



SICK Sensor Intelligence.

FORK SENSORS



Ordering information

| Туре       | Part no. |
|------------|----------|
| WF2-40B110 | 6058971  |

Other models and accessories -> www.sick.com/WF

Illustration may differ



#### Detailed technical data

#### Features

| Functional principle        | Fork sensor  |
|-----------------------------|--|
| Functional principle detail | Optical detection principle                          |
| Dimensions (W x H x D)      | 12 mm x 37.1 mm x 80 mm                              |
| Fork width                  | 2 mm   |
| Fork depth                  | 40 mm  |
| Label detection             | ✓  |
| Light source                | LED, infrared  |
| Output function             | Light/darkswitching, adjustable via reverse polarity |

#### Mechanics/electronics

| Current consumption              | 40 mA <sup>1)</sup>  |
|----------------------------------|--|
| Switching frequency              | 10 kHz <sup>2)</sup>   |
| Response time                    | 30 μs <sup>3)</sup>  |
| Switching output                 | PNP/NPN  |
| Switching output (voltage)       | PNP: HIGH = $U_V \le 2 V / LOW$ approx. 0 V<br>NPN: HIGH = approx. $U_V / LOW \le 2 V$ |
| Switching mode                   | Light/dark switching   |
| Output current I <sub>max.</sub> | 100 mA   |
| Connection type                  | Cable, 4-wire, 2 m   |
| Protection class                 | III <sup>4)</sup>  |
| Circuit protection               | Output Q short-circuit protected<br>Interference pulse suppression                     |

<sup>1)</sup> Without load.

<sup>3)</sup> Signal transit time with resistive load.

<sup>4)</sup> Reference voltage DC 50 V.

<sup>5)</sup> Depending on fork width.

<sup>&</sup>lt;sup>2)</sup> With light/dark ratio 1:1, without timer stage.

## WF2-40B110 | WF

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| Enclosure rating | IP65                             |
|------------------|----------------------------------|
| Weight           | Approx. 36 g 160 g <sup>5)</sup> |
| Housing material | Metal, Aluminum                  |

<sup>1)</sup> Without load.

<sup>2)</sup> With light/dark ratio 1:1, without timer stage.

<sup>3)</sup> Signal transit time with resistive load.

<sup>4)</sup> Reference voltage DC 50 V.

<sup>5)</sup> Depending on fork width.

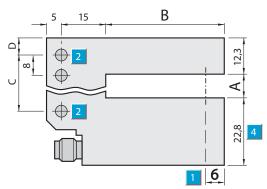
### Safety-related parameters

| MTTFD                  | 97 years                   |
|------------------------|----------------------------|
| DC <sub>avg</sub>      | 0 %                        |
| Ambient data           |                            |
| Ambient data           |                            |
| Ambient light immunity | ≤ 10,000 lx                |
| 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                   |

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

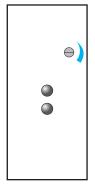




① Optical axis

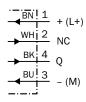
② Mounting hole, Ø 4.2 mm

### Adjustments



#### **Connection diagram**

Cd-040



# 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



Online data sheet

