



## Fotoprzełączniki W4S-3, Fotoprzełącznik odbiciowy, Tłumienie tła

WTB4S-3P2162



Nazwa modelu > **WTB4S-3P2162**

Numer części > **1042037**



Produkt może różnić się od ilustracji

#### At a glance

- Best background suppression in its class
- Setting either via teach-in pushbutton, 5-turn potentiometer cable or by IO-Link
- All models with PinPoint LED technology
- Versions with laser-like LED light spots
- High immunity to ambient light

#### Your benefits

- Less downtime due to reliable detection of all types of objects
- Laser-like light spot provides quick and easy alignment
- Smart machine design makes it possible to mount the sensor in the tightest spaces
- Reliable object detection due to best-in-class background suppression and high immunity to ambient light



#### Cechy

|                                            |                                          |
|--------------------------------------------|------------------------------------------|
| Zasada działania czujnika/Sposób detekcji: | Fotoprzełącznik odbiciowy, Tłumienie tła |
| Wymiary (Szer. x Wys. x Głęb.):            | 12,2 mm x 41,8 mm x 17,3 mm              |
| Housing design (light emission):           | Prostopadłościenna                       |
| Maks. strefa działania:                    | 4 mm ... 150 mm <sup>1)</sup>            |
| Sensing range:                             | 15 mm ... 150 mm <sup>2)</sup>           |
| Rodzaj światła:                            | Widzialne światło czerwone               |
| Nadajnik światła:                          | Pin Point LED <sup>3)</sup>              |
| Długość fali:                              | 650 nm                                   |
| Teach-in:                                  | Single teach-in button                   |
| Nastawa:                                   | Teach-in                                 |
| Średnica plamki świetlnej (odległość):     | Ø 6,5 mm (150 mm)                        |

<sup>1) 2)</sup> Obiekt odbijający 90% światła (standardowy biały zgodnie z normą DIN 5033) <sup>3)</sup> Average service life of 100,000 h at T<sub>A</sub> = +25 °C

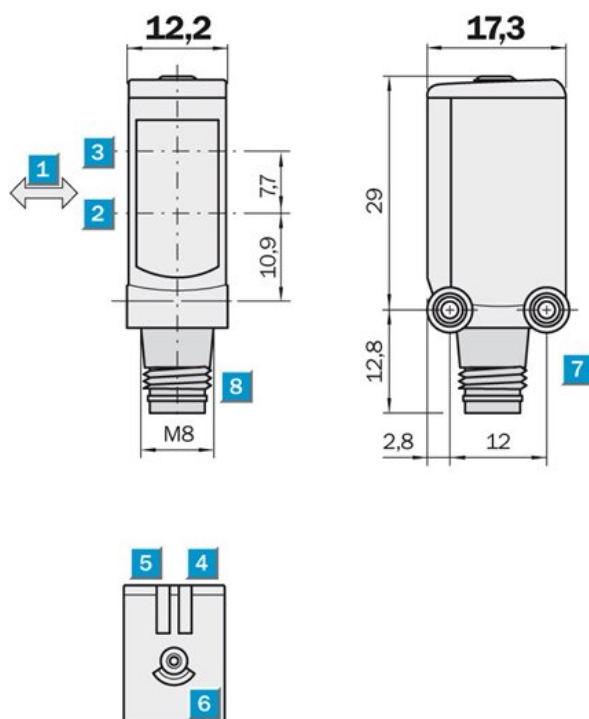
#### Mechanika/elektronika

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Napięcie zasilania:               | 10 V DC ... 30 V DC <sup>1)</sup> |
| Tętnienia resztkowe:              | < 5 Vss <sup>2)</sup>             |
| Pobór prądu:                      | ≤ 20 mA <sup>3)</sup>             |
| Wyjście przełączające:            | PNP                               |
| Tryb przełączania:                | Przełączanie na jasnym            |
| Output current I <sub>max</sub> : | ≤ 100 mA                          |

|                                |                                                   |
|--------------------------------|---------------------------------------------------|
| Czas reakcji:                  | < 0,5 ms <sup>4)</sup>                            |
| Switching frequency:           | 1.000 Hz <sup>5)</sup>                            |
| Sposób przyłączenia:           | Connector M8, 3-pin                               |
| Układ zabezpieczenia:::        | A, C, D <sup>6)</sup> <sup>7)</sup> <sup>8)</sup> |
| Klasa ochronności:             | III                                               |
| Ciężar:                        | 30 g                                              |
| Tworzywo, obudowa:             | ABS, Tworzywo sztuczne                            |
| Tworzywo, układ optyczny:      | PMMA                                              |
| Rodzaj zabezpieczenia:         | IP 67<br>IP 66                                    |
| Ambient operating temperature: | -40 °C ... 60 °C                                  |
| Ambient storage temperature:   | -40 °C ... 75 °C                                  |
| UL File No.:                   | NRKH.E181493 & NRKH7.E181493                      |

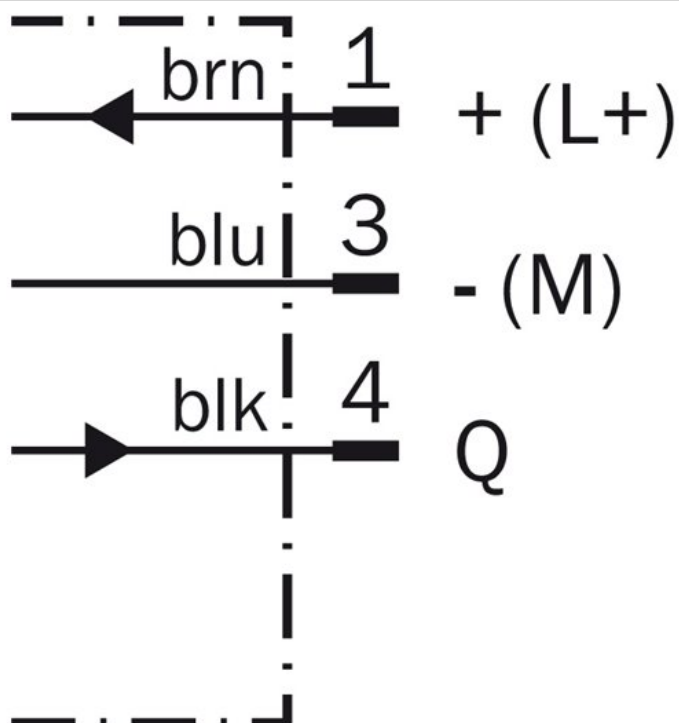
1) Limit values 2) May not exceed or fall short of  $V_S$  tolerances 3) Bez obciążenia 4) Signal transit time with resistive load 5) With light/dark ratio 1:1 6)  $A = V_S$   
connections reverse-polarity protected 7) C = interference suppression 8) D = outputs overcurrent and short-circuit protected

## Dimensional drawing

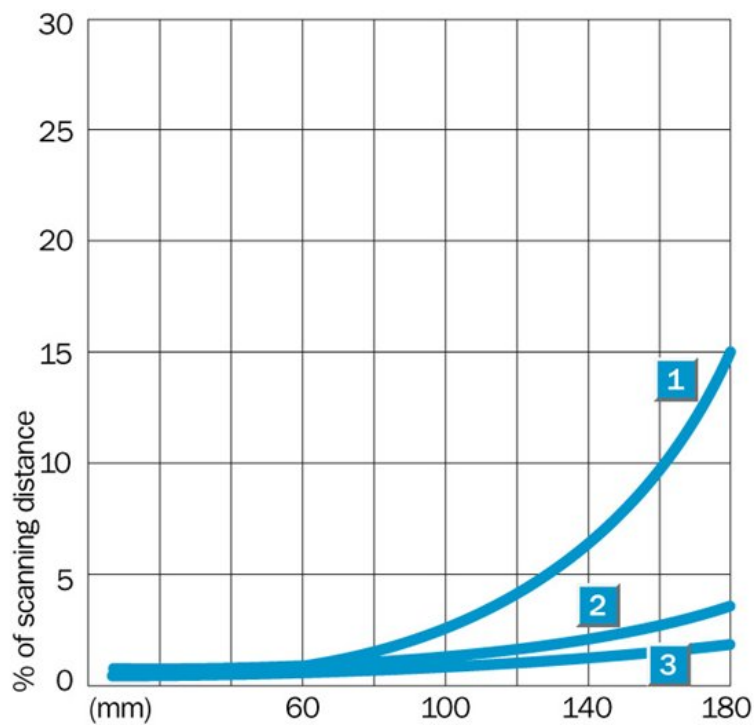


- [1] Standard direction of the material being scanned
- [2] Optical axis receiver
- [3] Optical axis sender
- [4] Status indicator LED green: power on
- [5] Status indicator LED, yellow: Status of received light beam
- [6] Teach-in button
- [7] Threaded mounting hole M3
- [8] Connection

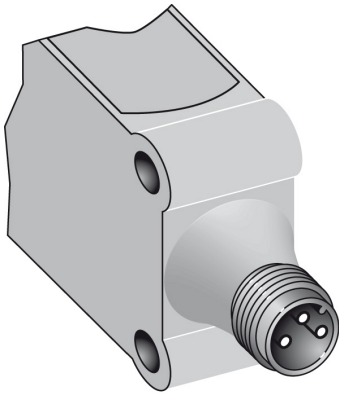
## Connection diagram



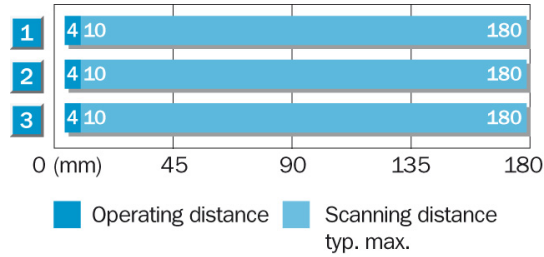
## Characteristic curve



Connection type



Sensing range diagram



|   |                                            |
|---|--------------------------------------------|
| 1 | Scanning distance on black, 6 % remission  |
| 2 | Scanning distance on grey, 18 % remission  |
| 3 | Scanning distance on white, 90 % remission |

**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

**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 +972-4-6801000  
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

**Nederland**

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 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 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)