



CLV 405 Bar Code Scanner Standard Line

Small, but with big performance

With the bar code scanners of the CLV 405 product family, SICK can solve ambitious applications in different market segments such as packaging machinery, robotic handling, clinical analyzers or document processing in an intelligent manner.

Packaged in an extremely small housing of only 45.5 x 45.5 x 21.6 mm³, the CLV 405 is able to identify bar codes with a scanning frequency of up to 1,000 Hz. In addition, very long bar code labels can be decoded at a short reading distance, because the laser light is emitted with an aperture angle of 70°.

It goes without saying that the CLV 405 also offers maximum performance regarding variable reading distances and operating comfort. With the help of the Setup-Button, which is integrated in the housing, different procedures like Auto-Setup, Percentage Evaluation of reading quality, Matchcode Teach-In or permanent saving of reading parameters can be started. With the above functionality the CLV 405 can be easily first time installed onsite without any PC support.

Your benefits:

- Easy mechanical installation even in space limited applications due to the very compact size
- Identification of long bar code labels at short reading distances
- High first read rate even for fast moving objects
- First time onsite installation without PC support possible

The CLV 405 at a glance:

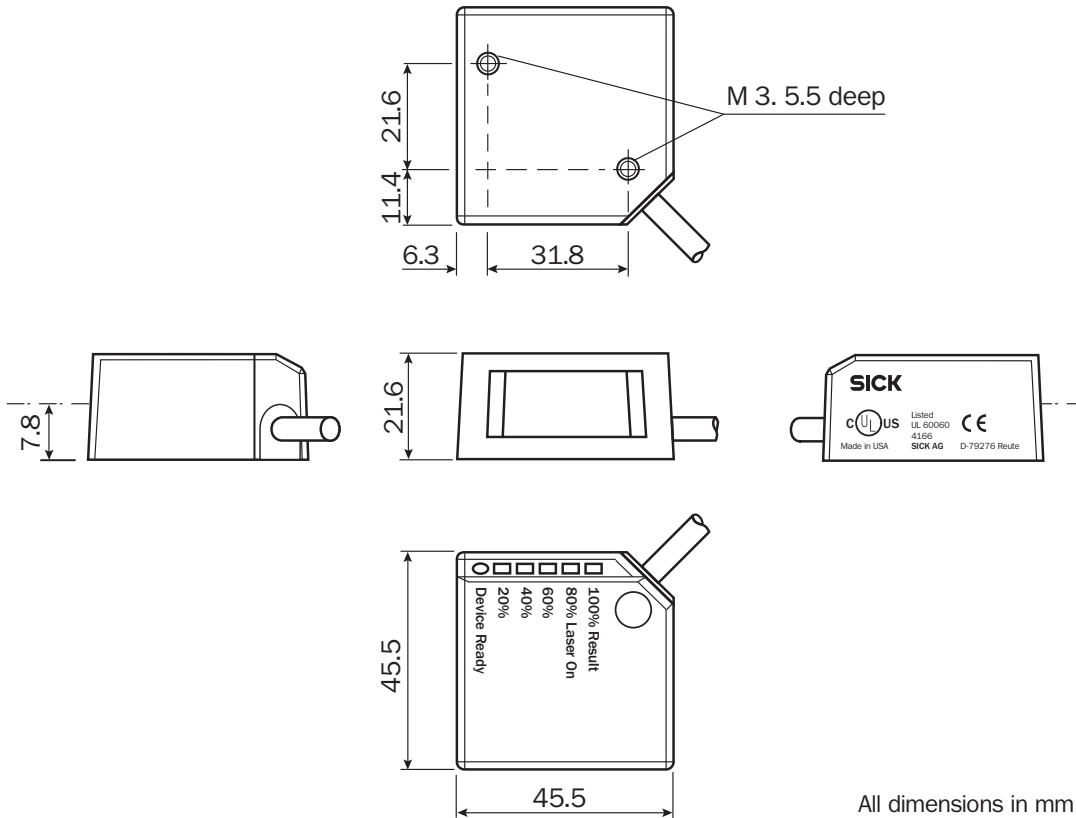
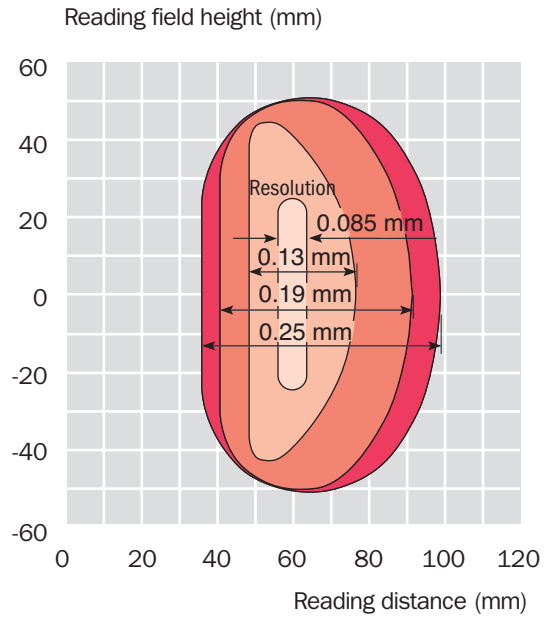
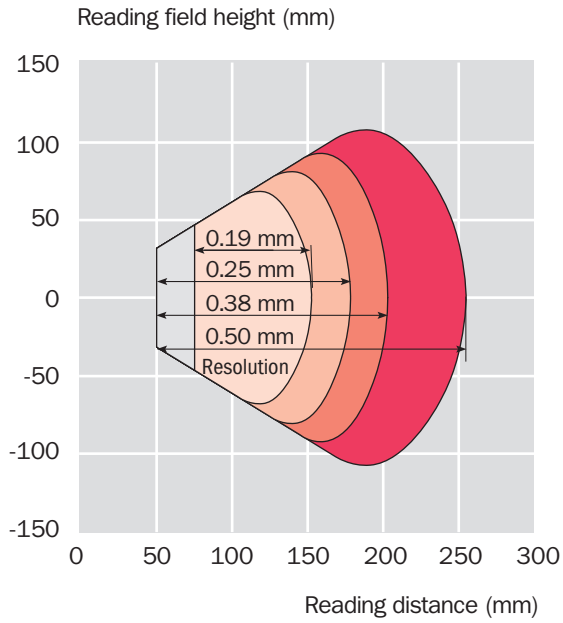
- Extremely small housing size
- High scanning frequency up to 1,000 Hz
- Large aperture angle
- Large depth of field
- Integrated Setup-Button

SICK

Reading field diagrams

CLV 405 - 0010
CLV 405 - 1010

CLV 405 - 0011
CLV 405 - 1011



All dimensions in mm

Technical data

| Type | CLV 405 (Standard-Density) | CLV 405 (High-Density) |
|---|--|----------------------------------|
| Line scanner (front reading window) | CLV 405-0010/Order No. 6 028 376 | CLV 405-0011/Order No. 6 028 377 |
| Raster scanner (front reading window) | CLV 405-1010/Order No. 6 028 638 | CLV 405-1011/Order No. 6 028 639 |
| Line scanner (lateral reading window) ¹⁾ | CLV 405-2010/Order No. 6 028 640 | CLV 405-2011/Order No. 6 028 641 |
| Raster scanner (lateral reading window) ¹⁾ | CLV 405-3010/Order No. 6 028 642 | CLV 405-3011/Order No. 6 028 643 |
| Focus | Fixed focus | |
| Laser diode (wave length) | Visible red light ($\lambda = 650$ nm) | |
| MTBF of laser diode | 40,000 h | |
| Laser class | Class 2 (pursuant to DIN EN 60825-1) | |
| Useful aperture angle | Max. 70° | |
| Scanning/decoding frequency | 300 to 1,000 Hz | |
| Resolution | 0.2 to 0.5 mm | 0.085 to 0.25 mm |
| Raster height | 6 mm at 100 mm reading distance (front reading window) | |
| Code print contrast (PCS) | ≥ 25% | |
| Immunity to ambient light | 2,000 lx (on bar code) | |
| No. of bar codes per scan | 1 to 6 | |
| No. of bar codes per reading interval | 1 to 6 | |
| Bar code types | All popular bar codes | |
| Bar code length | Max. 50 characters | |
| Print ratio | 2:1 to 3:1 | |
| No. of multiple reading | 1 to 99 | |
| Optical indicators | 6 x LEDs (status indicator) | |
| Acoustic indicators | Beeper, can be deactivated and assigned to a function for result status indication | |
| Reading pulse | Switching input/serial interface/free-running | |
| “Host“ data interface | RS 232 True, variable data output format | |
| Data transfer rate | 600 to 57,600 bd | |
| Protocols | SICK Standard | |
| Physical configurationen | Stand-alone, Daisy-Chain, Master/Slave | |
| “Terminal“ data interface | RS 232 TTL, 9,600 bd, 8 data bits, no parity, 1 stop bit, fixed data output format | |
| Switching inputs | 2 (“Sensor 1“, “Sensor 2“), NPN | |
| Switching outputs | 3 (“Result 1“ to “Result 3“), not opto-decoupled, TTL | |
| Electrical connection | 15-pin D Sub HD connector, cable length 0.9 m | |
| Operating voltage/power consumption | 5 V DC ±5 %/2 W | |
| Housing | Metal | |
| Enclosure rating/protection class | IP 54 (to DIN 4050)/ class 3 (to VDE 0106/IEC 0101-1) | |
| EMC/vibration/shock tested | to EN 61000-6-3, to EN 61000-6-2/to IEC 60068-2-6, to IEC 60068-2-64/to IEC 60068-2-27 | |
| Weight | 57 g, without connecting cable (front reading window) | |
| Temperature (operating/storage) | 0 to +50 °C/-20 to +70 °C | |
| Max. relative humidity | 90 %, non-condensing | |

¹⁾ angle of emergence 80°

Note: For setting-up operation, a power supply unit and an interface cable are additionally required.

Australia

Phone +61 3 94 97 41 00
1800 33 48 02 – toll free
Fax +61 3 94 97 11 87

Austria

Phone +43 22 36 62 28 80
Fax +43 22 36 62 28 85

Belgium/Luxembourg

Phone +32 24 66 55 66
Fax +32 24 63 31 04

Brazil

Phone +55 11 5091-4900
Fax +55 11 55 35 41 53

China

Phone +852 27 63 69 66
Fax +852 27 63 63 11

Czech Republic

Phone +42 02 57 81 05 61
Fax +42 02 57 81 05 59

Denmark

Phone +45 45 82 64 00
Fax +45 45 82 64 01

Finland

Phone +358-9-25 15 800
Fax +358-9-25 15 8055

France

Phone +33 1 64 62 35 00
Fax +33 1 64 62 35 77

Germany

Phone +49 211 5301-0
Fax +49 211 5301-100

Great Britain

Phone +44 17 27 83 11 21
Fax +44 17 27 85 67 67

Italy

Phone +39 02 27 40 93 19
Fax +39 02 27 40 90 87

Japan

Phone +81 3 33 58 13 41
Fax +81 3 33 58 90 48

Korea

Phone +82 2 786 6321/4
Fax +82 2 786 63 25

Netherlands

Phone +31 3 02 29 25 44
Fax +31 3 02 29 39 94

Norway

Phone +47 67 81 50 00
Fax +47 67 81 50 01

Poland

Phone +48 2 28 37 40 50
Fax +48 2 28 37 43 88

Singapore

Phone +65 67 44 37 32
Fax +65 68 41 77 47

Spain

Phone +34 9 34 80 31 00
Fax +34 9 34 73 44 69

Sweden

Phone +46 86 80 64 50
Fax +46 87 10 18 75

Switzerland

Phone +41 4 16 19 29 39
Fax +41 4 16 19 29 21

Taiwan

Phone +886 2 23 65 62 92
Fax +886 2 23 68 73 97

USA/Canada/Mexico

Phone +1 (952) 941-6780
Fax +1 (952) 941-9287

Branch offices and representatives
in all major industrial countries.

SICK

SICK AG
Auto Ident
Nimburger Strasse 11
79276 Reute
Germany
www.sick.com

Received from your SICK partner: