



WF15-95B416S01

WF

FORK SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | Part no. |
|----------------|----------|
| WF15-95B416S01 | 6050966 |

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

Detailed technical data

Features

| | |
|--|---|
| Functional principle | Optical detection principle |
| Dimensions (W x H x D) | 10 mm x 45 mm x 110 mm |
| Fork width | 15 mm |
| Fork depth | 60 mm |
| Minimum detectable object (MDO) | 2 mm |
| Adjustment | Plus/minus button (Teach-in, sensitivity, light/dark switching, key lock) |
| Teach-in mode | 2-point teach-in |
| Output function | Light/darkswitching, selectable via button |
| Special features | Increased transmission intensity for thick materials |

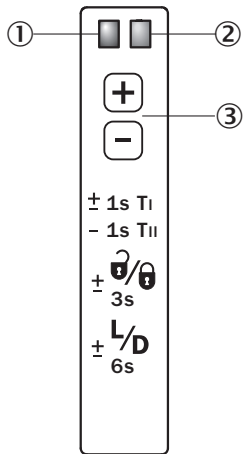
Mechanics/electronics

| | |
|---|---|
| Stability of response time | ± 20 µs |
| Jitter | 40 µs |
| Switching output | PNP/NPN |
| Switching output (voltage) | PNP: HIGH = $U_V \leq 2 \text{ V}$ / LOW approx. 0 V NPN: HIGH = approx. U_V / LOW ≤ 2 V |
| Switching mode | Light/dark switching |
| Output current I_{max} | 100 mA |
| 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 ¹⁾ |
| Housing material | Aluminum |

¹⁾ Depending on fork width.

Adjustments

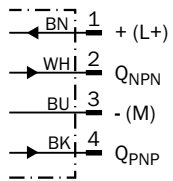
Adjustment: teach-in via plus/minus buttons (WFxx-B416)



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

Connection diagram

Cd-086

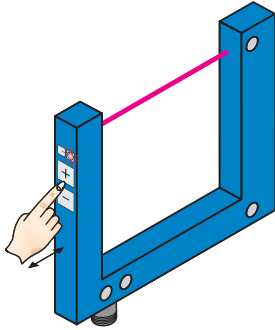


Concept of operation

Teach-in via plus/minus buttons (WFxx-B416)

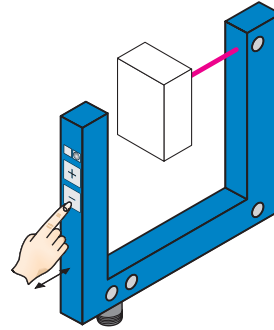
The switching threshold is set automatically. Fine adjustment is possible using the “+”/“–” buttons.

1. No object or substrate in the beam path



Press the “+” and “–” buttons together and hold for 1 second. The red function indicator flashes slowly.



2. Object or label in the beam path





Press the “–” button for 1 second. Red function indicator goes out.

Notes

Material speed = 0 (machine at a standstill).



-  Once teach-in process is complete, the switching threshold can be adjusted at any time using the “+” or “–” button. To make minor adjustments, press the “+” or “–” button once.
-  To configure settings quickly, keep the “+” or “–” button pressed for longer.

 Press both the “+” and “–” buttons together (3 seconds) to lock the device and prevent unintentional actuation.

 Press both the “+” and “–” buttons together (6 seconds) to define the switching function (light/dark switching). Standard setting: \bar{Q} = light switching.

Recommended accessories

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

| | Brief description | Type | Part no. |
|---|--|--------------------|----------|
| Others | | | |
|  | <ul style="list-style-type: none"> • 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 |
|  | <ul style="list-style-type: none"> • 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:

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