



DATA SHEET

CLV602-2D200

CLV60x
Fixed mount barcode scanners

SICK

Sensor Intelligence



FIXED MOUNT BARCODE SCANNERS

CLV602-2D200

ORDERING INFORMATION

Type	part no.
CLV602-2D200	1133407

Further device versions and accessories at www.sick.com/CLV60x



DETAILED TECHNICAL DATA

FEATURES

Connection type	Cable
Reading field	Front
Sensor type	Line scanner
Optical focus	Fixed focus (50 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	≤ 62°
Reading distance	20 mm ... 105 mm ¹⁾
Scanning frequency	750 Hz
Reading angle	Tilt α ± 5° (with code resolution ≥ 0.2 mm) ± 10° (with code resolution ≥ 0.25 mm) ± 15° (with code resolution ≥ 0.35 mm) ± 25° (with code resolution ≥ 0.5 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)
Code resolution	0.2 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	✓
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 61000-6-2:2005 / EN 61000-6-3:2007+A1:2011
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
Relative humidity	90 %, Non-condensing
Ambient light immunity	5,000 lx, on barcode
Bar code print contrast (PCS)	≥ 60 %

GENERAL NOTES

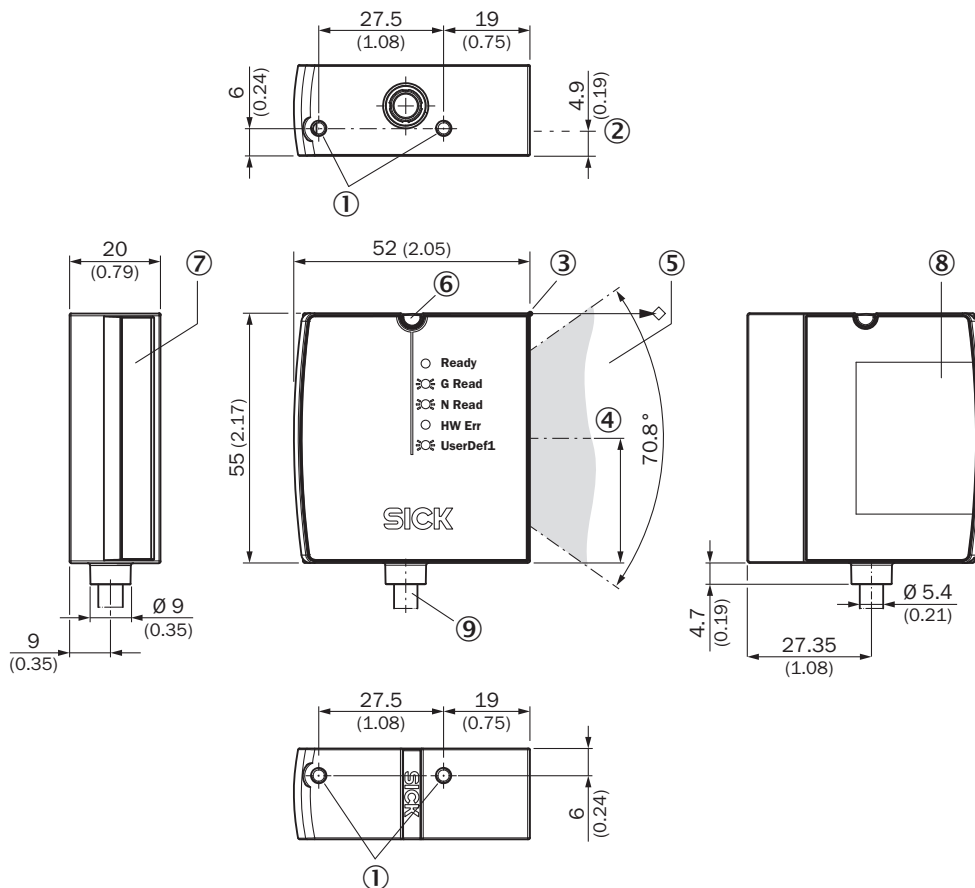
Items supplied	Single scanner, Safety Notes
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CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓

cULus certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

DIMENSIONAL DRAWING CLV60X, FRONT

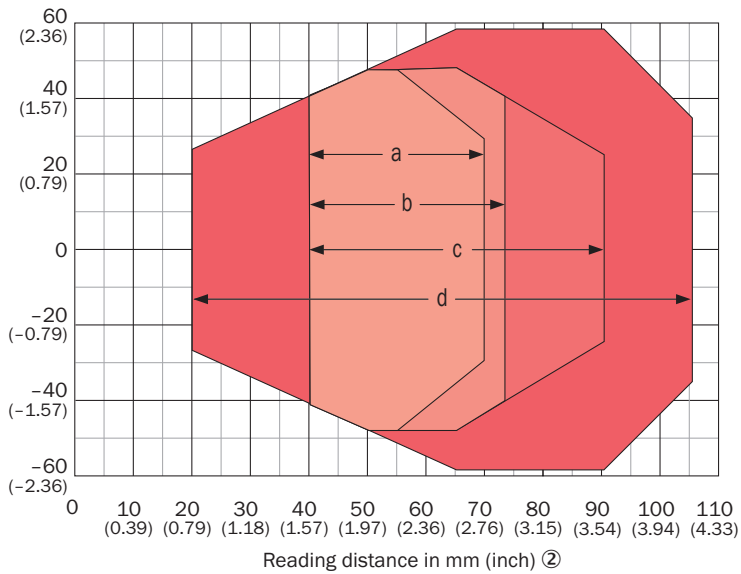


Dimensions in mm (inch)

- 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) ①

**Resolution ③**

a: 0.2 mm (7.9 mil)	c: 0.35 mm (13.8 mil)
b: 0.25 mm (9.8 mil)	d: 0.50 mm (19.7 mil)

① Reading field height in mm (inch)

② Reading distance in mm (inch)

③ Resolution

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1133407



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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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