



## Fotoprzełączniki W4S-3, Fotoprzełącznik refleksyjny, autocollimation

WL4S-3P2132



Nazwa modelu > **WL4S-3P2132**

Numer części > **1042077**



Produkt może różnić się od ilustracji

#### At a glance

- Single-lens autocollimation optics
- All models with PinPoint LED technology provides a small intense, light spot
- Maximum sensing range of 5 m
- Long sensing ranges on small reflectors
- Quality monitoring thanks to IO-Link
- Key lock function, remote teach
- Diagnostics messages (contamination and short-circuit)

#### Your benefits

- Quick and easy alignment due to the PinPoint LED's small, well-defined, intense light spot
- Single-lens autocollimation optics sees through small gaps and bore holes, enabling efficient machine integration
- Long sensing ranges are obtained on small reflectors due to the small, intense light spot
- Quick and easy threshold adjustment (depending on type)
- Simple monitoring of detection quality
- Key lock function and parameter download prevent incorrect settings



#### Cechy

|                                            |                                              |
|--------------------------------------------|----------------------------------------------|
| Zasada działania czujnika/Sposób detekcji: | Fotoprzełącznik refleksyjny, autocollimation |
| 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:                    | 0 m ... 5 m <sup>1)</sup>                    |
| Sensing range:                             | 0 m ... 3 m <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 45 mm (1,5 m)                              |

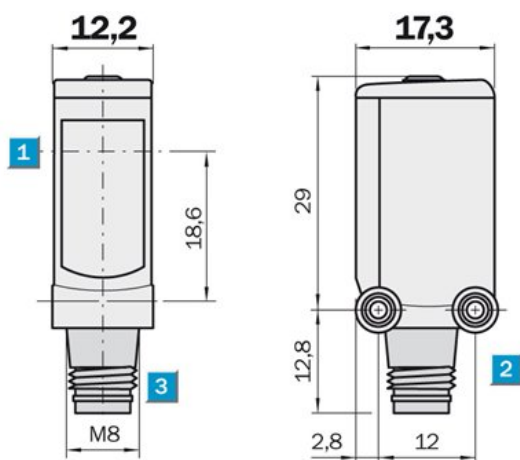
1) 2) PL80A <sup>3)</sup> Average service life of 100,000 h at T<sub>A</sub> = +25 °C

## 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                                              |
| Filtr polaryzacyjny:              | ✓                                                 |
| Special device:                   | -                                                 |
| 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                      |

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

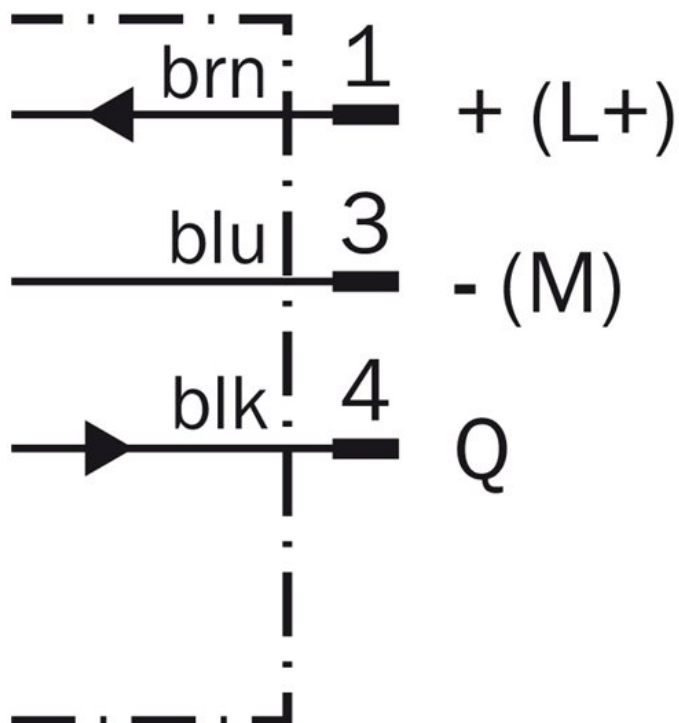
## Dimensional drawing



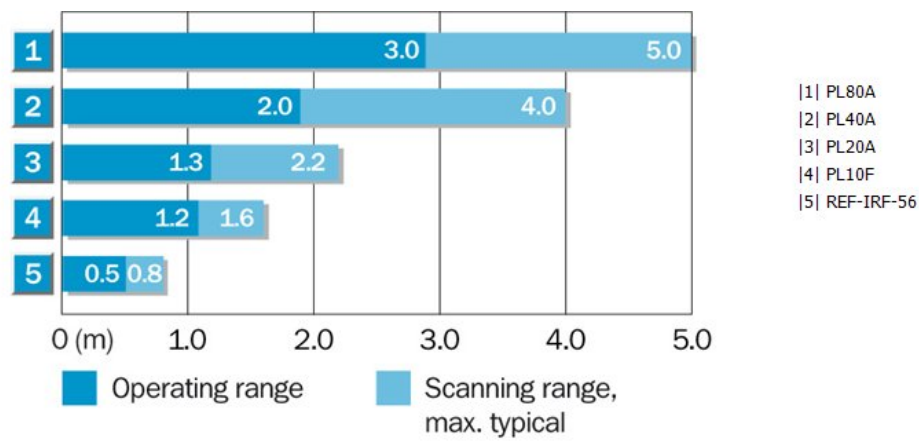
- |1| Center of optical axis
- |2| Threaded mounting hole M3
- |3| Connection
- |4| Status indicator LED green: power on
- |5| LED indicator orange: status of received light beam
- |6| Teach-in button



## Connection diagram

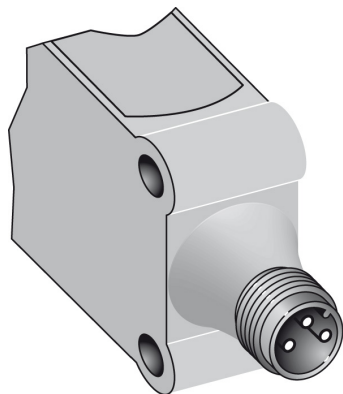


Sensing range diagram



| Reflector type |            | Operating range |
|----------------|------------|-----------------|
| 1              | PL80A      | 0 ... 3.0 m     |
| 2              | PL40A      | 0 ... 2.0 m     |
| 3              | PL20A      | 0 ... 1.3 m     |
| 4              | PL10F      | 0 ... 1.2 m     |
| 5              | REF-IRF-56 | 0 ... 0.5 m     |

Connection type



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