



LUT2-P1116

LUT2

LUMINESCENCE SENSORS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	part no.
LUT2-P1116	1023500

Other models and accessories → www.sick.com/LUT2

Detailed technical data

Features

Housing design	Small
Dimensions (W x H x D)	12 mm x 40 mm x 22 mm
Light source	LED, Ultraviolet light ¹⁾
Light emission	Long side
Light spot size	2 mm x 2.5 mm
Light spot direction	Vertical
Receiving filters	≤ 420 nm ²⁾
Wave length	375 nm
Sensing distance	≤ 12.5 mm ³⁾
Receiving range	450 nm ... 750 nm
Adjustment	Teach-in button
Teach-in mode	Static teach-in

¹⁾ Average service life: 100,000 h at T_U = +25 °C.

²⁾ Filter blocks shorter wavelengths to suppress background luminescence.

³⁾ From leading edge of lens.

Electronics

Supply voltage	12 V DC ... 24 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Current consumption	< 30 mA ³⁾
Switching frequency	0.5 kHz ⁴⁾ adjustable
Response time	

¹⁾ Limit values: DC 12 V (–10 %) ... DC 24 V (+20 %).

²⁾ May not fall below or exceed U_y tolerances.

³⁾ Without load.

⁴⁾ With light/dark ratio 1:1, without timer stage.

⁵⁾ Reference voltage DC 50 V.

	1,000 µs
	250 µs
Switching output	PNP
Switching output (voltage)	PNP: HIGH = $U_V \leq 2 \text{ V}$ / LOW approx. 0 V
Output current $I_{\max}$	100 mA
Protection class	II ⁵⁾
Circuit protection	U_V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Connection type	Male connector M12, 4-pin

1) Limit values: DC 12 V (–10 %) ... DC 24 V (+20 %).

2) May not fall below or exceed U_V tolerances.

3) Without load.

4) With light/dark ratio 1:1, without timer stage.

5) Reference voltage DC 50 V.

Mechanics

Housing material	ABS
Weight	11 g

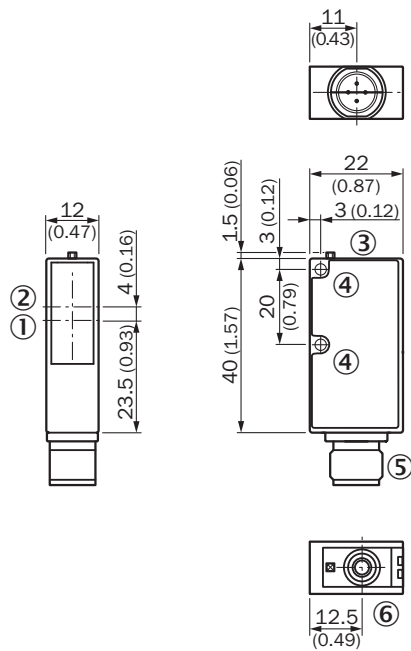
Ambient data

Ambient operating temperature	–10 °C ... +55 °C
Ambient temperature, storage	–25 °C ... +75 °C
Shock load	According to IEC 60068
Enclosure rating	IP67
UL File No.	NRKH.E181493 & NRKH7.E181493

Classifications

ECLASS 5.0	27270908
ECLASS 5.1.4	27270908
ECLASS 6.0	27270908
ECLASS 6.2	27270908
ECLASS 7.0	27270908
ECLASS 8.0	27270908
ECLASS 8.1	27270908
ECLASS 9.0	27270908
ECLASS 10.0	27270908
ECLASS 11.0	27270908
ECLASS 12.0	27270908
ETIM 5.0	EC001822
ETIM 6.0	EC001822
ETIM 7.0	EC001822
ETIM 8.0	EC001822
UNSPSC 16.0901	39121528

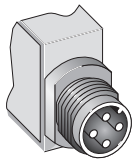
Dimensional drawing



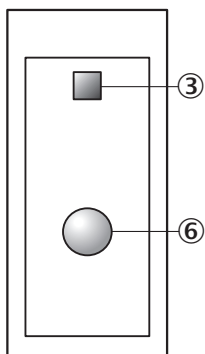
Dimensions in mm (inch)

- ① Center of optical axis, sender
- ② Center of optical axis, receiver
- ③ LED signal strength indicator
- ④ Mounting hole, Ø 3 mm
- ⑤ Male connector M12
- ⑥ Teach-in button

Pinouts

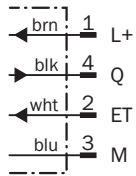


Adjustments



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

Connection diagram



Recommended accessories

Other models and accessories → www.sick.com/LUT2

	Brief description	Type	part no.
Mounting systems			
	Description: Mounting bracket Material: Steel Details: Steel, zinc coated Items supplied: Mounting hardware included Suitable for: W9-3	BEF-WN-W9-2	2022855
	Description: Plate L for universal clamp bracket Material: Steel Details: Steel, zinc coated Items supplied: Universal clamp (2022726), mounting hardware Usable for: W8, W100, W140-2, W150, W160, W9-2, W250, P250, LUT2, KT3, CSM1, G6, W100-2, W250, LUT2, W9-3, W150, CSM, LUTM, G10, W8, P250, KTM Core, KTM Prime	BEF-KHS-L01	2023057
reflectors and optics			
	Description: Writing chalk, red fluorescence	LUM-KLK	1002959
	Description: Thick chalk, red fluorescent, 12 units	LUM-FT	1004460

	Brief description	Type	part no.
connectors and cables			
	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm²	DOS-1204-G	6007302
	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm²	DOS-1204-W	6007303
	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones	YF2A14-020VB3XLEAX	2096234
	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones	YF2A14-050VB3XLEAX	2096235
	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones	YF2A14-100VB3XLEAX	2096236
	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 15 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones	YF2A14-150VB3XLEAX	2096237
	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones	YG2A14-020VB3XLEAX	2095895
	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones	YG2A14-050VB3XLEAX	2095897
	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones	YG2A14-100VB3XLEAX	2095898
	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones	YG2A14-C60VB3XLEAX	2145709
	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 1 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded	YG2A14-010VB3XLEAX	2145710

	Brief description	Type	part no.
	• Application: Zones with chemicals, Uncontaminated zones • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 0.6 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals, Uncontaminated zones	YF2A14-C60VB3XLEAX	2145707
	• Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 1 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals, Uncontaminated zones	YF2A14-010VB3XLEAX	2145708

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com