

WL12G-3B2531T01



Nazwa modelu > **WL12G-3B2531T01**

Numer części > **1041458**



Produkt może różnić się od ilustracji

#### At a glance

- Best-in-class optical performance due to superior OES technology
- Autocollimation in retro-reflective sensors
- Background and foreground suppression with second emitter LED in proximity sensors
- Highly visible, bright, precise light spot
- Rugged metal housing, optional with Teflon® coating
- Connection via cable or rotatable connector
- Mounting options with through holes, base blind holes, oblong through holes and dovetail
- IO-Link communication available (optional)

#### Your benefits

Reliable detection due to superior ASIC (application-specific integrated circuit) technology and immunity to optical interference factors from the industrial environment

PinPoint LED technology for a bright, small and precise light spot, enabling quick and easy sensor alignment

Precise switching characteristics ensure reliable object detection, reducing downtime caused by re-adjusting sensors during recipe changes

Quick and easy setup due to highly visible status LEDs

Wide range of products enclosed in a rugged metal housing enables application flexibility in a broad range of industrial environments

Uniform design for entire product family regardless of connection, which ensures simple machine integration

Quick and easy mounting due to several mounting options

Easy installation using SICK accessories



#### Cechy

|                                            |                                           |
|--------------------------------------------|-------------------------------------------|
| Zasada działania czujnika/Sposób detekcji: | Fotoprzeźnik refleksyjny, autocollimation |
| Wymiary (Szer. x Wys. x Głęb.):            | 15,6 mm x 48,5 mm x 42 mm                 |
| Housing design (light emission):           | Prostopadłościenna                        |
| Maks. strefa działania:                    | 0 m ... 4 m <sup>1)</sup>                 |
| Rodzaj światła:                            | Widzialne światło czerwone                |

|                                        |                          |
|----------------------------------------|--------------------------|
| Nadajnik światła:                      | LED <sup>2)</sup>        |
| Długość fali:                          | 640 nm                   |
| Kąt promieniowania:                    | Ca. 1,5 °                |
| Nastawa:                               | Potencjometr, 11 obrotów |
| Średnica plamki świetlnej (odległość): | Ø 25 mm (1,5 m)          |

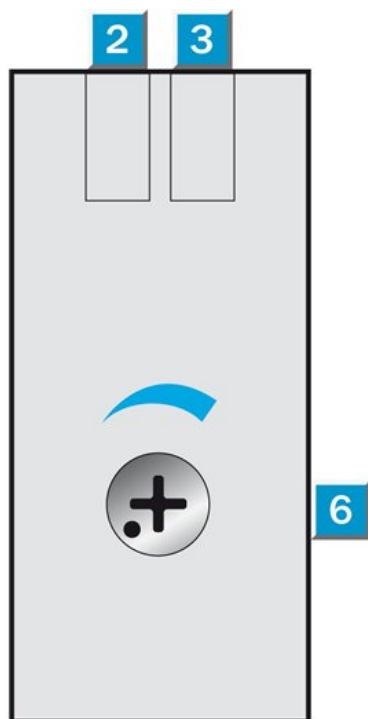
<sup>1)</sup> PL80A <sup>2)</sup> Average service life of 100,000 h at T<sub>A</sub> = +25 °C

## Mechanika/elektronika

|                                   |                                                   |
|-----------------------------------|---------------------------------------------------|
| Napięcie zasilania:               | ≤ 30 V DC <sup>1)</sup>                           |
| Tętnienia resztkowe:              | ≤ 5 Vss <sup>2)</sup>                             |
| Pobór prądu:                      | ≤ 30 mA <sup>3)</sup>                             |
| Wyjście przełączające:            | NPN, PNP                                          |
| Tryb przełączania:                | Dark-switching, Przełączanie na jasnym            |
| Switching mode selector:          | Selectable via L/D control wire                   |
| Output current I <sub>max</sub> : | 100 mA                                            |
| Czas reakcji:                     | ≤ 330 µs <sup>4)</sup>                            |
| Switching frequency:              | ± 1.500 Hz <sup>5)</sup>                          |
| Sposób przyłączenia:              | Connector M12, 5-pin                              |
| Układ zabezpieczenia:::           | A, C, D <sup>6)</sup> <sup>7)</sup> <sup>8)</sup> |
| Klasa ochronności:                | II                                                |
| Ciężar:                           | 120 g                                             |
| Filtr polaryzacyjny:              | ✓                                                 |
| Tworzywo, obudowa:                | PTFE                                              |
| Rodzaj zabezpieczenia:            | IP 66<br>IP 67<br>IP 69K                          |
| Ambient operating temperature:    | -40 °C ... 60 °C                                  |
| Ambient storage temperature:      | -40 °C ... 75 °C                                  |
| UL File No.:                      | NRKH.E181493 & NRKH7.E181493                      |
| Napięcie sygnału PNP HIGH/LOW:    | > U <sub>v</sub> - 3 V/ca. 0 V                    |

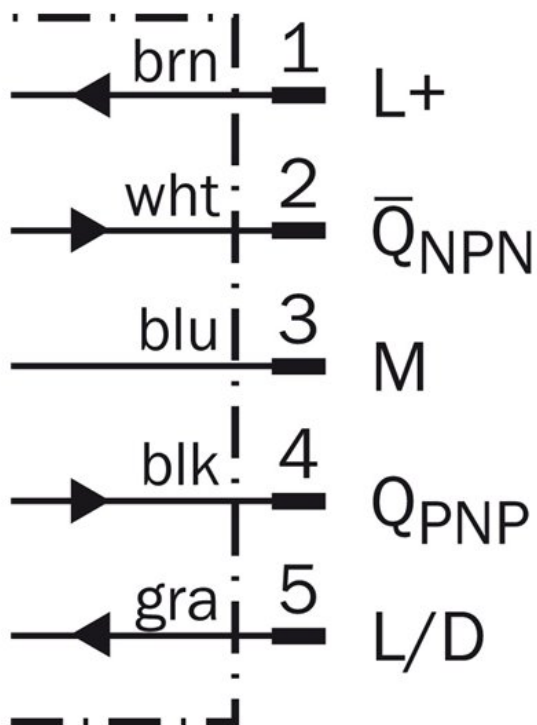
<sup>1)</sup> Limit values, operation in short-circuit protected network max. 8 A <sup>2)</sup> May not exceed or fall short of V<sub>S</sub> tolerances <sup>3)</sup> Bez obciążenia <sup>4)</sup> Signal transit time with resistive load <sup>5)</sup> With light/dark ratio 1:1 <sup>6)</sup> A = V<sub>S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

## Adjustments possible



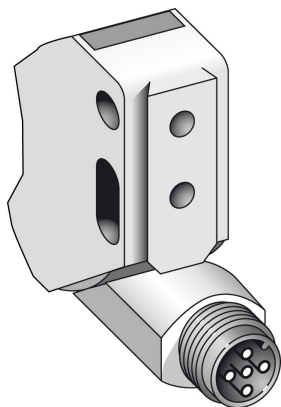
- |2| LED indicator yellow: Light received
- |3| Green LED indicator: supply voltage active
- |6| Sensitivity adjustment: poti

## Connection diagram



## Connection type

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