



GLS100L-1MEB1FZ

GLS100

IMAGE-BASED CODE READERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
GLS100L-1MEB1FZ	1141629

Other models and accessories → www.sick.com/GLS100



Detailed technical data

Features

Optical focus	100 mm fixed focus
LED class	Free group (IEC 62471:2006-07, EN 62471:2008-09)
Light source	Internal lighting, 2 x LED, Visible, Amber, 590 nm, ± 80 nm Internal lighting, 2 x LED, Visible, cyan, 500 nm, ± 40 nm
Reading distance	100 mm ¹⁾
Overrun speed	≤ 3.5 m/s ²⁾
Repeatability (position)	± 0.1 mm ³⁾
Angular accuracy (azimuth)	± 0.1° ⁴⁾

¹⁾ ± 30 mm with the SICK MultiCode label; ± 10 mm when using color tracks.

²⁾ ≤ 3.5 m/s with the SICK MultiCode label.

³⁾ ± 0.1 mm with the SICK MultiCode label; ± 1 mm when using color tracks.

⁴⁾ ± 0.1° with the SICK MultiCode label; ± 2° when using color tracks.

Mechanics/electronics

Connection type	1 x M12, 5-pin male connector ¹⁾
Supply voltage	10.8 V ... 30 V
Power consumption	< 3 W
Housing material	Zinc diecast
Housing color	Light blue (RAL 5012)
Enclosure rating	IP65 (EN 60529, EN 60529/A2)
Protection class	III
Weight	250 g
Dimensions (L x W x H)	31 mm x 62 mm x 52.5 mm

¹⁾ Use of a shielded cable is recommended for longer connecting cables.

Performance

Readable code structures	2D
2D code types	Data Matrix ECC200, QR code
Code qualification	On the basis of ISO/IEC 16022, ISO/IEC 15415, ISO/IEC 15416, ISO/IEC 18004

Interfaces

CANopen	✓
Data transmission rate	50/125/250/500/1,000 kbit/s
Optical indicators	2 LEDs (1 x voltage supply, 1 x code read)

Ambient data

Electromagnetic compatibility (EMC)	EN 61000-6-3:2007+A1:2011, EN 61000-6-2:2005-08 / IEC 61000-6-3:2006+AMD1:2010
Vibration resistance	EN 60068-2-6:2008-02, EN 60068-2-27:2010-02
Ambient operating temperature	0 °C ... +50 °C
Storage temperature	-25 °C ... +75 °C
Permissible relative humidity	90 %, Non-condensing

Connection type/pinouts

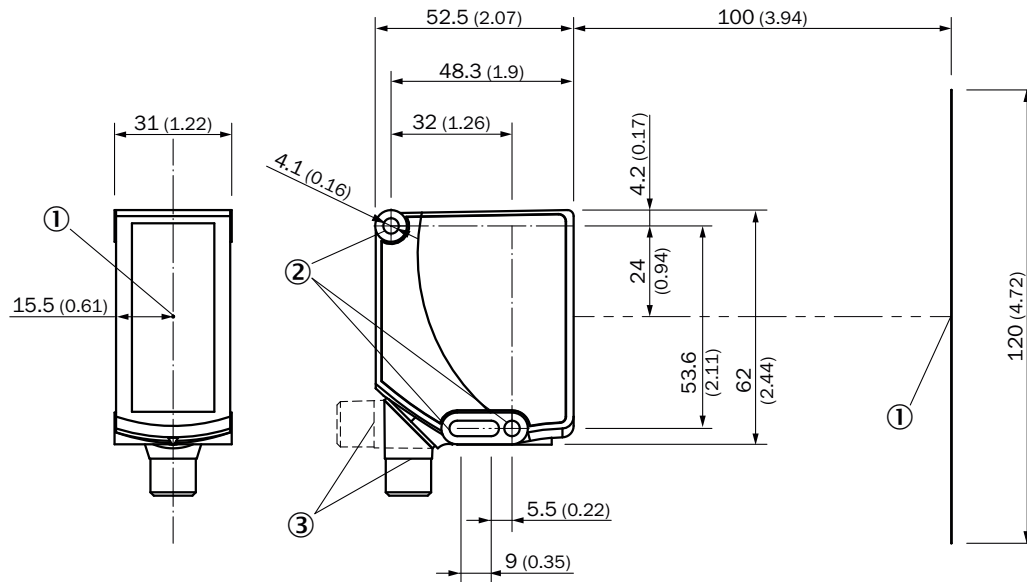
Connection type	Connector M12, 5-pin, A-coded
Pinouts	
BN 1	V IN
WH 2	CAN HIGH
BU 3	GND
BK 4	n.c.
GY 5	CAN LOW

Classifications

ECLASS 5.0	27280103
ECLASS 5.1.4	27280103
ECLASS 6.0	27280103
ECLASS 6.2	27280103
ECLASS 7.0	27280103
ECLASS 8.0	27280103
ECLASS 8.1	27280103
ECLASS 9.0	27280103
ECLASS 10.0	27280103
ECLASS 11.0	27280103
ECLASS 12.0	27280103
ETIM 5.0	EC002550
ETIM 6.0	EC002550
ETIM 7.0	EC002999
ETIM 8.0	EC002999
UNSPSC 16.0901	43211701

Dimensional drawing (Dimensions in mm (inch))

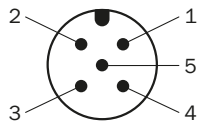
Dimensional drawing, sensor



- ① Optical axis
- ② Mounting hole, \varnothing 4.1 mm
- ③ Connector M12 (rotatable up to 90°)

Connection type

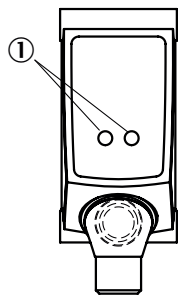
Pinouts, see table Technical data: **Connection type/pinouts**



Male connector, M12, 5-pin, A-coded

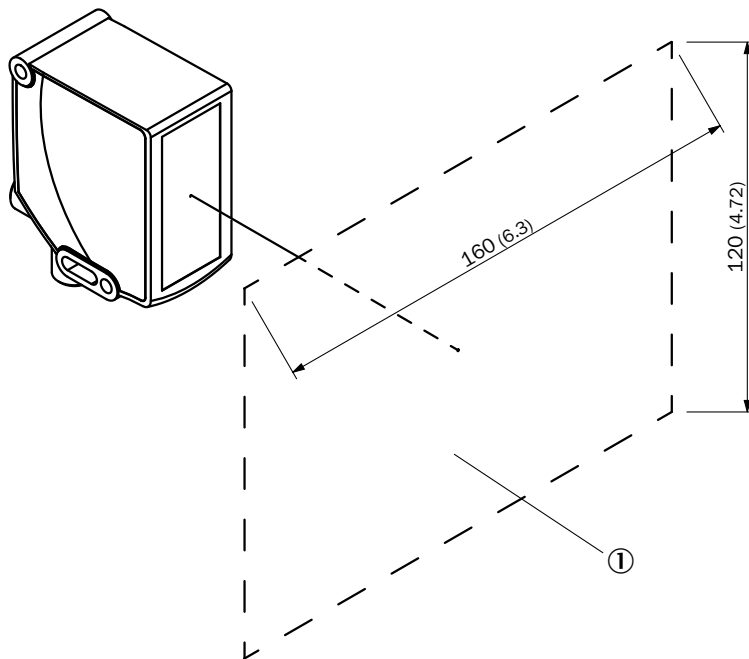
Adjustments

Display and adjustment elements



- ① Status indicators






Field of view





① Field of view (W x H)

Recommended accessories

Other models and accessories → www.sick.com/GLS100

	Brief description	Type	Part no.
Universal bar clamp systems			
	Plate N04 for universal clamp, steel, Zinc plated steel (sheet), Zinc die cast (clamping bracket), Universal clamp (5322626), mounting hardware	BEF-KHS-N04	2051610
	Mounting bar, straight, 200 mm, steel, steel, zinc coated, without mounting hardware	BEF-MS12G-A	4056054
	Mounting bar, L-shaped, 250 x 250 mm, steel, steel, zinc coated, without mounting hardware	BEF-MS12L-B	4056053
Codes			
	Multi code label with 16 Data Matrix codes for localizing AGVs, 100 codes in set: X0 / Y0 to X9 / Y9, self-adhesive, recommended for GLS100	DATAMATRIX MULTI-CODE LABEL SET1 X0/Y0-X9/Y9	4111693
	Multi code label with 16 data matrix codes for localizing AGVs, 400 codes in set: X0 / Y0 to X9 / Y9, self-adhesive, recommended for GLS100	DATAMATRIX MULTI-CODE LABEL SET2 X0/Y0-X19/Y19	4111694
	Code tape with 2D Data Matrix codes for positioning using GLS100, code size 12 mm x 12 mm, self-adhesive, recommended for GLS100	MULTICODE-TAPE 0-40	5345479

	Brief description	Type	Part no.
Terminal and alignment brackets			
	GLS100 adapter bracket	GLS100 adapter bracket	4111249
	GLS100 adapter plate	GLS100 adapter plate	4111248
Others			
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 5-pin, straight, A-coded • Description: Unshielded, Head A: male connector, M12, 5-pin, straight, unshielded, for cable diameter 4 mm ... 6 mm Head B: - • Connection systems: Screw-type terminals • Permitted cross-section: $\leq 0.75 \text{ mm}^2$ • Note: For field bus technology 	STE-1205-G	6022083
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 5-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 5-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF2A15-050VB5XLEAX	2096240

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