



## Luminescence sensors LUT3, LUT3-9

LUT3-910



**Model Name** > LUT3-910  
**Part No.** > 1019285



**At a glance**

- Tough metal housing
- Sensing distance: 10, 20 or 50 mm
- Sensing distances selectable through interchangeable lenses
- Transmitter LED UV (375 nm)

**Your benefits**

- Sensitivity of the sensor can be infinitely adjusted using a potentiometer, saves time and reduces costs
- Filters ensure that background luminescence is reliably suppressed, ensuring greater process reliability
- Interchangeable lenses for different sensing distances provide flexibility



**Features**

Sensing distance <sup>1)</sup> :	10 mm
Light source <sup>2)</sup> :	LED
Type of light:	Ultraviolet light
Wave length:	375 nm
Light spot size:	2 mm x 6 mm
Receiving filters:	KV 418 (standard)
Receiving range:	450 nm ... 750 nm
Adjustment:	Manual (potentiometer)
Output function:	Light switching
Dimensions (W x H x D):	30.4 mm x 53 mm x 80 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

**Mechanics/electronics**

Ripple <sup>1)</sup> :	< 2 Vpp
Current consumption <sup>2)</sup> :	< 60 mA
Switching frequency <sup>3)</sup> :	1.5 kHz
Response time <sup>4)</sup> :	350 µs
Output type:	NPN: HIGH = approx. VS / LOW ≤ 2 V PNP: HIGH = VS- ≤ 3 V / LOW = approx. 0 V
Switching mode:	PNP/NPN
Output current I <sub>max.</sub> :	100 mA
Connection type:	Connector M12, 5-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:	400 g
Housing material:	Metal, Zinc diecast
Supply voltage:	12 V DC ... 30 V DC <sup>6)</sup>
Fieldbus interface:	-

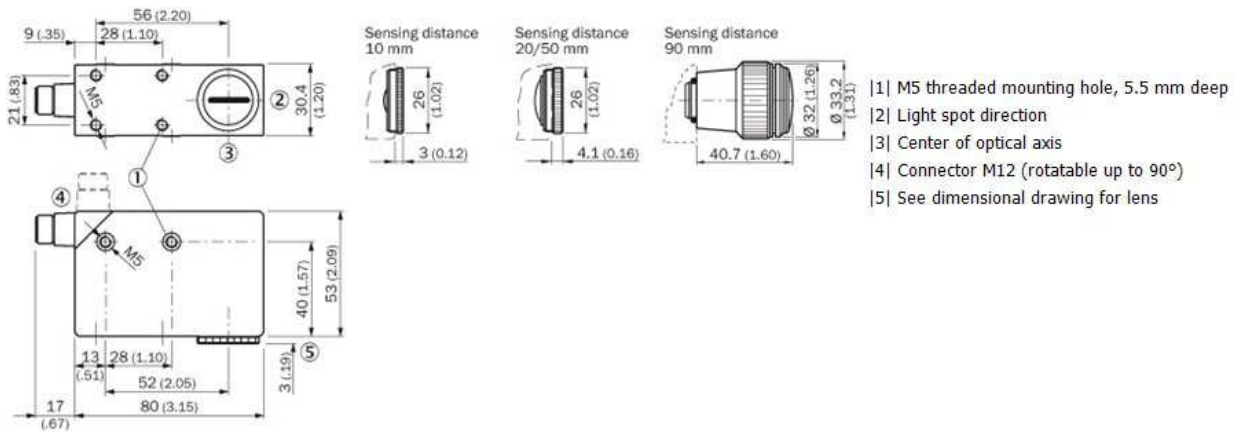
1) May not exceed or fall short of  $V_S$  tolerances 2) Without load 3) With light/dark ratio 1:1 4) Signal transit time with resistive load 5) Reference voltage DC 50 V 6)

Limit values; operation in short-circuit protected network max. 8 A

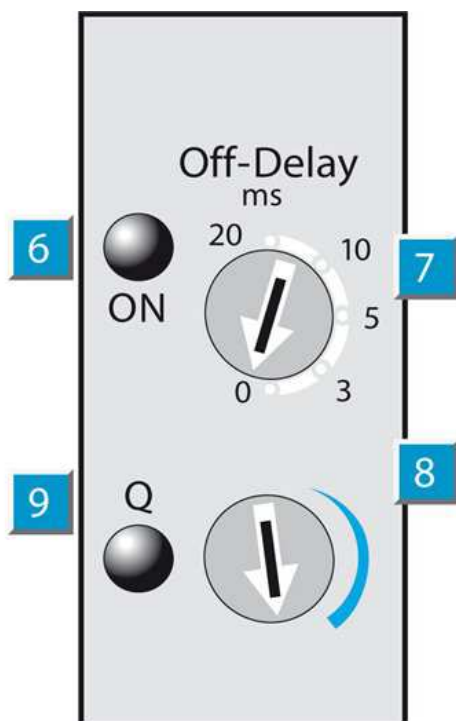
### Ambient data

Shock load:	According to IEC 60068
Ambient operating temperature:	-10 °C ... +55 °C
Ambient storage temperature:	-25 °C ... +75 °C

### Dimensional drawing



## Adjustments

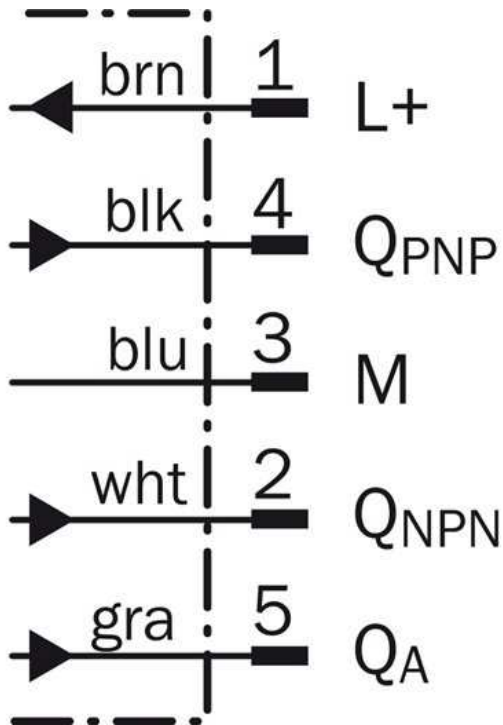


- |6| Operating indicator
- |7| time delay selector switch
- |8| Sensitivity adjustment
- |9| Output indicator

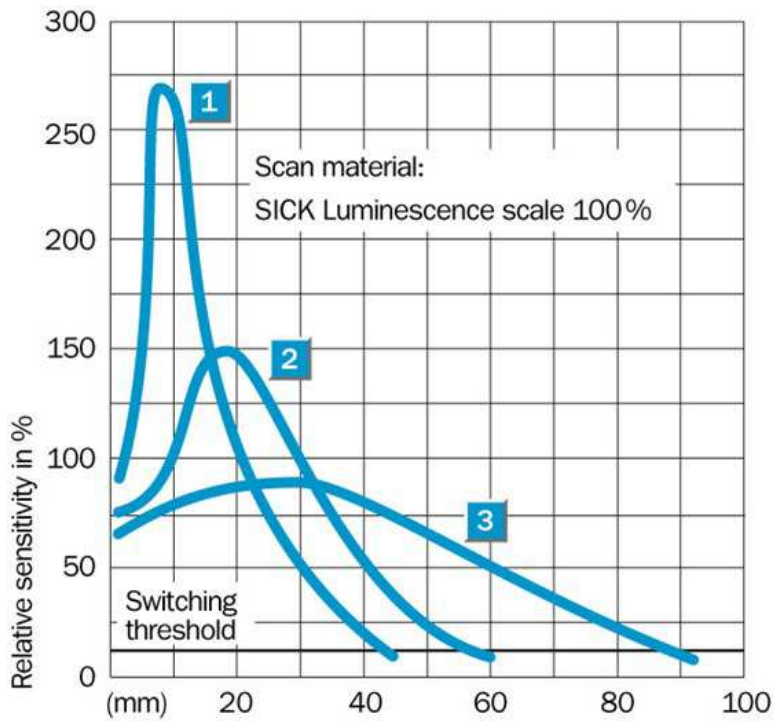
## Connection type



## Connection diagram



## Characteristic curve



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