



# V20W-0101000

V200 Work Station Extended

SAFE 3D CAMERAS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

| Type         | part no. |
|--------------|----------|
| V20W-0101000 | 1042027  |

Other models and accessories → [www.sick.com/V200\\_Work\\_Station\\_Extended](http://www.sick.com/V200_Work_Station_Extended)

### Detailed technical data

#### Features

|                                      |  |
|--------------------------------------|--|
| <b>Technology</b>                    | 2D camera  |
| <b>Resolution</b>                    | 20 mm, 24 mm, 30 mm <sup>1)</sup>  |
| <b>Protective field range</b>        |  |
| 20 mm resolution                     | 1.41 m   |
| 24 mm resolution                     | 1.7 m  |
| 30 mm resolution                     | 2.12 m   |
| <b>Protective field size</b>         |  |
| 20 mm resolution                     | 1 m x 1 m  |
| 24 mm resolution                     | 1.2 m x 1.2 m  |
| 30 mm resolution                     | 1.5 m x 1.5 m  |
| <b>Aspect ratio protective field</b> | 1:1 to 2:1   |
| <b>Response time</b>                 | 20 ms  |
| <b>Items supplied</b>                | Including teaching pen, operating instructions on CD-ROM and Quickstart (instructions for quick commissioning) |

<sup>1)</sup> Depending on resolution set.

#### Safety-related parameters

|   |   |
|---|---|
| <b>Type</b>   | Type 2 (IEC 61496-1)                              |
| <b>Safety integrity level</b>   | SIL 1 (IEC 61508)                                 |
| <b>Category</b>   | Category 2 (EN ISO 13849)                         |
| <b>Test rate (internal test)</b>  | 50 /s (EN ISO 13849)                              |
| <b>Maximum demand rate</b>  | 30 min <sup>-1</sup> (EN ISO 13849) <sup>1)</sup> |
| <b>Performance level</b>  | PL c (EN ISO 13849)                               |
| <b>PFH<sub>D</sub> (mean probability of a dangerous failure per hour)</b> | 5.6 x 10 <sup>-9</sup>                            |

<sup>1)</sup> Between two requirements on a safety-related response of the device, at least 100 internal or external tests must be carried out.

|   |  |
|---|--|
| <b>T<sub>M</sub> (mission time)</b>       | 20 years (EN ISO 13849)                |
| <b>Safe state in the event of a fault</b> | At least one OSSD is in the OFF state. |

<sup>1)</sup> Between two requirements on a safety-related response of the device, at least 100 internal or external tests must be carried out.

## Functions

|   | Functions | Delivery status |
|---|-----------|-----------------|
| <b>Restart interlock</b>                | ✓         | Deactivated     |
| <b>External device monitoring (EDM)</b> | ✓         | Deactivated     |
| <b>Cascading</b>                        | ✓         |                 |
| <b>Teach/sync</b>                       | ✓         |                 |

## Interfaces

|                         |                           |
|-------------------------|---------------------------|
| <b>Connection type</b>  | Male connector M12, 8-pin |
| Permitted cable length  | ≤ 7.5 m <sup>1)</sup>     |
| <b>Display elements</b> | LEDs                      |

<sup>1)</sup> With a wire cross-section of 0.25 mm<sup>2</sup>.

## Electronics

|  |  |
|--|--|
| <b>Protection class</b>                        | III (EN 50178)   |
| <b>Supply voltage V<sub>S</sub></b>            | 24 V DC (19.2 V DC ... 28.8 V DC)                                      |
| <b>Power consumption</b>                       | ≤ 165 mA <sup>1)</sup><br>≤ 690 mA <sup>2)</sup>                       |
| <b>Output signal switching devices (OSSDs)</b> | 2 PNP semiconductors, short-circuit protected, cross-circuit monitored |
| ON state, switching voltage HIGH               | V <sub>S</sub> - 2.7 V DC ... V <sub>S</sub>                           |
| OFF state, switching voltage LOW               | ≤ 3.5 V DC   |

<sup>1)</sup> At 24 V DC without output load.

<sup>2)</sup> Including maximum output load.

## Mechanics

|                               |                           |
|-------------------------------|---------------------------|
| <b>Dimensions (W x H x D)</b> | 93.9 mm x 50 mm x 93.9 mm |
| <b>Weight</b>                 | 355 g                     |
| <b>Housing material</b>       | Aluminum die cast         |

## Ambient data

|                                      |                                     |
|--------------------------------------|-------------------------------------|
| <b>Enclosure rating</b>              | IP54 (EN 60529)                     |
| <b>Ambient operating temperature</b> | 0 °C ... +50 °C                     |
| <b>Storage temperature</b>           | -25 °C ... +70 °C                   |
| <b>Air humidity</b>                  | 15 % ... 95 %, Non-condensing       |
| <b>Vibration resistance</b>          | 5 g, 10 Hz ... 55 Hz (EN 60068-2-6) |

## Other information

|                    |        |
|--------------------|--------|
| <b>Wave length</b> | 850 nm |
|--------------------|--------|

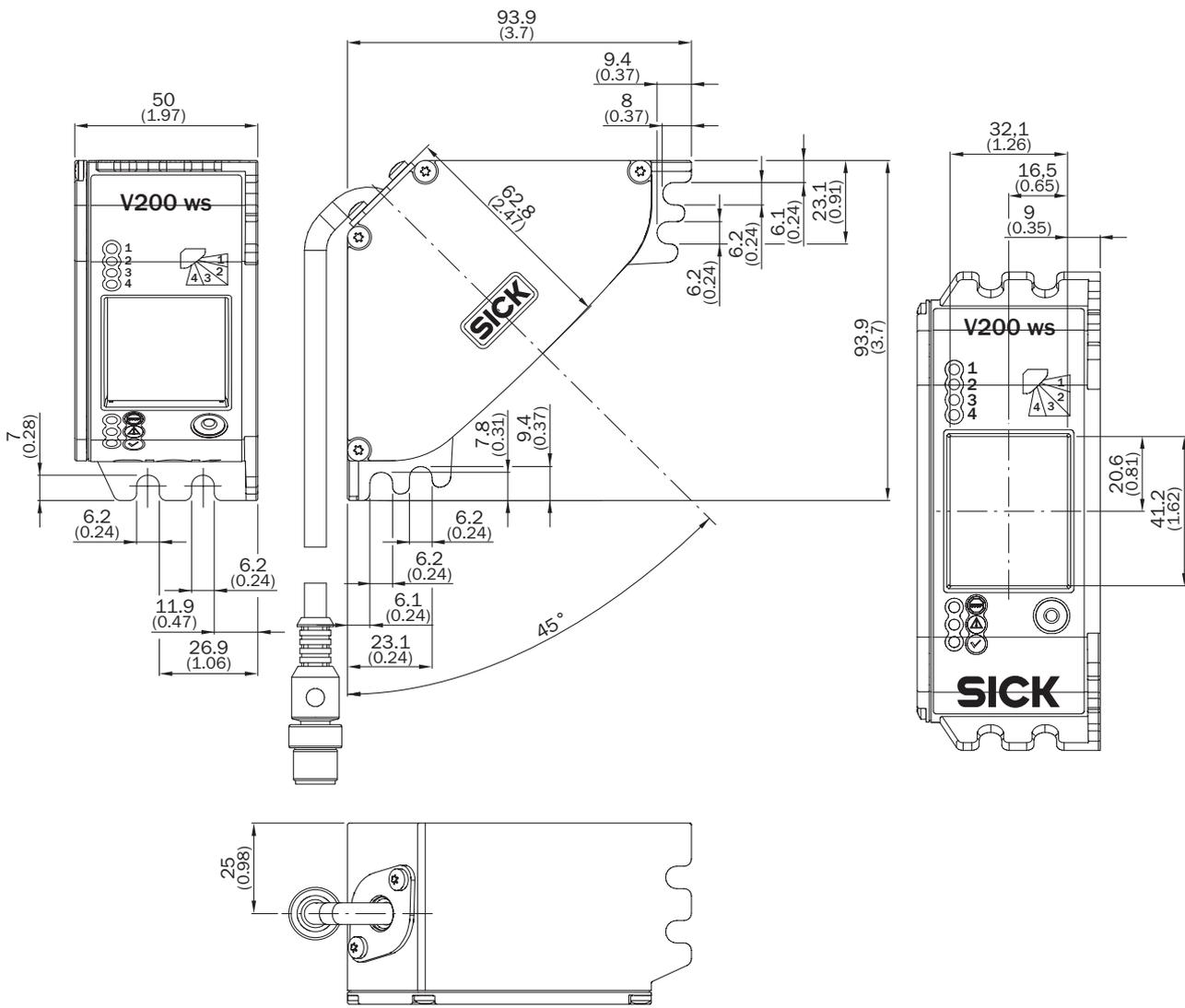
## Certificates

|                                       |   |
|---------------------------------------|---|
| <b>ACMA declaration of conformity</b> | ✓ |
| <b>China RoHS</b>                     | ✓ |
| <b>cULus certificate</b>              | ✓ |

Classifications

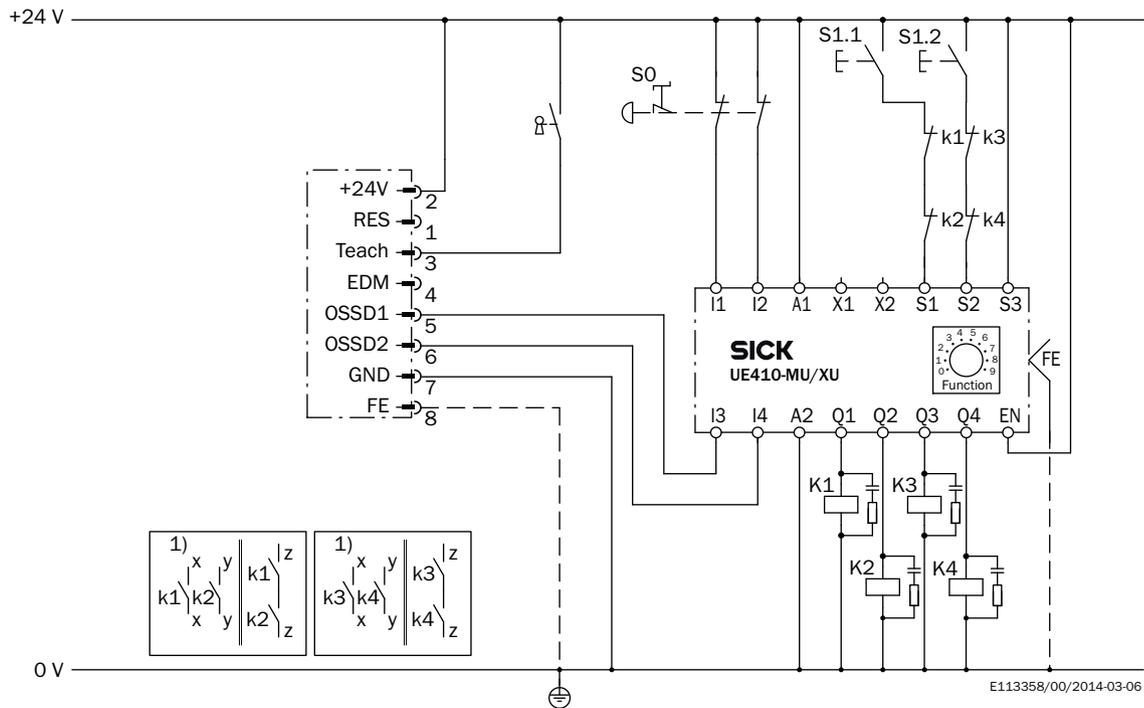
|                       |          |
|-----------------------|----------|
| <b>ECLASS 5.0</b>     | 27272790 |
| <b>ECLASS 5.1.4</b>   | 27272790 |
| <b>ECLASS 6.0</b>     | 27272790 |
| <b>ECLASS 6.2</b>     | 27272790 |
| <b>ECLASS 7.0</b>     | 27272790 |
| <b>ECLASS 8.0</b>     | 27272790 |
| <b>ECLASS 8.1</b>     | 27272790 |
| <b>ECLASS 9.0</b>     | 27272790 |
| <b>ECLASS 10.0</b>    | 27272790 |
| <b>ECLASS 11.0</b>    | 27272790 |
| <b>ECLASS 12.0</b>    | 27272790 |
| <b>ETIM 5.0</b>       | EC001511 |
| <b>ETIM 6.0</b>       | EC001511 |
| <b>ETIM 7.0</b>       | EC001511 |
| <b>ETIM 8.0</b>       | EC001511 |
| <b>UNSPSC 16.0901</b> | 39121528 |

Dimensional drawing



Dimensions in mm (inch)

### Connection diagram Secure camera system to Flexi Classic safety controller



### Recommended accessories

Other models and accessories → [www.sick.com/V200\\_Work\\_Station\\_Extended](http://www.sick.com/V200_Work_Station_Extended)

|   | Brief description   | Type         | part no. |
|---|---|--------------|----------|
| Mounting systems  |   |              |          |
|  | <ul style="list-style-type: none"> <li><b>Description:</b> Mounting kit for mounting the sensor on the profile frame</li> </ul> | Mounting kit | 2045375  |

|   | Brief description   | Type                 | part no. |
|---|---|----------------------|----------|
| reflectors and optics   |   |                      |          |
|  | <ul style="list-style-type: none"> <li><b>Description:</b> Resolution set for 20 mm resolution and protective field size from 0.4 x 0.4 m to 1.0 m x 1.0 m</li> </ul> | Resolution set 20 mm | 2051336  |
|  | <ul style="list-style-type: none"> <li><b>Description:</b> Resolution set for 24 mm resolution and protective field size from 0.4 x 0.4 m to 1.2 m x 1.2 m</li> </ul> | Resolution set 24 mm | 2051338  |
|  | <ul style="list-style-type: none"> <li><b>Description:</b> Resolution set for 30 mm resolution and protective field size from 0.6 x 0.6 m to 1.5 m x 1.5 m</li> </ul> | Resolution set 30 mm | 2051339  |
| Commissioning aids and test equipment   |   |                      |          |
|  | <ul style="list-style-type: none"> <li><b>Product:</b> Configuration devices</li> <li><b>Description:</b> Teach-in pin for safety camera systems</li> </ul>           | Teaching pen         | 4052939  |

## 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)