

Photoelectric proximity switch
with visible red light
Operating instructions

Safety notes

- Read the operating instructions before commissioning.
- Connection, mounting, and setting may only be performed by trained specialists.
- Not a safety component in accordance with the EU Machinery Directive.
- UL: The device shall be supplied from an isolating transformer having a secondary overcurrent protective device that complies with UL 248 to be installed in the field rated either:
a) max 5 amps for voltages 0 ~ 20 V (0 ~ 28.3 V peak), or
b) 100 / Vp for voltages of 20 ~ 30 V (28.3 ~ 42.4 V peak).
Alternatively, they can be supplied from a Class 2 power supply.
UL Environmental Rating: Enclosure type 1.
- When commissioning, protect the device from moisture and contamination.
- These operating instructions contain information required during the life cycle of the sensor.

Correct use

The G2S is an opto-electronic sensor for the optical, non-contact detection of objects, animals, and persons.

Starting operation

1 GT2S

The sensing ranges for the GTB2S pushbuttons are assigned permanent settings during production. No further settings need to be made.
Check the application conditions such as size and reflectance capacity of the object as well as background influences and compare with the switching distance diagram of the GT2S type.

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Align the photoelectric sensor and reflector with each other.

The red light spot is visible on the reflector.

- In the horizontal/vertical direction, determine the on / off switching point of the receive indicator and select the central position.

The receive indicator must be lit.

3 GSES

- Align the sender and receiver with each other.

- In the horizontal / vertical direction, determine the on / off switching point of the receive indicator and select the central position.

- Use a slit diaphragm (accessory) for precise positioning tasks and to detect small or transparent objects.

Warning: The slit diaphragm reduces the sensing range. Sensing ranges for the slit diaphragms can be found at www.sick.com or in the data sheet.

Maintenance

SICK light barriers are maintenance-free.

We recommend doing the following regularly:

- Clean the external lens surfaces.
- Check the screw connections and plug-in connections.

No modifications may be made to devices.

SICK

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G2S

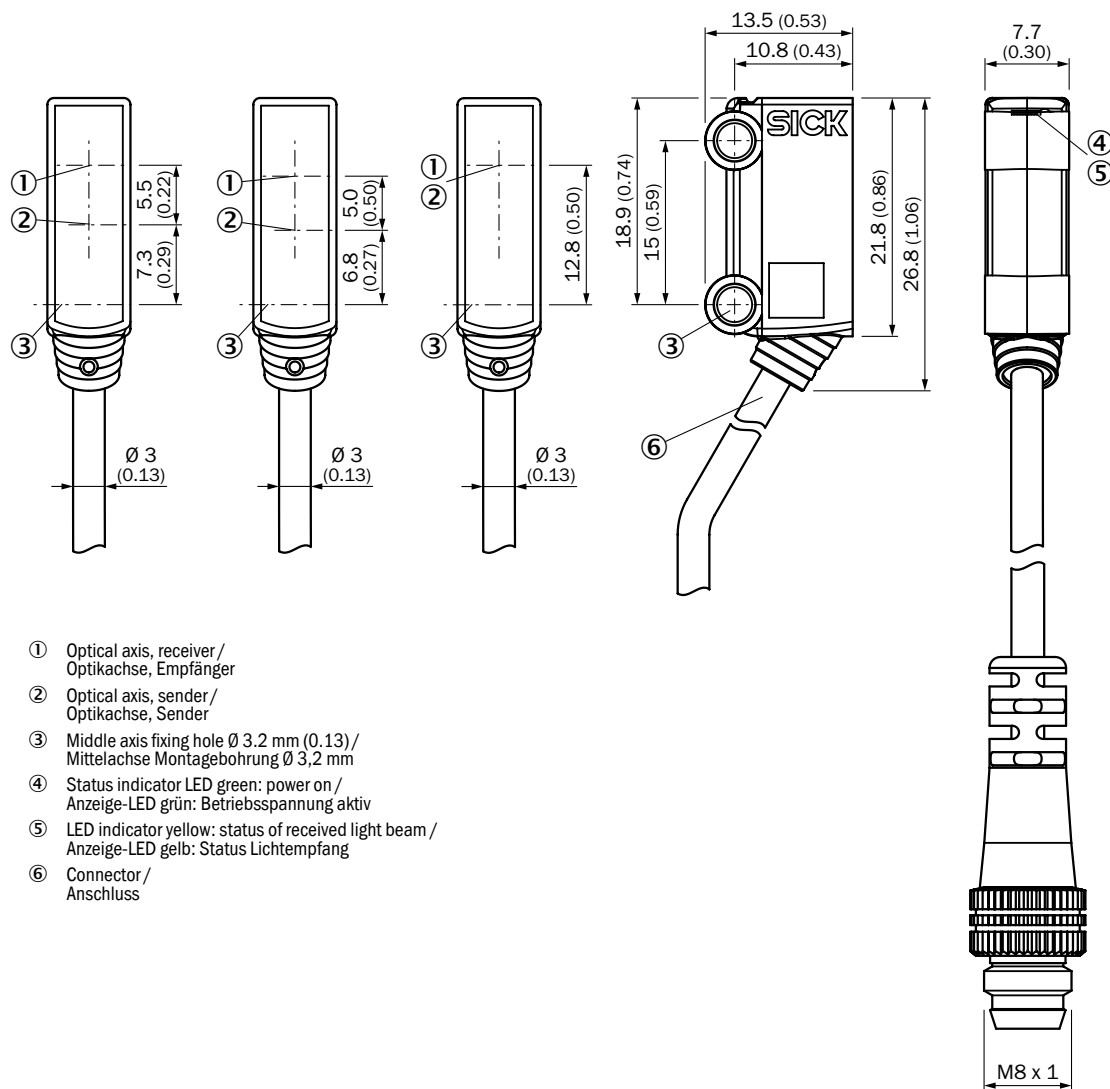
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Detailed addresses and further locations at www.sick.com

A GTB2S

GL2S

GSE2S



- 1 Optical axis, receiver / Optikachse, Empfänger
- 2 Optical axis, sender / Optikachse, Sender
- 3 Middle axis fixing hole \varnothing 3.2 mm (0.13) / Mittelachse Montagebohrung \varnothing 3.2 mm
- 4 Status indicator LED green: power on / Anzeige-LED grün: Betriebsspannung aktiv
- 5 LED indicator yellow: status of received light beam / Anzeige-LED gelb: Status Lichtempfang
- 6 Connector / Anschluss

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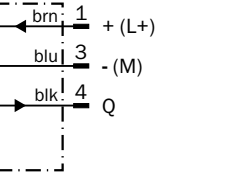
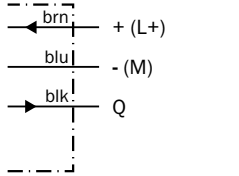
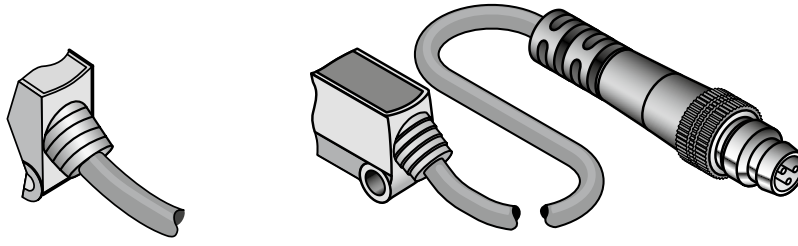
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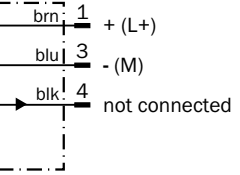
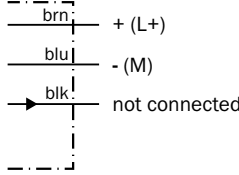
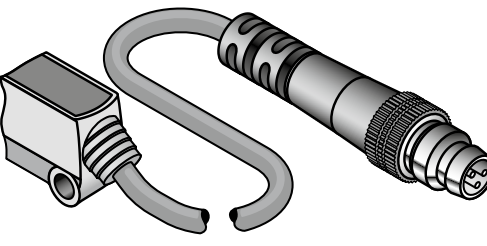
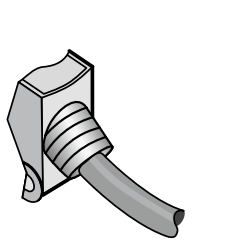
**B Gx2S-P/N13xx
Gx2S-F/E13xx**

**Gx2S-P/N53xx
Gx2S-F/E53xx**

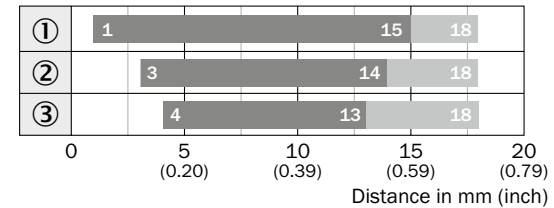


GS2S-D13xx

GS2S-D53xx

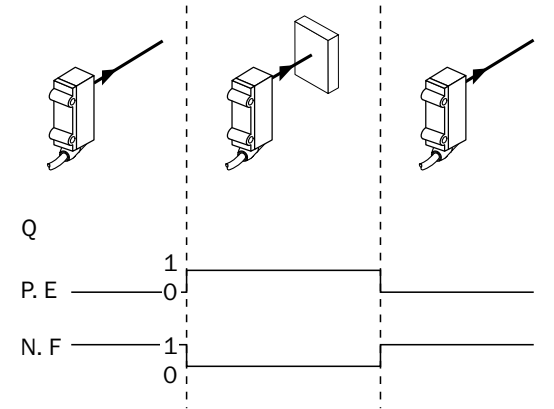


1 GTB2S-Xxx1x fix 15 mm

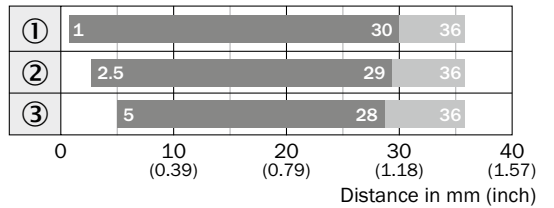


■ Sensing range ■ Sensing range max.

- ① Sensing range on white, 90 % remission
- ② Sensing range on gray, 18 % remission
- ③ Sensing range on black, 6 % remission



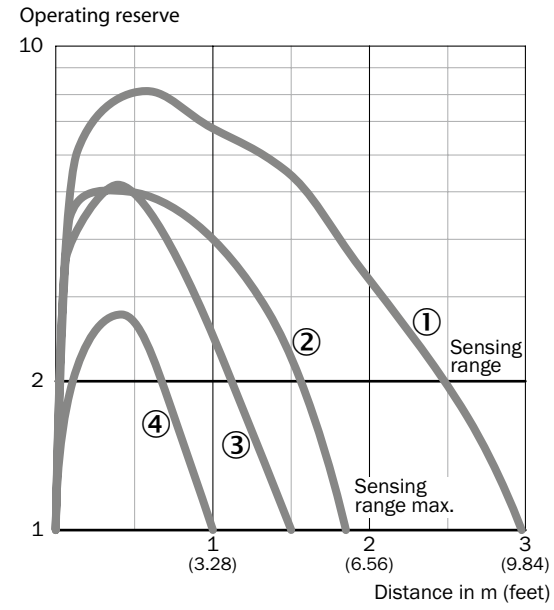
GTB2S-Xxx3x fix 30 mm



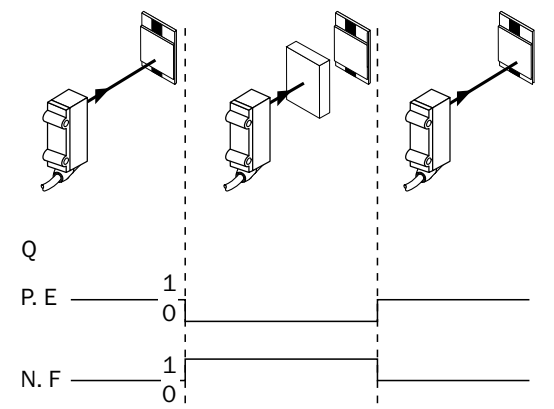
■ Sensing range ■ Sensing range max.

- ① Sensing range on white, 90 % remission
- ② Sensing range on gray, 18 % remission
- ③ Sensing range on black, 6 % remission

2 GL2S



- Reflector type**
- ① PL40A
 - ② PL20A
 - ③ PL10F
 - ④ IREF 6000 reflective foil



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