



## Luminescence sensors LUT2, LUT2-2

LUT2-2P1116



**Model Name** > LUT2-2P1116  
**Part No.** > 1048505



**At a glance**

- Small plastic housing
- High system sensitivity
- Static teach-in on mark and/or background via control panel or control cable
- Fast switching speed 500 Hz and 2 kHz

**Your benefits**

- Compact size enables easy integration into any machine
- Fast and easy setup saves time and money
- Increased reliability and precision enable fast response time



**Features**

Sensing distance <sup>1)</sup> :	12.5 mm
Operating range:	8 mm 20 mm
Light source <sup>2)</sup> :	LED
Type of light:	Ultraviolet light
Wave length:	370 nm
Light emission:	Long side
Light spot size <sup>3)</sup> :	2 mm x 2.5 mm
Light spot direction:	Vertical
Receiving filters:	KV 418 (standard)
Receiving range:	450 nm ... 750 nm
Adjustment:	Static 2-point teach-in
Output function <sup>4)</sup> :	Light/dark switching
Dimensions (W x H x D):	12 mm x 40 mm x 22 mm
Housing design (light emission):	Rectangular

<sup>1)</sup> From front edge of lens   <sup>2)</sup> Average service life of 100,000 h at T<sub>A</sub> = +25 °C   <sup>3)</sup> At sensing distance   <sup>4)</sup> L/D switching via teach-in

**Mechanics/electronics**

Ripple <sup>1)</sup> :	≤ 5 Vpp
Power consumption <sup>2)</sup> :	≤ 30 mA
Switching frequency <sup>3)</sup> :	0.5 kHz, 2 kHz, Depending on the mark intensity
Response time <sup>4)</sup> :	1 ms 250 µs
Output type:	PNP: HIGH = VS- ≤ 2 V / LOW approx. 0 V
Switching mode:	PNP

Output current I <sub>max</sub> :	≤ 100 mA
Input, teach-in (ET):	PNP:, Run: U < 2 V, Teach: U = 10 V ... < U <sub>V</sub>
Connection type:	Connector M12, 4-pin
Protection class <sup>5)</sup> :	II
Circuit protection:	Output Q short-circuit protected Interference suppression VS connections reverse-polarity protected
Enclosure rating:	IP 67
Weight:	11 g
Housing material:	ABS, Plastic
Supply voltage:	12 V DC ... 24 V DC <sup>6)</sup>
Fieldbus interface:	-

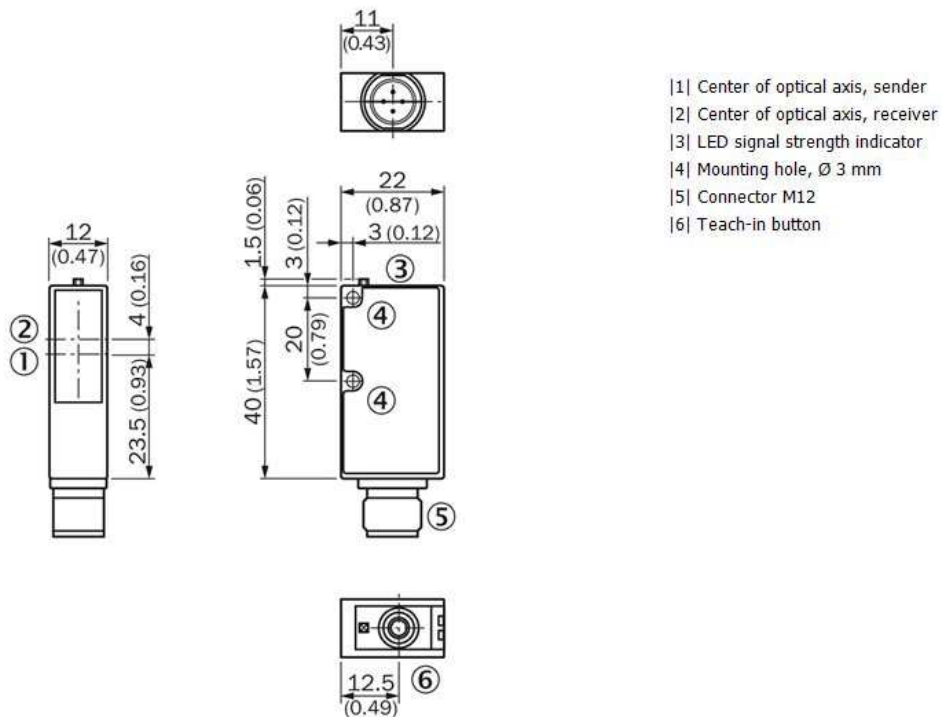
1) May not exceed or fall short of V<sub>S</sub> tolerances 2) Without load 3) With light/dark ratio 1:1 4) Signal transit time with resistive load 5) Reference voltage DC 50 V 6)

Limit values: DC 12 V (-10 %) ... DC 24 V (+20 %). Operation in short-circuit protected network max. 8 A

### Ambient data

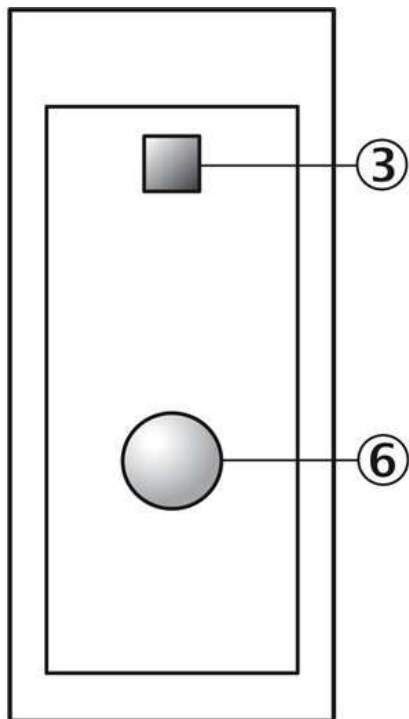
Shock load:	According to IEC 60068
Ambient operating temperature:	-10 °C ... +55 °C
Ambient storage temperature:	-25 °C ... +75 °C
UL File No.:	NRKH.E181493 & NRKH7.E181493

### Dimensional drawing



## Adjustments

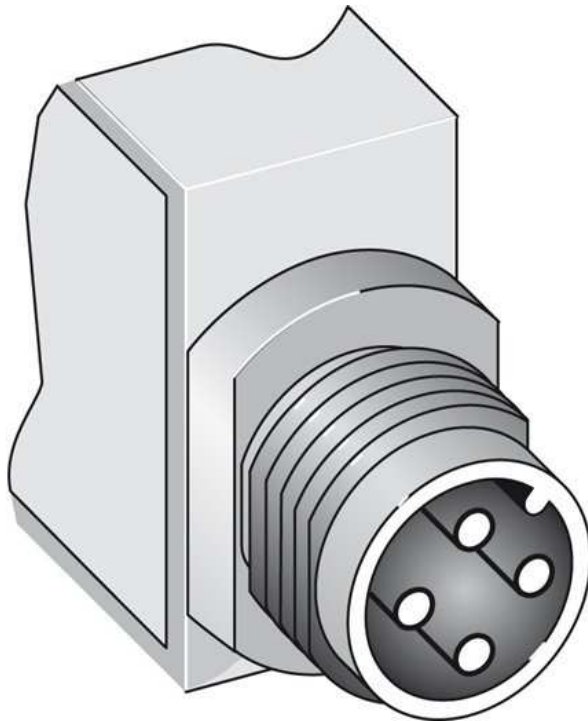
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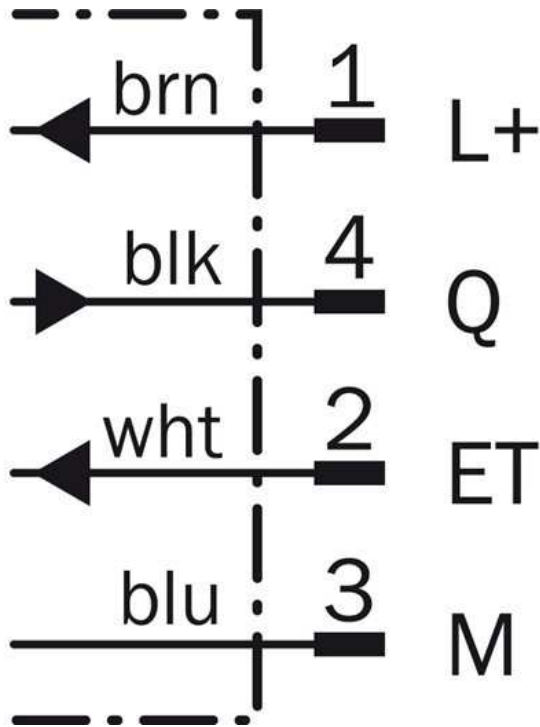
- |3| LED signal strength indicator
- |6| Teach-in button

## Connection type

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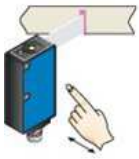


## Connection diagram



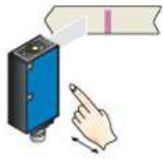
## Bedienhinweis

### 1. Position mark



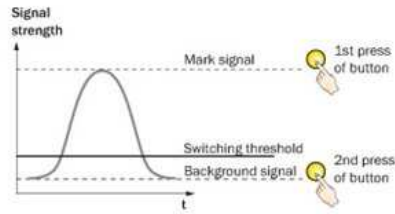
Press and hold teach-in button  
> 1 s. Yellow LED flashes slowly.

### 2. Position background



Press and hold teach-in button  
> 1 s. Yellow LED goes out.

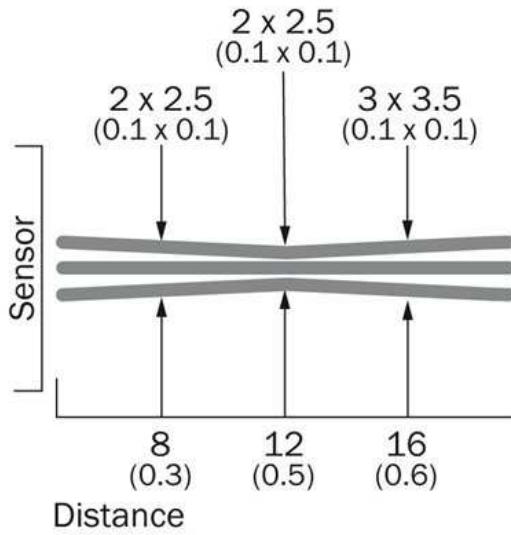
### Sensitivity setting



### Note

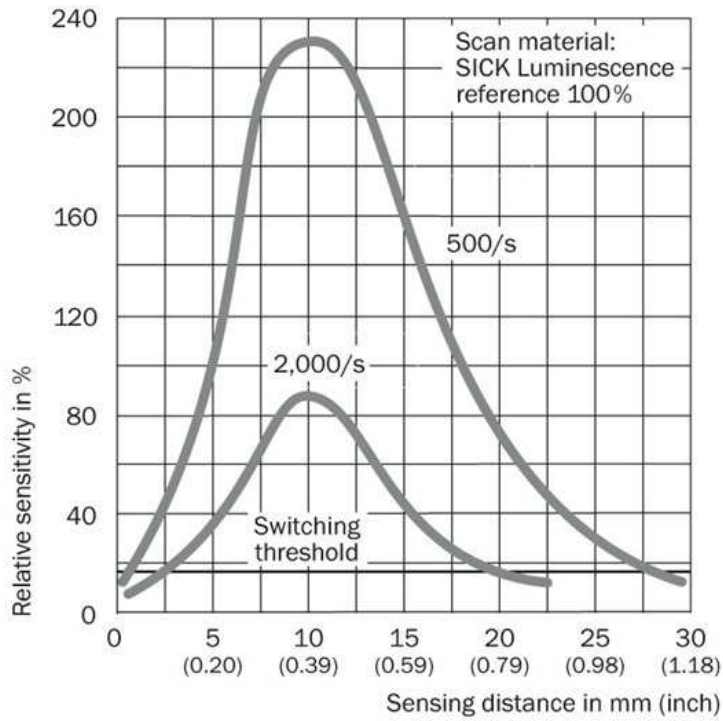
Adjustments are intended for luminescence background suppression.

### Sensing distance 12 mm



All dimensions in mm (inch)

### Sensing distance



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