



CLV601-0D200

CLV60x

BAR CODE 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						
Scanner design	Line scanner						
Focus	Fixed focus (30 mm)						
Sensor	CMOS line sensor						
Sensor resolution	2,048 px						
Light source	LED (visible red light, 626 nm)						
LED class	Risk group 0 (IEC 62471:2006-07, EN 62471:2008-09)						
Aperture angle	≤ 71°						
Scanning frequency	750 Hz						
Code resolution	0.125 mm ... 0.5 mm						
Reading angle	<table border="0"> <tbody> <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> </tbody> </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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Reading distance	15 mm ... 70 mm ¹⁾						
MTTF	670,000 h						

¹⁾ For details see reading field diagram.

Performance

Bar code types	All current code types, Code 39, Code 128, Code 93, Codabar, UPC / GTIN / EAN, Interleaved 2 of 5
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	Host, AUX
Data transmission rate	2,400 Baud ... 250 kBaud, AUX: 57.6 kBaud
Switching inputs	1 ("Input 1", Vin = max. 30 V)
Switching outputs	2 ("Output 1", "Output 2", Iout = max. 50 mA)
Reading pulse	Start: switching input, free, command, auto pulse, Stop: switching 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

Mechanics/electronics

Electrical connection	1 x 9-pin D-sub male connector (2 m)
Operating voltage	5 V DC, ± 10 %
Power consumption	Typ. 1 W
Housing	Zinc diecast
Housing color	Light blue (RAL 5012), black (RAL 9005)
Front screen	PMMA
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

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 bar code
Bar code print contrast (PCS)	≥ 60 %

General notes

Items supplied	Single scanner, Safety Notes
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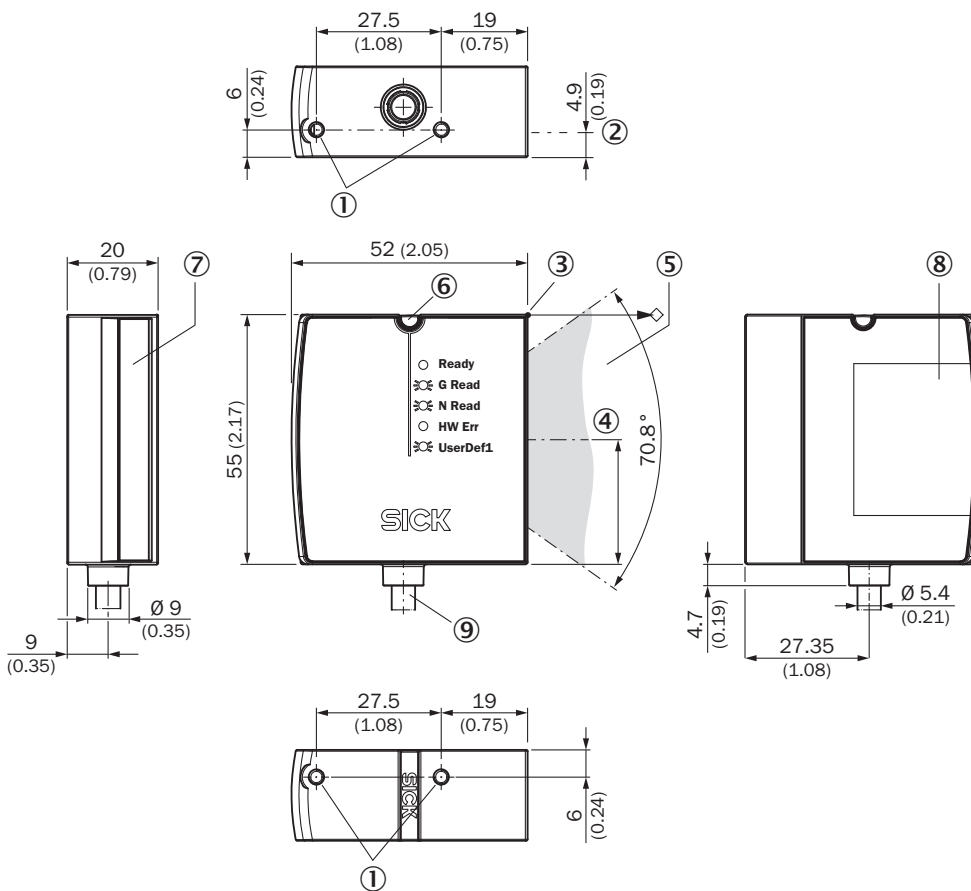
Classifications

ECI@ss 5.0	27280102
ECI@ss 5.1.4	27280102
ECI@ss 6.0	27280102

ECl@ss 6.2	27280102
ECl@ss 7.0	27280102
ECl@ss 8.0	27280102
ECl@ss 8.1	27280102
ECl@ss 9.0	27280102
ETIM 5.0	EC002550
ETIM 6.0	EC002550
UNSPSC 16.0901	43211701

Dimensional drawing (Dimensions in mm (inch))

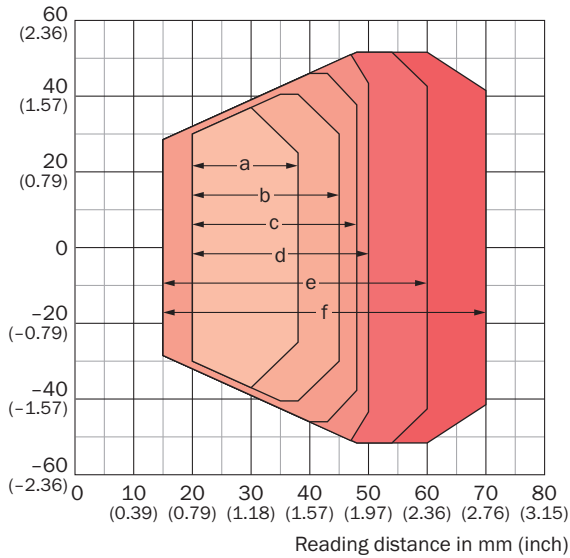
CLV60x, front



- 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

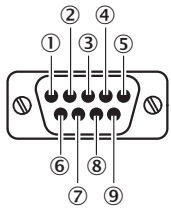
Reading field height in mm (inch)



Resolution

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