °C ... +65 °C</li></ul>	P250	5304812

## 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](http://www.sick.com)