



## Czujniki luminescencji LUT9

LUT9U-11316



Nazwa modelu > **LUT9U-11316**

Numer części > **1047052**



#### At a glance

- Simple teach-in
- Operating range up to 250 mm
- Version with IO-Link for remote monitoring
- Bar graph display provides information about the luminescence intensity
- High speed (6.5 kHz), standard (2.5 kHz), high resolution (500 Hz) models
- Additional optical filters suppress background luminescence
- Fiber-optic cable connection (with 20 mm lens)
- Switching and analog output

#### Your benefits

- Simple sensitivity adjustment via teach-in for optimum adaptation to the application
- Long sensing distance tolerance leads to less mechanical height adjustments of the sensor on the machine
- Using IO-Link, the sensor can be configured and monitored by the central control system, enabling simple, cost-effective diagnostics and data collection
- Bar graph display provides continual process control through easy visualization of the luminescence intensity
- Filters ensure that background luminescence is reliably suppressed, ensuring greater process reliability
- Interchangeable lenses for different sensing distances and the second light exit provide flexibility
- High detection reliability ensures the process and reduces downtime
- Select speed or high resolution, making it ideal for any application.



#### Cechy

|                                                  |                                                     |
|--------------------------------------------------|-----------------------------------------------------|
| Wymiary (dł. x szer. x wys.):                    | 80 mm x 30,4 mm x 53 mm                             |
| Sensing distance <sup>1)</sup> :                 | 50 mm                                               |
| Zasięg roboczy:                                  | 20 mm 70 mm                                         |
| Nadajnik światła <sup>2)</sup> , <sup>3)</sup> : | UV-LED                                              |
| Light emission:                                  | Long side                                           |
| Średnica plamki świetlnej:                       | 5 mm x 15 mm                                        |
| Kierunek plamki świetlnej:                       | Vertical                                            |
| Receiving filters:                               | OG 570                                              |
| Receiving range:                                 | 570 nm ... 750 nm                                   |
| Nastawa:                                         | Static 2-point teach-in with manual fine adjustment |
| Tryb przełączania <sup>4)</sup> :                | Przełączanie na jasnym                              |

1) Od przedniej powierzchni soczewki 2) Average service life of 100,000 h at  $T_A = +25\text{ °C}$  3) Długość fali: 375 nm 4) L/D switching via teach-in or IO-Link

## Mechanika/elektronika

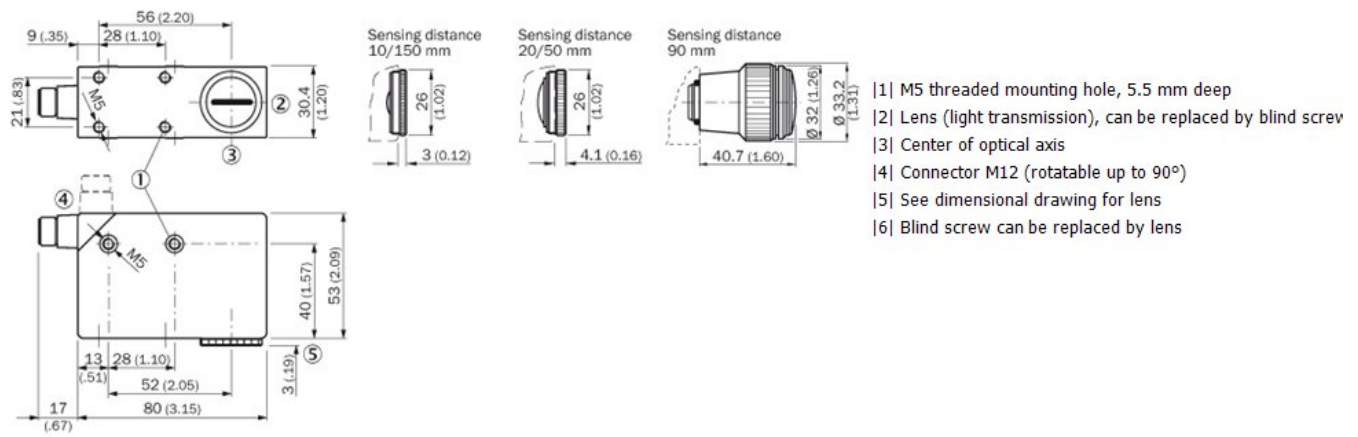
|                                          |                                                                                                                 |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Napięcie zasilania $V_S$ <sup>1)</sup> : | DC 10 V ... 30 V                                                                                                |
| Tętnienia resztkowe <sup>2)</sup> :      | < 5 Vss                                                                                                         |
| Pobór prądu <sup>3)</sup> :              | < 100 mA                                                                                                        |
| Switching frequency <sup>4)</sup> :      | 500 Hz<br>2,5 kHz<br>6,5 kHz, Adjustable                                                                        |
| Czas reakcji <sup>5)</sup> :             | 1 ms<br>200 µs<br>75 µs                                                                                         |
| Switching output:                        | NPN: HIGH = approx. $V_S$ / LOW ≤ 2 V<br>PNP: HIGH = $V_S$ - ≤ 2 V / LOW approx. 0 V                            |
| Tryb przełączania:                       | PNP/NPN                                                                                                         |
| Wyjście analogowe QA:                    | 0 mA ... 13 mA                                                                                                  |
| Output current I <sub>max</sub> :        | 100 mA                                                                                                          |
| Opóźnienie czasowe:                      | 0 ms / 10 ms / 20 ms, Adjustable                                                                                |
| Electrical connection:                   | Wtyk M12, 5-pin (standard)                                                                                      |
| Klasa ochronności <sup>6)</sup> :        | II                                                                                                              |
| Układ zabezpieczenia:                    | Wyjście Q zabezpieczone przed zwarciami<br>Tłumienie interferencji<br>Vs connections reverse-polarity protected |
| Rodzaj zabezpieczenia:                   | IP 67                                                                                                           |
| Ciężar:                                  | Ca. 400 g                                                                                                       |
| Housing material:                        | Cynkowa, odlewana                                                                                               |

1) Limit values: operation in short-circuit protected network max. 8 A 2) May not exceed or fall short of  $V_S$  tolerances 3) Bez obciążenia 4) With light/dark ratio 1:1, no time delay 5) Signal transit time with resistive load 6) Reference voltage DC 50 V

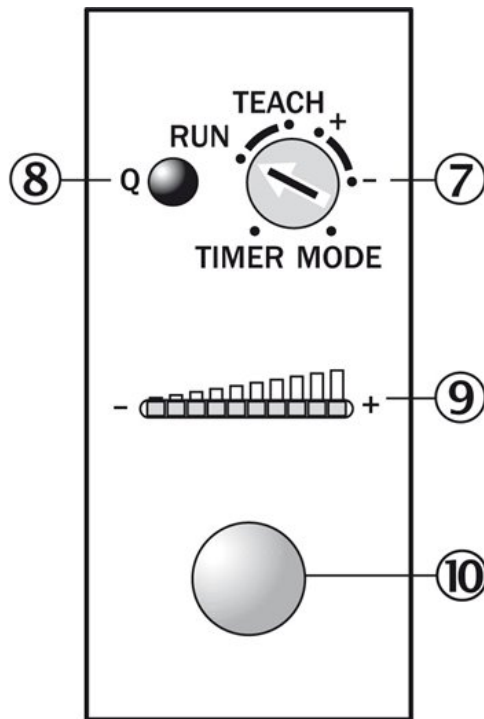
## Dane otoczenia

|                         |                                                  |
|-------------------------|--------------------------------------------------|
| Ambient temperature:    | Operation: -10 ... 55 °C, Storage: -25 ... 75 °C |
| Obciążenie uderzeniowe: | Zgodnie z IEC 60068                              |

## Dimensional drawing



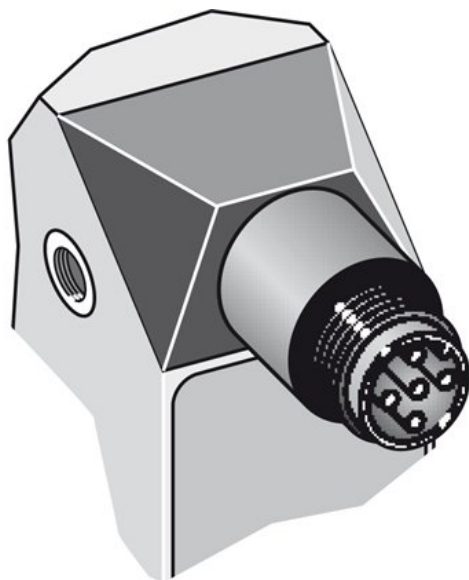
## Adjustments



- [7] Rotary selection switch
- [8] Function signal indicator (yellow), switching output
- [9] Bar graph (green), Power on left LED
- [10] Teach-in button

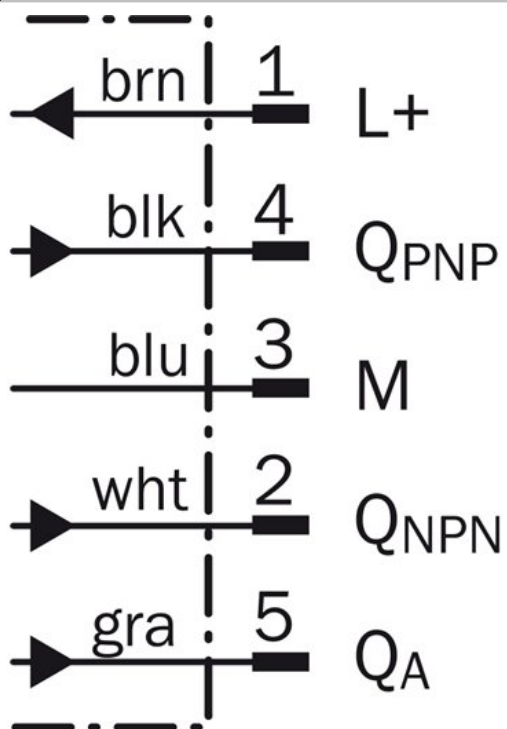
## Connection type

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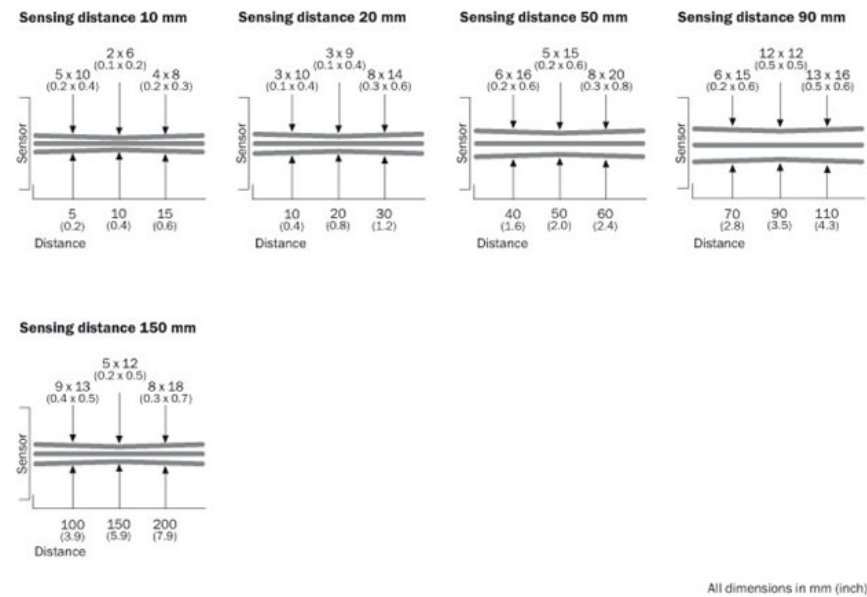


## Connection diagram

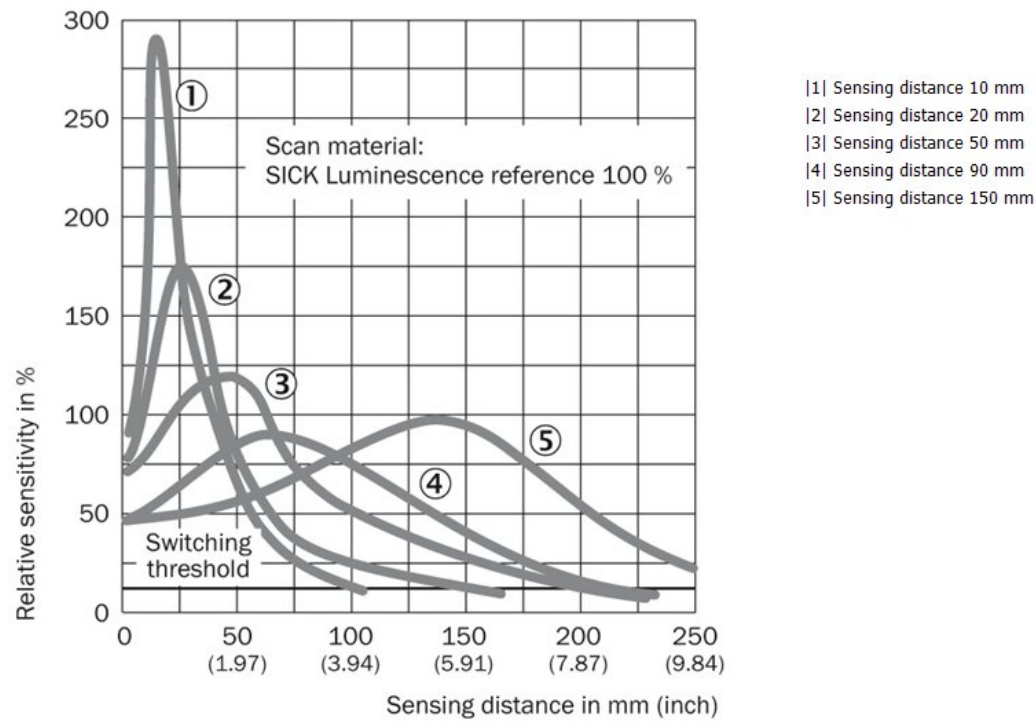
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Średnica plamki świetlnej



Sensing distance



**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 sick@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)