

WF30-95B410

WF

FORK SENSORS





Ordering information

Туре	Part no.
WF30-95B410	6028446

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

Illustration may differ



Detailed technical data

Features

Functional principle	Optical detection principle
Dimensions (W x H x D)	10 mm x 60 mm x 110 mm
Fork width	30 mm
Fork depth	95 mm
Minimum detectable object (MD0)	0.2 mm
Label detection	√
Adjustment	Plus/minus button (Sensitivity, light/dark switching, key lock)
Teach-in mode	_
Output function	Light/darkswitching, selectable via button

Mechanics/electronics

Current consumption 40 mA Stability of response time ± 20 μs Jitter 40 μs Switching output PNP/NPN Switching output (voltage) PNP: HIGH = U _V ≤ 2 V / LOW approx. 0 V NPN: HIGH = approx. U _V / LOW ≤ 2 V Switching mode Light/dark switching Output current I _{max} . 100 mA Initialization time 100 ms Connection type Male connector M8, 4-pin Circuit protection U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression Enclosure rating IP65 Weight Approx. 36 g 160 g ¹¹)		
Jitter 40 μs Switching output PNP/NPN Switching output (voltage) PNP: HIGH = U _V ≤ 2 V / LOW approx. 0 V NPN: HIGH = approx. U _V / LOW ≤ 2 V Switching mode Light/dark switching Output current I _{max} . 100 mA Initialization time 100 ms Connection type Male connector M8, 4-pin Circuit protection U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression Enclosure rating IP65	Current consumption	40 mA
	Stability of response time	± 20 µs
Switching output (voltage) PNP: HIGH = $U_V \le 2 \text{ V} / \text{LOW approx. 0 V}$ NPN: HIGH = approx. $U_V / \text{LOW} \le 2 \text{ V}$ Switching mode Light/dark switching Output current I_{max} . 100 mA Initialization time 100 ms Connection type Male connector M8, 4-pin Circuit protection U_V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression Enclosure rating IP65	Jitter	40 μs
NPN: HIGH = approx. U _V / LOW ≤ 2 V Switching mode Light/dark switching Output current I _{max} . 100 mA Initialization time 100 ms Connection type Male connector M8, 4-pin Circuit protection U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression Enclosure rating IP65	Switching output	PNP/NPN
Output current I _{max.} Initialization time 100 ms Connection type Male connector M8, 4-pin U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression Enclosure rating IP65	Switching output (voltage)	
Initialization time 100 ms Connection type Male connector M8, 4-pin U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression Enclosure rating IP65	Switching mode	Light/dark switching
Connection type Male connector M8, 4-pin U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression Enclosure rating IP65	Output current I _{max.}	100 mA
Circuit protection U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression Enclosure rating IP65	Initialization time	100 ms
Output Q short-circuit protected Interference pulse suppression Enclosure rating IP65	Connection type	Male connector M8, 4-pin
	Circuit protection	Output Q short-circuit protected
Weight Approx. 36 g 160 g ¹⁾	Enclosure rating	IP65
	Weight	Approx. 36 g 160 g ¹⁾

¹⁾ Depending on fork width.

Housing material	Aluminum
------------------	----------

¹⁾ Depending on fork width.

Safety-related parameters

MTTF _D	97 years
DC _{avg}	0 %

Ambient data

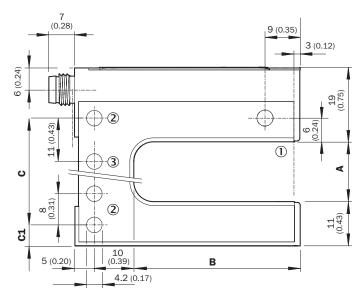
Shock load	According to EN 60068-2-27
UL File No.	NRKH.E191603

Classifications

ECLASS 5.0	27270909
ECLASS 5.1.4	27270909
ECLASS 6.0	27270909
ECLASS 6.2	27270909
ECLASS 7.0	27270909
ECLASS 8.0	27270909
ECLASS 8.1	27270909
ECLASS 9.0	27270909
ECLASS 10.0	27270909
ECLASS 11.0	27270909
ECLASS 12.0	27270909
ETIM 5.0	EC002720
ETIM 6.0	EC002720
ETIM 7.0	EC002720
ETIM 8.0	EC002720
UNSPSC 16.0901	39121528

Dimensional drawing (Dimensions in mm (inch))





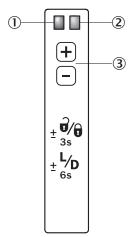
- ① Optical axis
- ② Mounting hole, Ø 4.2 mm
- ③ WF50/80/120 only

Dimensions in mm (inch)

	A Fork width	B Fork depth	С	C1
WF2	2	42/59/95	14	5
	(0.08)	(1.65/2.32/3.74)	(0.55)	(0.20)
WF5	5	42/59/95	14	6.5
	(0.20)	(1.65/2.32/3.74)	(0.55)	(0.20)
WF15	15	42/59/95	27	5
	(0.59)	(1.65/2.32/3.74)	(1.06)	(0.20)
WF30	30	42/59/95	42	5
	(1.18)	(1.65/2.32/3.74)	(1.65)	(0.20)
WF50	50	42/59/95	51	16
	(1.97)	(1.65/2.32/3.74)	(2.01)	(0.63)
WF80	80	42/59/95	81	16
	(3.15)	(1.65/2.32/3.74)	(3.19)	(0.63)
WF120	120	42/59/95	121	16
	(4.72)	(1.65/2.32/3.74)	(4.76)	(0.63)

Adjustments

Adjustment: plus/minus buttons (WFxx-B410)



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

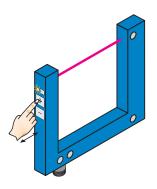
Connection diagram

Cd-086

Concept of operation

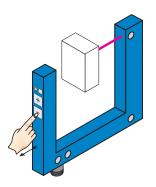
Setting the switching threshold via plus/minus buttons (WFxx-B410)

1. No object in the beam path



The yellow function indicator illuminates when the light received is at its optimum level. If necessary, increase sensitivity using the "+" button.

2. Object in the beam path



Yellow function indicator goes out. If necessary, reduce sensitivity using the "-" button.

Recommended accessories

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

	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
	 Connection type head A: Female connector, M8, 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 	YF8U14- 050VA3XLEAX	2095889

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

