

## WLL180T-N434



**SICK**  
Sensor Intelligence.

Nazwa modelu > **WLL180T-N434**

Numer części > **6039096**



#### At a glance

- Selectable response time up to 16  $\mu$ s
- Sensing range up to 20 m, sensing distance up to 1400 mm
- Bus-compatible with anti-interference
- 2 x 4-digit display
- Adjustable hysteresis
- Rotatable display screen
- High-resolution signal processing
- Programmable time delays

#### Your benefits

- Extremely rapid processes are detected reliably
- Workpieces are detected reliably even under the most difficult of ambient conditions such as dust, spray or mist
- No mutual effects from fiber-optic heads mounted in close proximity due to bus communication
- Easy monitoring of process parameters
- Hysteresis can be adapted to suit the application, e.g. when detecting tiny or transparent objects
- The display is easy to read, even under difficult installation conditions
- Tiny objects can be detected due to the high-resolution signal processing
- Time delays can be adjusted individually to suit the application



#### Cechy

|                                   |                                                                                                             |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------|
| Typ urządzenia:                   | Stand-alone                                                                                                 |
| Wymiary (Szer. x Wys. x Głęb.):   | 10,5 mm x 34,6 mm x 71,9 mm                                                                                 |
| Maks. strefa działania::          | 0 m ... 20 m, through-beam system <sup>1) 2)</sup>                                                          |
| Sensing range:::                  | 0 mm ... 1.400 mm, proximity system <sup>3) 4) 5) 6)</sup><br>0 ... 18 m, through-beam system <sup>7)</sup> |
| Nadajnik światła:                 | LED                                                                                                         |
| Rodzaj światła:                   | widzialne światło czerwone                                                                                  |
| Długość fali:                     | 650 nm                                                                                                      |
| Nastawa:                          | adjustable                                                                                                  |
| Nastawienie czułości:             | Cable<br>Cable                                                                                              |
| Adjustment of operating distance: | Przewód, +/- increment button, manual, Teach-Taste                                                          |
| Teach-in:                         | Menu-controlled                                                                                             |

|                                            |                                                                                         |
|--------------------------------------------|-----------------------------------------------------------------------------------------|
| Typ czasu:                                 | Without time delay<br>time delay off<br>switch on delay<br>ON and OFF delay<br>one shot |
| Czas opóźnienia:                           | Programmable: 0 ... 9.999 ms                                                            |
| Indication:                                | Display                                                                                 |
| Zasada działania czujnika/Sposób detekcji: | Fiber-optic photoelectric sensor                                                        |
| Housing desig (light emission):            | Prostopadłościenna                                                                      |

With correctly attached fibre-optic cable LL3 and closed protection hood;

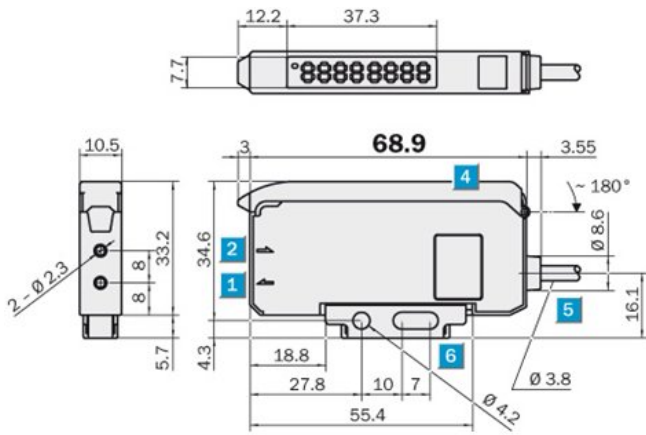
1) 4) Scanning range with 8 ms response time. Scanning range reduction with shorter response time (see tables LL3/WLL180T) 2) 6) LL3-TX01 3) Objects to be sensed with 90% reflectivity (based on DIN 5033 white standard). sensing distance with 8 ms response time. sensing distance reduction with shorter response time (see tables LL3/WLL180T) 5) LL3-DK06 7) Average service life 100,000 h at Ta = +25 °C

## Mechanika/elektronika

|                                   |                                                                                |
|-----------------------------------|--------------------------------------------------------------------------------|
| Rodzaj zabezpieczenia:            | IP 50                                                                          |
| Napięcie zasilania:               | 12 V DC ... 24 V DC <sup>1)</sup>                                              |
| Tętnienia resztkowe:              | ≤ 10 % <sup>2)</sup>                                                           |
| Pobór prądu:                      | ≤ 50 mA <sup>3)</sup>                                                          |
| Wyjście przełączające:            | NPN, przełączanie jasno/ciemno, wybierane, manually selectable, open collector |
| Output current I <sub>max</sub> : | ≤ 100 mA                                                                       |
| Czas reakcji:                     | ≤ 2 ms<br>≤ 8 ms<br>≤ 16 μs<br>≤ 70 μs <sup>4)</sup><br>≤ 250 μs               |
| Switching frequency:              | 31,2 kHz<br>7,1 kHz<br>2 kHz<br>250 Hz<br>62,5 Hz                              |
| Typ połączenia:                   | Wtyk M8, 4-pinowe                                                              |
| Klasa ochronności:                | III                                                                            |
| Układ zabezpieczenia:::           | A<br>B<br>C <sup>5) 6) 7) 8)</sup><br>D                                        |
| Special device:                   | 0                                                                              |
| Tworzywo, obudowa:                | ABS/PC                                                                         |
| Ambient temperature, operation:   | -25 °C ... 55 °C                                                               |
| Ambient temperature, storage:     | -40 °C ... 70 °C                                                               |
| Kąt promieniowania:               | Ca. 65 ° <sup>9)</sup>                                                         |

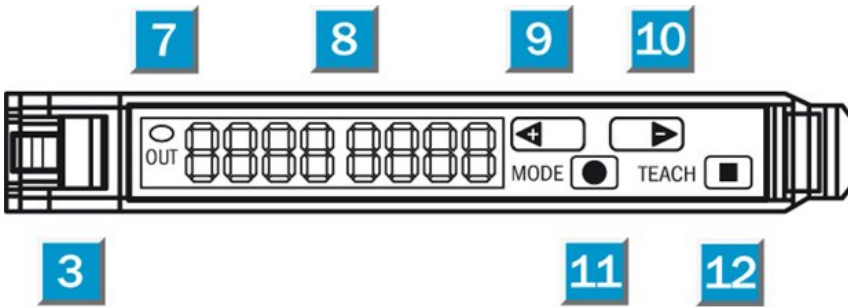
1) ± 10% 2) May not exceed or fall short of V <sup>3)</sup> Without load 4) Selectable 5) A = VS connections reverse-polarity protected 6) B = inputs and output reverse-polarity protected 7) C = interference suppression 8) D = outputs overcurrent and short-circuit protected 9) See LL3 fiber-optic data

## Rysunek techniczny

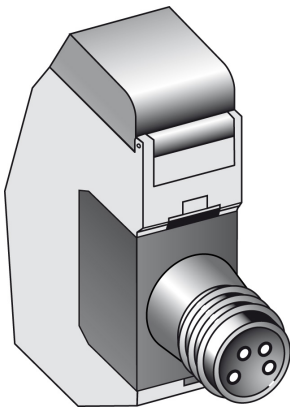


- [1] Sender LED, installation of LL3 fibre-optic cable (sender fibre)
- [2] Receiver, installation of LL3 fibre optic cable (receiver fibre)
- [3] Locking the fiber-optic cables
- [4] Protective hood, can be raised at both ends
- [5] Connection
- [6] Mounting bracket, included

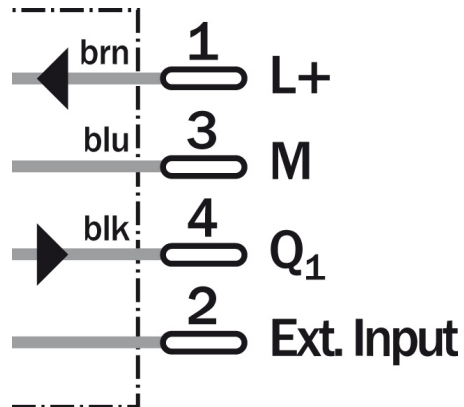
## Możliwość dostosowania



## Typ połączenia



## Schemat połączenia



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