



CLV490-0010

CLV49x

FIXED MOUNT BARCODE SCANNERS

**SICK**  
Sensor Intelligence.



## Ordering information

| Type        | Part no. |
|-------------|----------|
| CLV490-0010 | 1016958  |

Other models and accessories → [www.sick.com/CLV49x](http://www.sick.com/CLV49x)



## Detailed technical data

### Features

|                                       |   |
|---------------------------------------|---|
| <b>Task</b>                           | Identifying - 1D code                                     |
| <b>Version</b>                        | Standard Density  |
| <b>Connection type</b>                | Standard  |
| <b>Reading field</b>                  | Front   |
| <b>Scanner design</b>                 | Line scanner  |
| <b>Optical focus</b>                  | Auto focus (alternative: dynamic focus control)           |
| <b>No. of distance configurations</b> | ≤ 8   |
| <b>Focus adjustment time</b>          | ≤ 20 ms   |
| <b>Focus trigger source</b>           | Switching inputs "IN 0 ... IN 4" / data interface / timer |
| <b>Light source</b>                   | Visible red light (650 nm)                                |
| <b>Laser class</b>                    | 2 (DIN EN 60825-1)  |
| <b>Aperture angle</b>                 | ≤ 60°   |
| <b>Reading distance</b>               | 500 mm ... 2,100 mm <sup>1)</sup>                         |
| <b>Scanning frequency</b>             | 600 Hz ... 1,200 Hz                                       |
| <b>Code resolution</b>                | 0.25 mm ... 1 mm  |
| <b>On delay</b>                       | 35 ... 40 min at -35 °C and 24 V DC                       |

<sup>1)</sup> For details see reading field diagram.

### Mechanics/electronics

|                          |   |
|--------------------------|---|
| <b>Connection type</b>   | 1 x 15-pin D-sub HD plug<br>1 x 15-pin D-Sub HD device female connector |
| <b>Supply voltage</b>    | 18 V DC ... 30 V DC   |
| <b>Power consumption</b> | 16 W  |
| <b>Housing</b>           | Aluminum die cast, no materials containing silicone on outside          |
| <b>Housing color</b>     | Light blue (RAL 5012)   |
| <b>Enclosure rating</b>  | IP65 (DIN 40 050)   |
| <b>Protection class</b>  | III (VDE 0106)  |
| <b>Weight</b>            | 1,500 g   |

|                               |                         |
|-------------------------------|-------------------------|
| <b>Dimensions (L x W x H)</b> | 117 mm x 117 mm x 94 mm |
| <b>MTBF</b>                   | 80,000 h                |

### Performance

|   |  |
|---|--|
| <b>Bar code types</b>                         | All current code types, Code 39, Code 128, Code 93, Codabar, GS1-128 / EAN 128, UPC / GTIN / EAN, Interleaved 2 of 5 |
| <b>Print ratio</b>                            | 2:1 ... 3:1  |
| <b>No. of codes per scan</b>                  | 1 ... 12 (Standard decoder)<br>1 ... 6 (SMART decoder)   |
| <b>No. of codes per reading interval</b>      | 1 ... 50 (auto-discriminating)   |
| <b>No. of characters per reading interval</b> | 600  |
| <b>No. of multiple readings</b>               | 1 ... 99   |

### Interfaces

|                           |   |
|---------------------------|---|
| <b>Digital inputs</b>     | 6 (Sensor, IN 0 ... IN 4)   |
| <b>Digital outputs</b>    | 4 ("Result 1" ... "Result 4")   |
| <b>Reading pulse</b>      | Switching input "Sensor" (+ "IN 4"), non-powered, data interface, OTS (Omni tracking) |
| <b>Optical indicators</b> | 4 LEDs (function indicator)   |

### Ambient data

|  |  |
|--|--|
| <b>Electromagnetic compatibility (EMC)</b> | EN 61000-6-2 (2001-10), EN 61000-6-3 (2001-10), EN 61000-6-3 / A11 (2004-07) |
| <b>Vibration resistance</b>                | EN 60068-2-6 (1995)  |
| <b>Shock resistance</b>                    | EN 60068-2-27 (1993)   |
| <b>Ambient operating temperature</b>       | 0 °C ... +40 °C  |
| <b>Storage temperature</b>                 | -20 °C ... +70 °C  |
| <b>Permissible relative humidity</b>       | ± 90 %, Non-condensing   |
| <b>Ambient light immunity</b>              | 2,000 lx, on barcode   |

### General notes

|                         |              |
|-------------------------|--------------|
| <b>Life cycle phase</b> | Discontinued |
|-------------------------|--------------|

### Classifications

|                     |          |
|---------------------|----------|
| <b>ECLASS 5.0</b>   | 27280102 |
| <b>ECLASS 5.1.4</b> | 27280102 |
| <b>ECLASS 6.0</b>   | 27280102 |
| <b>ECLASS 6.2</b>   | 27280102 |
| <b>ECLASS 7.0</b>   | 27280102 |
| <b>ECLASS 8.0</b>   | 27280102 |
| <b>ECLASS 8.1</b>   | 27280102 |
| <b>ECLASS 9.0</b>   | 27280102 |
| <b>ECLASS 10.0</b>  | 27280102 |
| <b>ECLASS 11.0</b>  | 27280102 |
| <b>ECLASS 12.0</b>  | 27280102 |
| <b>ETIM 5.0</b>     | EC002550 |
| <b>ETIM 6.0</b>     | EC002550 |
| <b>ETIM 7.0</b>     | EC002550 |

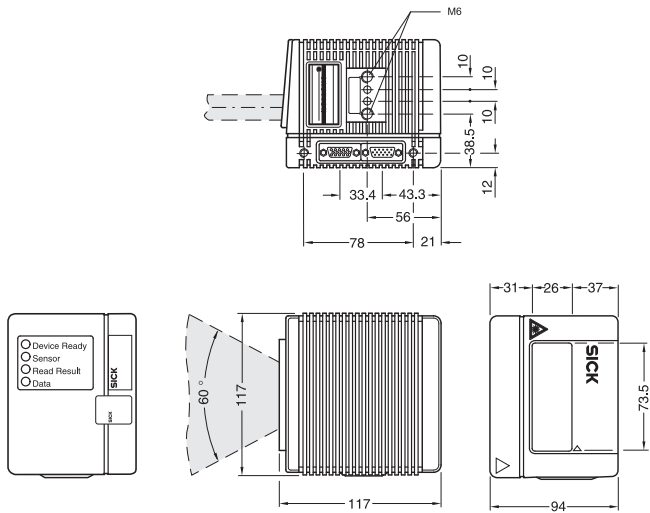
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## FIXED MOUNT BARCODE SCANNERS

|                       |          |
|-----------------------|----------|
| <b>ETIM 8.0</b>       | EC002550 |
| <b>UNSPSC 16.0901</b> | 43211701 |

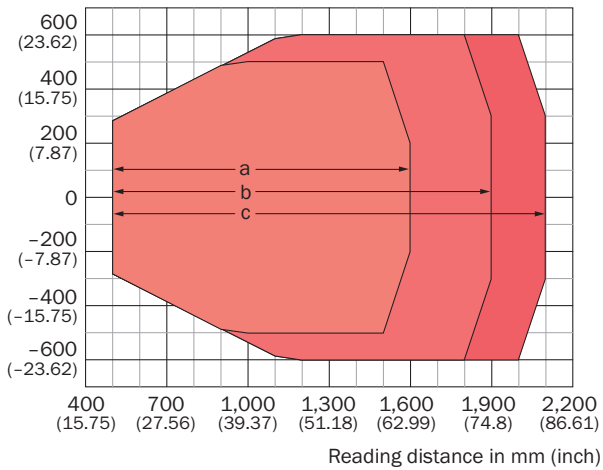
### Dimensional drawing (Dimensions in mm (inch))

CLV48x/49x front



### Reading field diagram

Reading field height in mm (inch)







#### Resolution

- a: 0.30 mm (11.8 mil)
- b: 0.35 mm (13.8 mil)
- c: 0.50 mm (19.7 mil)

## Recommended accessories

Other models and accessories → [www.sick.com/CLV49x](http://www.sick.com/CLV49x)

|   | Brief description  | Type                     | Part no. |
|---|--|--------------------------|----------|
| Mounting brackets and plates  |  |                          |          |
|  | Simple mounting bracket  | Mounting bracket         | 2013824  |
| Others  |  |                          |          |
|  | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Male connector, female connector, D-Sub-HD, 15-pin</li> <li>• <b>Connection type head B:</b> Male connector, D-Sub-HD, 15-pin</li> <li>• <b>Signal type:</b> Power, serial, CAN, digital I/Os</li> <li>• <b>Cable:</b> 3 m</li> <li>• <b>Description:</b> Power, serial, CAN, digital I/Os, shielded, to connection module CDM490</li> </ul>                       | Cover for male connector | 2020307  |
|  | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Male connector, female connector, D-Sub-HD, D-Sub-HD, 15-pin</li> <li>• <b>Connection type head B:</b> Male connector, D-Sub-HD, 15-pin</li> <li>• <b>Signal type:</b> Power, serial, CAN, digital I/Os</li> <li>• <b>Cable:</b> 3 m, 15-wire</li> <li>• <b>Description:</b> Power, serial, CAN, digital I/Os, unshielded, to connection module CD-M42x</li> </ul> | Connection cable         | 2030023  |
| Modules   |  |                          |          |
|  | <ul style="list-style-type: none"> <li>• <b>Sub product family:</b> CDM490</li> <li>• <b>Fieldbus interface:</b> PROFIBUS DP, Ethernet, DeviceNet™</li> <li>• <b>Supported products:</b> CLV69x, LMS400</li> <li>• <b>Brief description:</b> Modular connection module for one sensor</li> </ul>   | CDM490-0001              | 1025363  |

## Recommended services

Additional services → [www.sick.com/CLV49x](http://www.sick.com/CLV49x)

|   | Type                  | Part no. |
|---|-----------------------|----------|
| Performance check   |                       |          |
| <ul style="list-style-type: none"> <li>• <b>Product area:</b> Fixed mount barcode scanners</li> <li>• <b>Range of services:</b> Inspection of defined functions, e.g., reading performance</li> <li>• <b>Duration:</b> Additional work will be invoiced separately</li> </ul>   | Performance check CLV | 1682028  |
| Maintenance   |                       |          |
| <ul style="list-style-type: none"> <li>• <b>Product area:</b> Fixed mount barcode scanners</li> <li>• <b>Range of services:</b> Inspection, analysis and restoring of defined functions, Inspection and adjustment of reading configuration, code configuration, data processing and network or interfaces</li> <li>• <b>Duration:</b> Additional work will be invoiced separately</li> </ul> | Maintenance CLV       | 1611420  |

## 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)