



DATA SHEET

UF3-70B410

UF
Fork sensors

SICK

Sensor Intelligence



Illustration may differ

FORK SENSORS

UF3-70B410

ORDERING INFORMATION

Type	part no.
UF3-70B410	6034888

Further device versions and accessories at www.sick.com/UF

DETAILED TECHNICAL DATA

FEATURES

Functional principle	Ultrasonic detection principle
Housing design	Fork shaped
Dimensions (W x H x D)	16 mm x 48 mm x 92 mm
Fork width	3 mm
Fork depth	69 mm
Label detection	✓
Minimum detectable object (MDO)	Gap between Labels / Size of labels: 2 mm ¹⁾
Adjustment	Plus/minus button

¹⁾ Depends on the label thickness.

ELECTRONICS

Supply voltage	10 V DC ... 30 V DC ¹⁾
Ripple	< 10 % ²⁾
Current consumption	40 mA ³⁾
Initialization time	100 ms
Switching frequency	1.2 kHz ⁴⁾
Response time	≤ 300 µs
Switching output	PNP

¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

²⁾ May not fall below or exceed U_v tolerances.

³⁾ Without load.

⁴⁾ With light/dark ratio 1:1, typical, depending on material and speed.

⁵⁾ Minimum output current 0.3 mA.

⁶⁾ Reference voltage DC 50 V.

	NPN
Switching output (voltage)	PNP: HIGH = $U_v \leq 2 \text{ V}$ / LOW approx. 0 V NPN: HIGH = approx. U_v / LOW $\leq 2 \text{ V}$
Switching mode	Light/dark switching
Output current I_{max}	100 mA ⁵⁾
Protection class	III ⁶⁾
Circuit protection	Output Q short-circuit protected Interference pulse suppression
Connection type	Male connector M8, 4-pin

¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

²⁾ May not fall below or exceed U_v tolerances.

³⁾ Without load.

⁴⁾ With light/dark ratio 1:1, typical, depending on material and speed.

⁵⁾ Minimum output current 0.3 mA.

⁶⁾ Reference voltage DC 50 V.

MECHANICS

Housing material	Aluminum
Weight	95 g

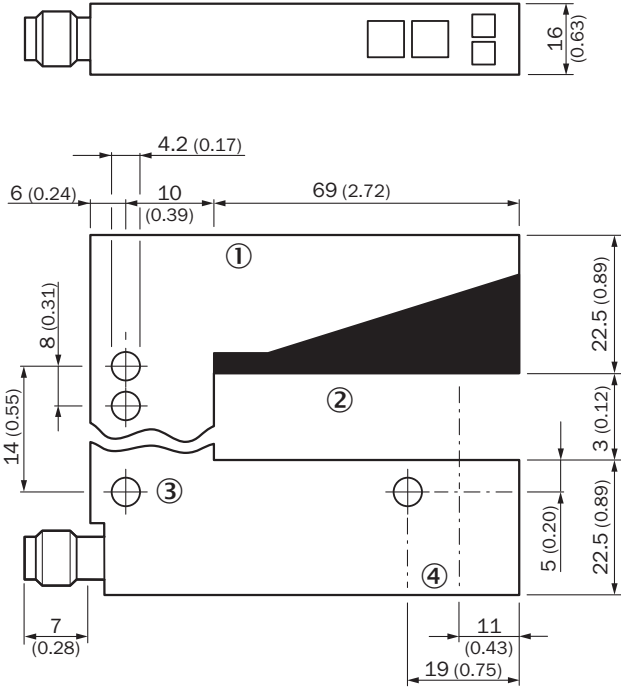
AMBIENT DATA

Ambient operating temperature	+5 °C ... +30 °C ¹⁾
Ambient temperature, storage	-30 °C ... +70 °C
Shock load	According to EN 60068-2-27
EMC	EN 60947-5-2 ²⁾
Enclosure rating	IP65
UL File No.	NRKH.E191603 & NRKH7.E191603

¹⁾ Do not bend below 0 °C.

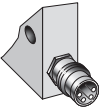
²⁾ The UFN complies with the Radio Safety Requirements (EMC) for the industrial sector (Radio Safety Class A). It may cause radio interference if used in residential areas.

DIMENSIONAL DRAWING

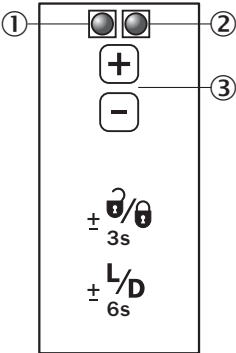


- Dimensions in mm (inch)
- ① Screw for removing the cover for cleaning purposes
 - ② Fork opening: fork width 3 mm, forks depth 69 mm
 - ③ Mounting hole, Ø 4.2 mm
 - ④ Detection axis

PINOUTS

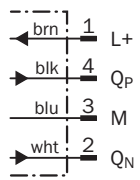


ADJUSTMENTS



- ① Function signal indicator (yellow), switching output
- ② Function indicator (red)
- ③ “+”/“-” buttons and function button

CONNECTION DIAGRAM



Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6034888



SICK AG
WALDKIRCH
GERMANY
SICK.COM

SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

SICK
Sensor Intelligence