



## Photoelectric sensors W8, Through-beam photoelectric sensor

WSE8-P2231



**Model Name** > [WSE8-P2231](#)  
**Part No.** > [6035583](#)

#### At a glance

- Standard miniature housing with M3 threaded mounting holes

#### Your benefits

- Highly visible light spot makes alignment quick and easy
- M3 threaded holes provide quick installation



*Illustration may differ*

#### Features

|                                  |                                   |
|----------------------------------|-----------------------------------|
| Sensor/detection principle:      | Through-beam photoelectric sensor |
| Dimensions (W x H x D):          | 11 mm x 31 mm x 20 mm             |
| Housing design (light emission): | Rectangular, Slim                 |
| Sensing range max.:              | 0 m ... 10 m                      |
| Sensing range:                   | 0 m ... 8 m                       |
| Type of light:                   | Visible red light                 |
| Light source:                    | LED <sup>1)</sup>                 |
| Wave length:                     | 650 nm                            |
| Alarm output:                    | -                                 |
| Focus adjustable:                | -                                 |
| Adjustment:                      | Potentiometer, 270 °              |
| Light spot size (distance):      | Ø 30 mm (1 m)                     |

<sup>1)</sup> Average service life of 100,000 h at T<sub>A</sub> = +25 °C

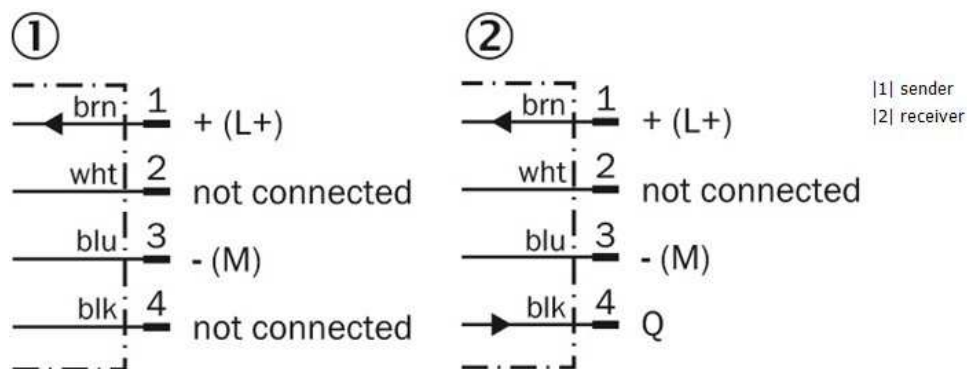
#### Mechanics/electronics

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Supply voltage:                   | 10 V DC ... 30 V DC <sup>1)</sup> |
| Residual ripple:                  | ± 10 % <sup>2)</sup>              |
| Power consumption:                | ≤ 30 mA <sup>3)</sup>             |
| Output type:                      | PNP                               |
| Switching mode:                   | Light/dark switching              |
| Output characteristic:            | Open collector                    |
| Switching mode selector:          | Manually selectable               |
| Signal voltage PNP HIGH/LOW:      | Approx. VS - 1.8 V / 0 V          |
| Output current I <sub>max</sub> : | ≤ 100 mA                          |
| Response time:                    | ≤ 25 ms <sup>4)</sup>             |
| Switching frequency:              | 2,000 Hz <sup>5)</sup>            |
| Electrical connection:            | Connector M8, 4-pin               |
| Circuit protection:::             | A, B, D <sup>6) 7) 8)</sup>       |

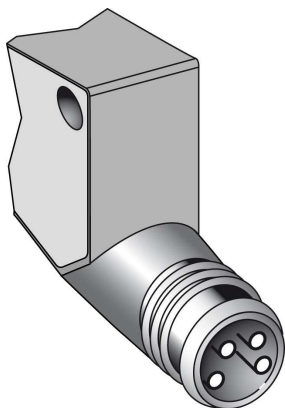
|                                |                                                          |
|--------------------------------|----------------------------------------------------------|
| Weight:                        | 10 g                                                     |
| Housing material:              | ABS, Plastic                                             |
| Optics material:               | PMMA                                                     |
| Enclosure rating:              | IP 67                                                    |
| Items supplied:                | Stainless steel mounting bracket (1.4301/304) BEF-W100-A |
| Ambient temperature operation: | -25 °C ... 55 °C                                         |
| Ambient storage temperature:   | -40 °C ... 70 °C                                         |

<sup>1)</sup> Limit values, operation in short-circuit protected network max. 8 A   
 <sup>2)</sup> May not exceed or fall short of  $V_S$  tolerances   
 <sup>3)</sup> Without load   
 <sup>4)</sup> Signal transit time with resistive load   
 <sup>5)</sup> With light/dark ratio 1:1   
 <sup>6)</sup>  $A = V_S$  connections reverse-polarity protected   
 <sup>7)</sup> B = inputs and output reverse-polarity protected   
 <sup>8)</sup> D = outputs overcurrent and short-circuit protected

## Connection diagram



## Connection type



**Australia**

Phone +61 3 9457 0600  
1800 33 48 02 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail marketing@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Česká republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail info@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6881000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 5309 2112  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederland**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail sick@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail sales.gsg@sick.com

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886 2 2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 88 65 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 (800) 325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)