

GL2S-N0311S26 G2

MINIATURE PHOTOELECTRIC SENSORS





Ordering information

| Туре | Part no. |
|---------------|----------|
| GL2S-N0311S26 | 1140105 |

Other models and accessories → www.sick.com/G2

Illustration may differ



Detailed technical data

Features

| Functional principle | Photoelectric retro-reflective sensor |
|---------------------------------|---|
| Functional principle detail | With minimum distance to reflector (dual lens system) |
| Dimensions (W x H x D) | 7.7 mm x 21.8 mm x 13.5 mm |
| Housing design (light emission) | Rectangular |
| Type of light | Visible red light |
| Light source | PinPoint LED 1) |
| Light spot size (distance) | Ø 11 mm (250 mm) |
| Wave length | 640 nm |
| Adjustment | None |

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

Mechanics/electronics

| Supply voltage U _B | 10 V DC 30 V DC ¹⁾ |
|----------------------------------|-----------------------------------|
| Ripple | < 5 V _{pp} ²⁾ |
| Current consumption | 20 mA ³⁾ |
| Switching output | NPN |
| Switching mode | Light/dark switching |
| Output current I _{max.} | ≤ 50 mA |
| Response time | < 0.6 ms ⁴⁾ |

 $^{^{1)}}$ Limit values when operated in short-circuit protected network: max. 8 A.

 $^{^{\}rm 2)}$ May not fall below or exceed ${\rm U}_{\rm V}$ tolerances.

³⁾ Without load.

⁴⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

 $^{^{6)}}$ Do not bend below 0 °C.

| Switching frequency | 800 Hz ⁵⁾ |
|-------------------------------|--|
| Connection type | Cable with special connector JST, 4-wire, 250 mm ⁶⁾ |
| Cable material | Plastic, PUR |
| Cable diameter | Ø 3 mm |
| Weight | 14 g |
| Housing material | Plastic, ABS |
| Optics material | Plastic, PMMA |
| Enclosure rating | IP67 |
| Ambient operating temperature | -30 °C +50 °C |
| Ambient temperature, storage | -40 °C +75 °C |
| UL File No. | NRKH.E181493 |

 $^{^{1)}}$ Limit values when operated in short-circuit protected network: max. 8 A.

Classifications

| ECLASS 5.0 | 27270902 |
|----------------|----------|
| ECLASS 5.1.4 | 27270902 |
| ECLASS 6.0 | 27270902 |
| ECLASS 6.2 | 27270902 |
| ECLASS 7.0 | 27270902 |
| ECLASS 8.0 | 27270902 |
| ECLASS 8.1 | 27270902 |
| ECLASS 9.0 | 27270902 |
| ECLASS 10.0 | 27270902 |
| ECLASS 11.0 | 27270902 |
| ECLASS 12.0 | 27270902 |
| ETIM 5.0 | EC002717 |
| ETIM 6.0 | EC002717 |
| ETIM 7.0 | EC002717 |
| ETIM 8.0 | EC002717 |
| UNSPSC 16.0901 | 39121528 |

²⁾ May not fall below or exceed U_V tolerances.

³⁾ Without load.

⁴⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

⁶⁾ Do not bend below 0 °C.

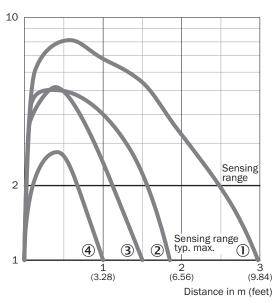
Connection diagram

Cd-094



Characteristic curve

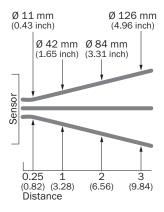
GL2S



- ① Reflector PL40A
- ② Reflector PL20A
- 3 PL10F reflector
- 4 Reflective tape IREF6000 (REF-IRF-56)

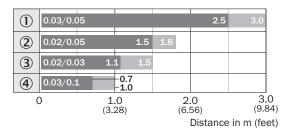
Light spot size

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Sensing range diagram

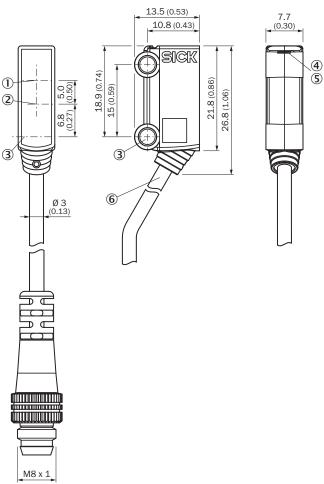
GL2S



- Sensing range
- Sensing range typ. max.
- ① Reflector PL40A
- ② Reflector PL20A
- ③ PL10F reflector
- ④ Reflective tape IREF6000 (REF-IRF-56)

Dimensional drawing (Dimensions in mm (inch))

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- ① Optical axis, receiver
- ② Optical axis, sender
- 3 Mounting hole, Ø 3.2 mm
- 4 LED indicator green: Supply voltage active
- ⑤ LED indicator yellow: Status of received light beam
- 6 Connection

Recommended accessories

Other models and accessories → www.sick.com/G2

| | Brief description | Туре | Part no. |
|------------|--|-------|----------|
| Reflectors | | | |
| | Fine triple reflector, screw connection, suitable for laser sensors, 20 mm x 32 mm, PM-MA/ABS, Screw-on, 2 hole mounting | PL10F | 5311210 |

| | Brief description | Туре | Part no. |
|--------|--|------------|----------|
| Others | | | |
| | Connection type head A: Male connector, M8, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: 0.14 mm² 0.5 mm² | STE-0804-G | 6037323 |

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