



## Photoelectric sensors W4-3, Through-beam photoelectric sensor

WSE4-3P3130



**Model Name** > [WSE4-3P3130](#)  
**Part No.** > [1028161](#)



*Illustration may differ*

#### At a glance

- Sensing range from 0 - 4 m
- PinPoint LED technology for highly visible, brilliant light spot
- Rugged plastic housing with M3 metal inserts

#### Your benefits

- The PinPoint LED's sharply defined, intense light spot makes alignment quick and easy
- Low-cost machine integration due to small dimensions that enable mounting in areas with space restrictions
- Rugged mounting system with M3 threaded metal inserts reduces maintenance costs due to a long service life



#### Features

|                                  |                                   |
|----------------------------------|-----------------------------------|
| Sensor/detection principle:      | Through-beam photoelectric sensor |
| Dimensions (W x H x D):          | 16 mm x 39.5 mm x 12 mm           |
| Housing design (light emission): | Rectangular                       |
| Sensing range max.:              | 0 m ... 4 m                       |
| Sensing range:                   | 0 m ... 3.5 m                     |
| Type of light:                   | Visible red light                 |
| Light source:                    | PinPoint LED <sup>1)</sup>        |
| Wave length:                     | 650 nm                            |
| Light spot size (distance):      | Ø 210 mm (2 m)                    |

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

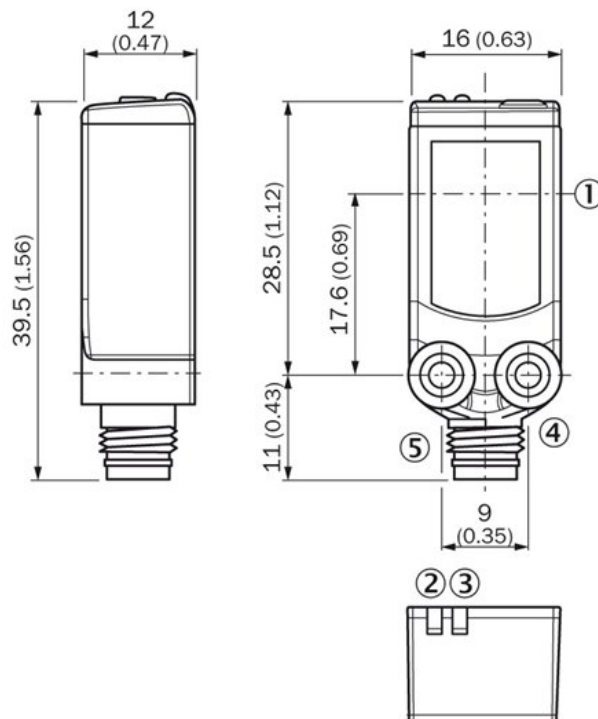
#### Mechanics/electronics

|                                   |                                                      |
|-----------------------------------|------------------------------------------------------|
| Supply voltage:                   | 10 V DC ... 30 V DC <sup>1)</sup>                    |
| Power consumption:                | ≤ 20 mA <sup>2) 3)</sup>                             |
| Output type:                      | PNP                                                  |
| Switching mode:                   | Light switching                                      |
| Output current I <sub>max</sub> : | ≤ 100 mA <sup>4)</sup>                               |
| Response time:                    | < 0.5 ms <sup>4)</sup>                               |
| Switching frequency:              | 1,000 Hz <sup>5)</sup>                               |
| Connection type:                  | Cable with connector M8, 3-pin, 100 mm <sup>6)</sup> |
| Cable material:                   | PVC                                                  |
| Conductor cross-section:          | 0.14 mm²                                             |

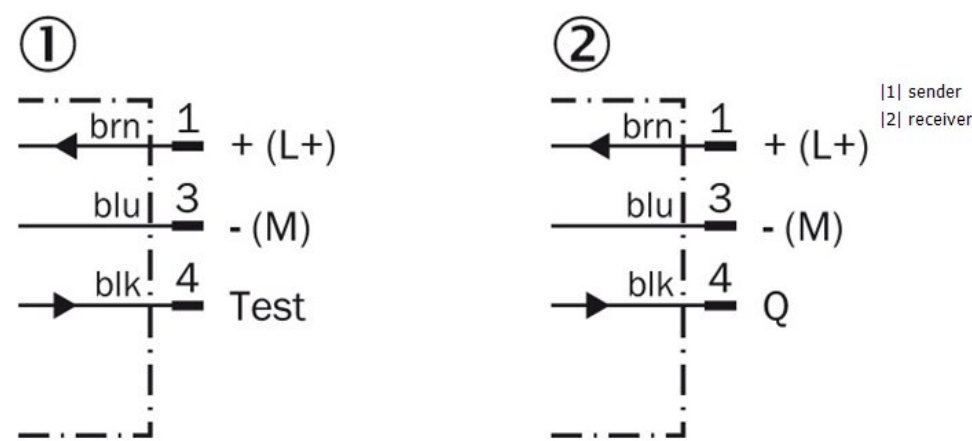
|                                       |                                                            |
|---------------------------------------|------------------------------------------------------------|
| Cable diameter:                       | 3.4 mm                                                     |
| Circuit protection:::                 | A, C, D <sup>7) 8) 9)</sup>                                |
| Protection class:                     | III                                                        |
| Weight:                               | 60 g                                                       |
| Housing material:                     | ABS, Plastic                                               |
| Optics material:                      | PMMA                                                       |
| Enclosure rating:                     | IP 67<br>IP 66                                             |
| Test input sender off:                | TE to 0 V                                                  |
| Ambient operating temperature:        | -40 °C ... 60 °C                                           |
| Ambient storage temperature:          | -40 °C ... 75 °C                                           |
| Part number of individual components: | Receiver, WE4-3P3130, 2038953, Sender, WS4-3D3130, 2038952 |
| UL File No.:                          | NRKH.E181493 & NRKH7.E181493                               |

<sup>1)</sup> Limit values   <sup>2)</sup> Sender   <sup>3)</sup> Receiver   <sup>4)</sup> Signal transit time with resistive load   <sup>5)</sup> With light/dark ratio 1:1   <sup>6)</sup> Do not bend below 0 °C   <sup>7)</sup> A = V<sub>S</sub> connections reverse-polarity protected  
<sup>8)</sup> C = interference suppression   <sup>9)</sup> D = outputs overcurrent and short-circuit protected

## Dimensional drawing



Connection diagram



②

brn

1

+

(L+)

blu

3

-

(M)

blk

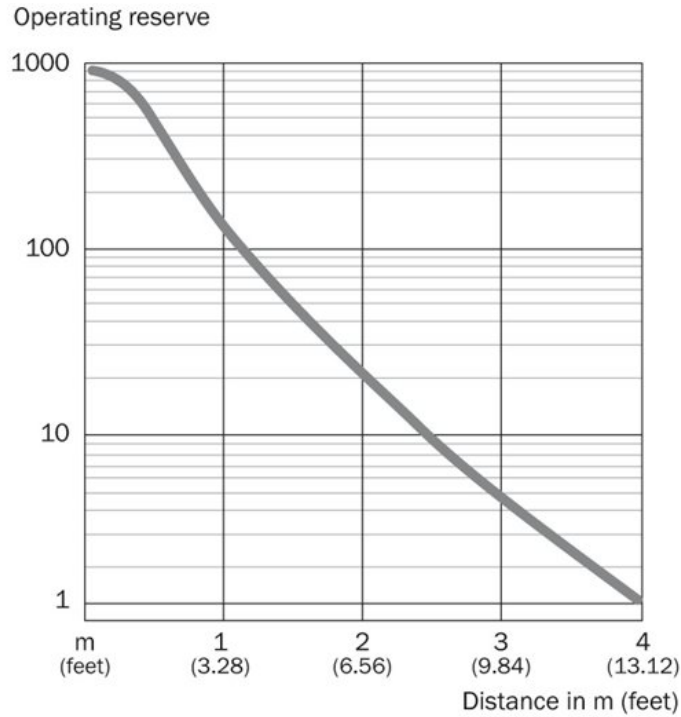
4

Q

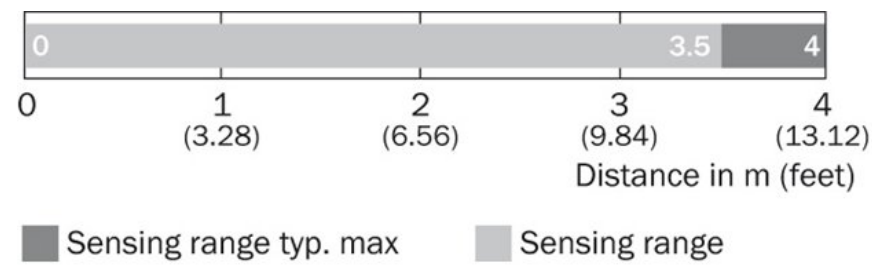
[1] sender

[2] receiver

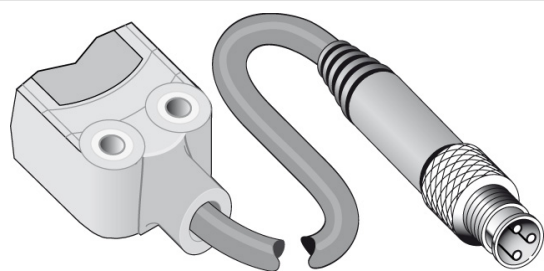
Characteristic curve



**Sensing range diagram**



**Connection type**



#### **Australia**

Phone +61 3 9457 0600  
1800 334 802 – 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 sac@sick.com.br

#### **Canada**

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

#### **Ceská 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 kundenservice@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 +972-4-6801000  
E-Mail info@sick-sensors.com

#### **Italia**

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

#### **Japan**

Phone +81 (0)3 3358 1341  
E-Mail support@sick.jp

#### **Magyarország**

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

#### **Nederlands**

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

#### **Norge**

Phone +47 67 81 50 00  
E-Mail austefjord@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 admin@sicksgp.com.sg

#### **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 8865 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)