



CLV601-OD200

CLV60x

FIXED MOUNT BARCODE SCANNERS

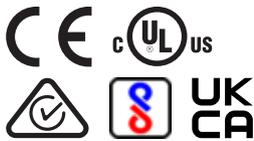
SICK
Sensor Intelligence.



Ordering information

| Type | part no. |
|--------------|----------|
| CLV601-0D200 | 1079204 |

Other models and accessories → www.sick.com/CLV60x



Detailed technical data

Features

| | | | | | | | |
|---------------------------|--|--------|---|---------|---|--------|--|
| Connection type | Cable | | | | | | |
| Reading field | Front | | | | | | |
| Sensor type | Line scanner | | | | | | |
| Optical focus | Fixed focus (30 mm) | | | | | | |
| Sensor | CMOS line sensor | | | | | | |
| Sensor resolution | 2,048 px | | | | | | |
| LED class | Risk group 0 (IEC 62471:2006-07, EN 62471:2008-09) | | | | | | |
| Light source | Light spot, LED, Visible, Red, 626 nm | | | | | | |
| Aperture angle | ≤ 71° | | | | | | |
| Reading distance | 15 mm ... 70 mm ¹⁾ | | | | | | |
| Scanning frequency | 750 Hz | | | | | | |
| Reading angle | <table border="0"> <tr> <td>Tilt α</td> <td>± 5° (with code resolution ≥ 0.125 mm) ± 10° (with code resolution ≥ 0.15 mm) ± 15° (with code resolution ≥ 0.2 mm) ± 25° (with code resolution ≥ 0.35 mm)</td> </tr> <tr> <td>Pitch β</td> <td>± 6° (with code resolution ≥ 0.2 mm) ± 15° (with code resolution ≥ 0.5 mm)</td> </tr> <tr> <td>Skew γ</td> <td>± 20° (with code resolution ≥ 0.2 mm) ± 30° (with code resolution ≥ 0.5 mm)</td> </tr> </table> | Tilt α | ± 5° (with code resolution ≥ 0.125 mm) ± 10° (with code resolution ≥ 0.15 mm) ± 15° (with code resolution ≥ 0.2 mm) ± 25° (with code resolution ≥ 0.35 mm) | Pitch β | ± 6° (with code resolution ≥ 0.2 mm) ± 15° (with code resolution ≥ 0.5 mm) | Skew γ | ± 20° (with code resolution ≥ 0.2 mm) ± 30° (with code resolution ≥ 0.5 mm) |
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| Code resolution | 0.125 mm ... 0.5 mm | | | | | | |

¹⁾ For details see reading field diagram.

Mechanics/electronics

| | |
|------------------------|--------------------------------------|
| Connection type | 1 x 9-pin D-sub male connector (2 m) |
| Supply voltage | 5 V DC, ± 10 % |

| | |
|-------------------------------|---|
| Power consumption | Typ. 1 W |
| Housing material | Zinc diecast |
| Housing color | Light blue (RAL 5012), black (RAL 9005) |
| Window material | Plastic |
| Enclosure rating | IP40 (DIN 40 050) |
| Protection class | III (VDE 0106/IEC 1010-1) |
| Weight | 230 g, with connecting cable |
| Dimensions (L x W x H) | 55 mm x 52 mm x 20 mm |
| MTBF | 100,000 h |

Performance

| | |
|---|---|
| Readable code structures | 1D codes |
| Bar code types | All current code types, Code 39, Code 128, Code 93, Codabar, UPC / GTIN / EAN, Interleaved 2 of 5 |
| Code printing process | Label (printed codes) |
| Print ratio | 2:1 ... 3:1 |
| No. of codes per scan | 1 ... 1 |
| No. of codes per reading interval | 1 ... 15 (auto-discriminating) |
| No. of characters per reading interval | 450 |
| Number of characters per code | ≤ 30 |
| No. of multiple readings | 1 ... 100 |

Interfaces

| | |
|-------------------------------|---|
| Serial | ✓, RS-232 |
| Function | Data interface (read result output), Service interface |
| Data transmission rate | 2,400 Baud ... 250 kBaud, AUX: 57.6 kBaud |
| Digital inputs | 1 ("Input 1", Vin = max. 30 V) |
| Digital outputs | 2 ("Output 1", "Output 2", Iout = max. 50 mA) |
| Reading pulse | Start: Digital input, free, command, auto pulse, stop: Digital input, free, command, timer, Good Read |
| Optical indicators | 1 RGB LED (multifunctional) |
| Acoustic indicators | Beeper/buzzer (can be switched off, can be allocated as a result indication function) |
| Configuration software | SOPAS ET |

Ambient data

| | |
|--|--|
| Electromagnetic compatibility (EMC) | EN 61000-6-3/A1:2011-03 / EN 61000-6-2:2005-08 |
| Vibration resistance | EN 60068-2-6:2008-02 |
| Shock resistance | EN 60068-2-27:2009-05 |
| Ambient operating temperature | 0 °C ... +50 °C |
| Storage temperature | -20 °C ... +70 °C |
| Permissible relative humidity | 90 %, Non-condensing |
| Ambient light immunity | 5,000 lx, on barcode |
| Bar code print contrast (PCS) | ≥ 60 % |

General notes

| | |
|-----------------------|------------------------------|
| Items supplied | Single scanner, Safety Notes |
|-----------------------|------------------------------|

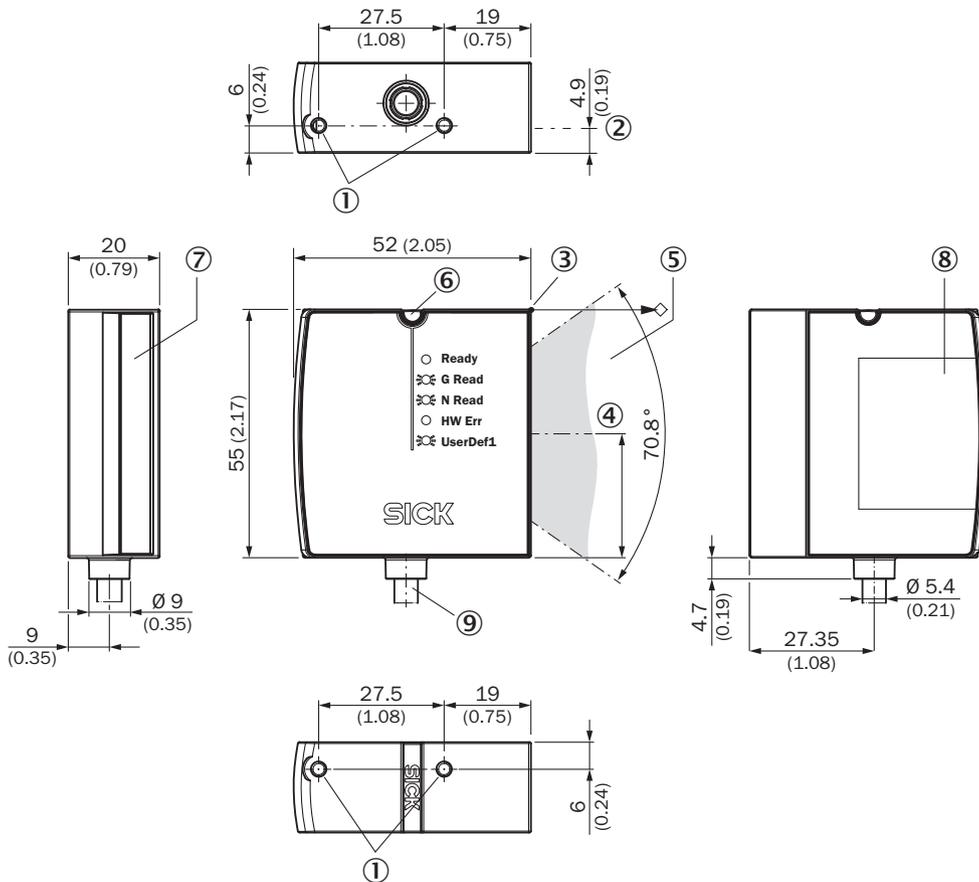
Certificates

| | |
|--|---|
| EU declaration of conformity | ✓ |
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| China RoHS | ✓ |
| cULus certificate | ✓ |
| BIS registration | ✓ |
| Information according to Art. 3 of Data Act (Regulation EU 2023/2854) | ✓ |

Classifications

| | |
|-----------------------|----------|
| ECLASS 5.0 | 27280102 |
| ECLASS 5.1.4 | 27280102 |
| ECLASS 6.0 | 27280102 |
| ECLASS 6.2 | 27280102 |
| ECLASS 7.0 | 27280102 |
| ECLASS 8.0 | 27280102 |
| ECLASS 8.1 | 27280102 |
| ECLASS 9.0 | 27280102 |
| ECLASS 10.0 | 27280102 |
| ECLASS 11.0 | 27280102 |
| ECLASS 12.0 | 27280102 |
| ETIM 5.0 | EC002550 |
| ETIM 6.0 | EC002550 |
| ETIM 7.0 | EC002550 |
| ETIM 8.0 | EC002550 |
| UNSPSC 16.0901 | 43211701 |

Dimensional drawing CLV60x, front

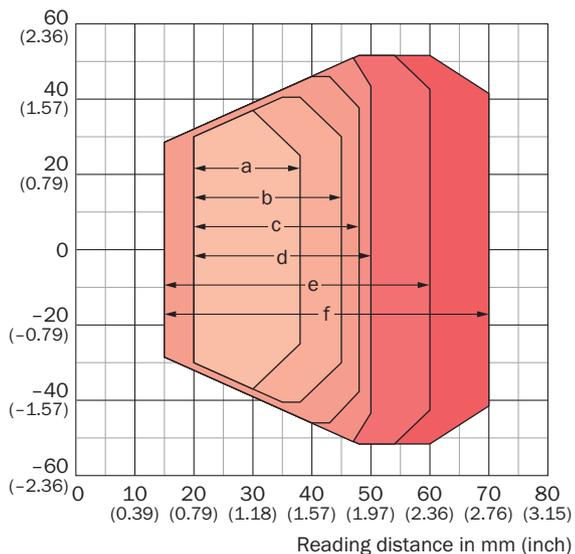


Dimensions in mm (inch)

- ① Mounting thread M3 x 5 mm
- ② Optical axis, reading window
- ③ Reading distance reference point
- ④ Reading field axis center
- ⑤ Reading field
- ⑥ status LED
- ⑦ Reading field
- ⑧ type label
- ⑨ Connection cable

Reading field diagram

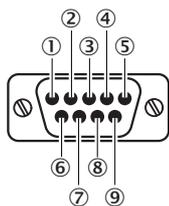
Reading field height in mm (inch)



Resolution

- a: 0.125 mm (4.9 mil)
- b: 0.15 mm (5.9 mil)
- c: 0.2 mm (7.9 mil)
- d: 0.25 mm (9.8 mil)
- e: 0.35 mm (13.8 mil)
- f: 0.5 mm (19.7 mil)

Connection type



- ① In₁
- ② RxD (HOST)
- ③ TxD (HOST)
- ④ OUT1
- ⑤ GND
- ⑥ OUT2
- ⑦ RxD
- ⑧ TxD
- ⑨ +5 V

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Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

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