

# GLL170T-B434

GLL170

FIBER-OPTIC SENSORS AND FIBERS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
GLL170T-B434	6063341

Other models and accessories → [www.sick.com/GLL170](http://www.sick.com/GLL170)

### Detailed technical data

#### Features

<b>Device type</b>	Stand-alone
<b>Sensor/ detection principle</b>	Fiber-optic photoelectric sensor
<b>Dimensions (W x H x D)</b>	10 mm x 31.7 mm x 72.5 mm
<b>Housing design (light emission)</b>	Rectangular
<b>Sensing range max.</b>	0 mm ... 400 mm, Proximity system <sup>1) 2)</sup> 0 mm ... 1,320 mm, Through-beam system <sup>3)</sup>
<b>Sensing range</b>	0 mm ... 350 mm, Proximity system <sup>1) 2)</sup> 0 mm ... 1,100 mm, Through-beam system <sup>3)</sup>
<b>Type of light</b>	Visible red light
<b>Light source</b>	LED <sup>4)</sup>
<b>Wave length</b>	632 nm
<b>Adjustment</b>	Teach-in button Cable Plus/minus button
<b>Time type</b>	On delay Off delay One shot Without time delay
<b>Delay time</b>	Programmable, 0 ms, 9,999 ms
<b>Indication</b>	Display
<b>Display</b>	Status LEDs, 4-digit digital display, display selectable between percentage value, absolute digit value and bar display / display of parameters

<sup>1)</sup> Object with 90 % reflectance (referred to standard white, DIN 5033).

<sup>2)</sup> LL3-DK06.

<sup>3)</sup> LL3-TB02.

<sup>4)</sup> Average service life: 100,000 h at T<sub>U</sub> = +25 °C.

## Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC <sup>1)</sup>
<b>Ripple</b>	≤ 10 % <sup>2)</sup>
<b>Power consumption</b>	≤ 40 mA <sup>3)</sup>
<b>Switching output</b>	PNP, NPN, Selectable via menu
<b>Number of switching outputs</b>	1
<b>Switching mode</b>	Light/dark switching
<b>Switching mode selector</b>	Selectable via menu
<b>Output current I<sub>max.</sub></b>	≤ 100 mA
<b>Response time</b>	≤ 250 μs <sup>4)</sup> ≤ 50 μs, Selectable via menu <sup>4)</sup>
<b>Switching frequency</b>	2 kHz 10 kHz
<b>Input</b>	Teach-in input
<b>Connection type</b>	Connector M8, 4-pin
<b>Cable material</b>	PVC
<b>Conductor cross-section</b>	0.2 mm <sup>2</sup>
<b>Cable diameter</b>	3.8 mm
<b>Circuit protection</b>	A <sup>5)</sup> B <sup>6)</sup> C <sup>7)</sup> D <sup>8)</sup>
<b>Protection class</b>	III
<b>Weight</b>	22 g
<b>Housing material</b>	Plastic, PC/POM
<b>Tightening torque, max.</b>	0.5 Nm
<b>Enclosure rating</b>	IP66 <sup>9)</sup>
<b>Ambient operating temperature</b>	-25 °C ... +55 °C
<b>Ambient storage temperature</b>	-40 °C ... +70 °C
<b>UL File No.</b>	NRKH2.E300503 & NRKH8.E300503

<sup>1)</sup> Limit values.

<sup>2)</sup> May not exceed or fall below U<sub>v</sub> tolerances.

<sup>3)</sup> Without load.

<sup>4)</sup> Signal transit time with resistive load.

<sup>5)</sup> A = V<sub>S</sub> connections reverse-polarity protected.

<sup>6)</sup> B = inputs and output reverse-polarity protected.

<sup>7)</sup> C = interference suppression.

<sup>8)</sup> D = outputs overcurrent and short-circuit protected.

<sup>9)</sup> With correctly attached fibre-optic cable LL3.

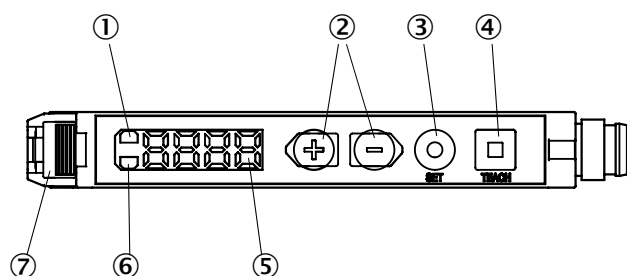
## Classifications

<b>ECl@ss 5.0</b>	27270905
<b>ECl@ss 5.1.4</b>	27270905
<b>ECl@ss 6.0</b>	27270905
<b>ECl@ss 6.2</b>	27270905

<b>ECl@ss 7.0</b>	27270905
<b>ECl@ss 8.0</b>	27270905
<b>ECl@ss 8.1</b>	27270905
<b>ECl@ss 9.0</b>	27270905
<b>ETIM 5.0</b>	EC002651
<b>ETIM 6.0</b>	EC002651
<b>UNSPSC 16.0901</b>	39121528

## Adjustments possible

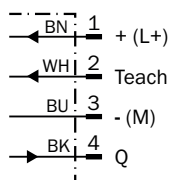
GLL170T



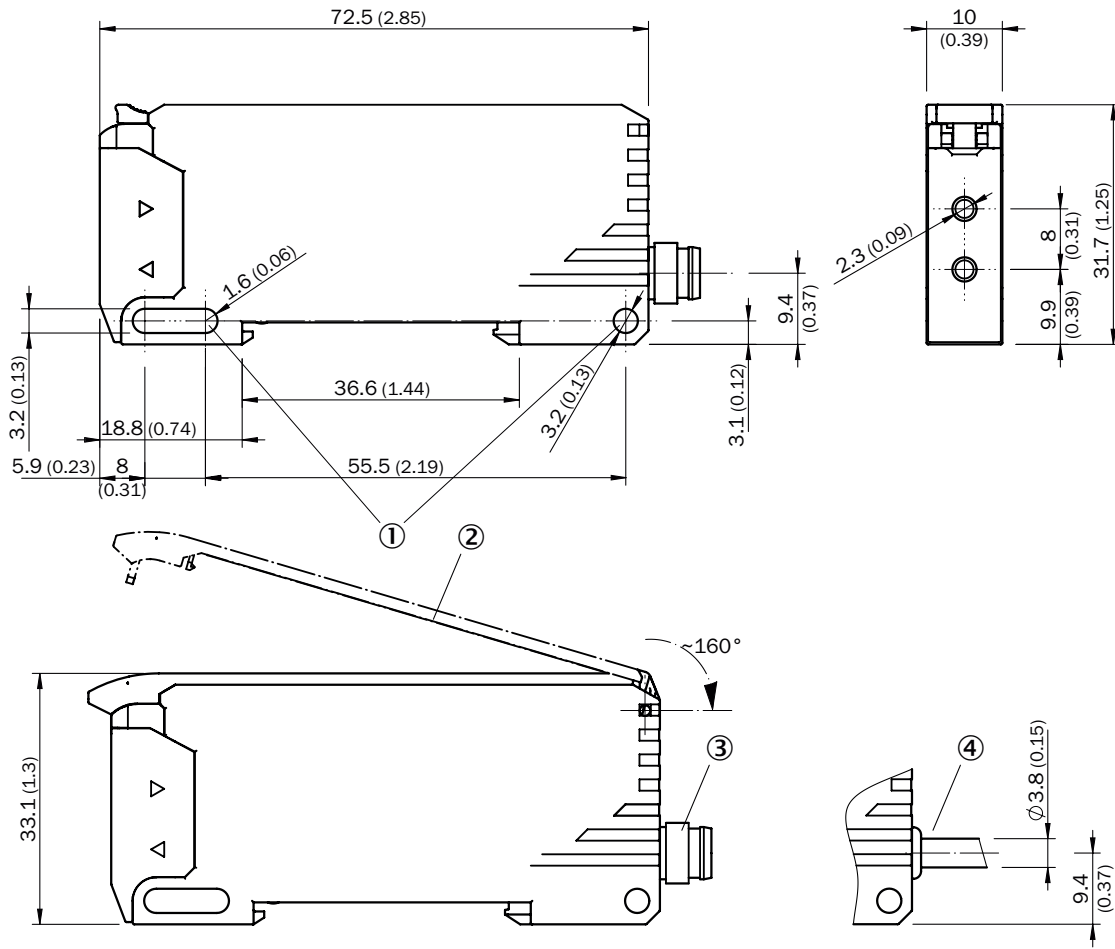
- ① LED indicator orange, lights up when switching output is active
- ② Plus/minus button
- ③ SET button
- ④ Teach-in button
- ⑤ Display
- ⑥ LED indicator green: Supply voltage active
- ⑦ Locking the fiber-optic cables

## Connection diagram

Cd-092





**Dimensional drawing** (Dimensions in mm (inch))







- ① Mounting holes
- ② Protective hood (optional), opens approx. 160°
- ③ Connector M8
- ④ Cable

**Recommended accessories**

Other models and accessories → [www.sick.com/GLL170](http://www.sick.com/GLL170)

	Brief description	Type	Part no.
<b>Device protection (mechanical)</b>			
	Protective Hood for GLL170, opens approx. 160°, PC	BF-GLL170	5336263
<b>Mounting brackets and plates</b>			
	Mounting bracket, steel, zinc coated, without mounting hardware	BEF-WLL180	5325812

	Brief description	Type	Part no.
Other mounting accessories			
	Cutter for fibers, supplied with LL3	FC	5304141
Plug connectors and cables			
	Head A: female connector, M8, 4-pin, straight Head B: open cable ends Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: female connector, M8, 4-pin, straight Head B: open cable ends Cable: PVC, unshielded, 5 m	DOL-0804-G05M	6009872
	Head A: female connector, M8, 4-pin, straight Head B: open cable ends Cable: PVC, unshielded, 10 m	DOL-0804-G10M	6010754
	Head A: female connector, M8, 4-pin, angled Head B: open cable ends Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871
	Head A: female connector, M8, 4-pin, angled Head B: open cable ends Cable: PVC, unshielded, 5 m	DOL-0804-W05M	6009873
	Head A: female connector, M8, 4-pin, angled Head B: open cable ends Cable: PVC, unshielded, 10 m	DOL-0804-W10M	6010755
	Head A: female connector, M8, 4-pin, straight Head B: - Cable: unshielded	DOS-0804-G	6009974
	Head A: female connector, M8, 4-pin, angled Head B: - Cable: unshielded	DOS-0804-W	6009975
	Head A: male connector, M8, 4-pin, straight Head B: - Cable: unshielded	STE-0804-G	6037323

## 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](http://www.sick.com)