

Technical data sheet

Stationary bar code reader

Part no.: 50127450
CR100M2/R2

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For illustration purposes only



Technical data

Basic data

Series	CR100
Chip	CCD

Functions

Functions	Alignment mode
	I/O
	LED indicator
	Multiple read / MultiScan
	Output format selectable
	Reading gate control

Read data

Code types, readable	2/5 Interleaved
	Codabar
	Code 128
	Code 39
	Code 93
	EAN 128
	EAN Addendum
	EAN/UPC
Scanning rate, typical	700 scans/s
Bar codes per reading gate, max. number	63 Piece(s)

Optical data

Reading distance	20 ... 72 mm
Light source	LED, Red
Wavelength	660 nm
Transmitted-signal shape	Continuous
Usable opening angle (reading field opening)	71 °
Modulus size	0.15 ... 0.5 mm
Reading method	Line scanner
Scanning rate	700 scans/s
Beam deflection	Via prism
Light beam exit	Front

Electrical data

Protective circuit	Polarity reversal protection
Performance data	
Supply voltage U_B	4.9 ... 5.4 V, DC
Current consumption, max.	250 mA
Inputs	
Number of digital switching inputs	1 Piece(s)
Switching inputs	
Voltage type	DC
Switching voltage	5V DC
Outputs	
Number of digital switching outputs	1 Piece(s)
Switching outputs	
Voltage type	DC
Switching current, max.	20 mA
Switching voltage	5 ... 30 V DC, 20 mA

Switching output 1

Switching element	Transistor, NPN
Switching principle	0 V switching

Interface

Type	RS 232
RS 232	
Function	Process
Transmission speed	4,800 ... 57,600 Bd
Data format	Fixed
Start bit	1
Data bit	7,8
Stop bit	1.2
Parity	None
Transmission protocol	Adjustable
Data encoding	ASCII
	HEX

Service interface

Type	RS 232
RS 232	
Function	Service

Connection

Number of connections	1 Piece(s)
Connection 1	
Function	Data interface
	Signal IN
	Signal OUT
	Voltage supply
Type of connection	Cable
Cable length	2,000 mm
Sheathing material	PUR
Cable color	Black
Number of conductors	6 -wire
Wire cross section	0.081 mm ²

Cable properties

AWG	28
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Mechanical data

Design	Cubic
Dimension (W x H x L)	55 mm x 20 mm x 47 mm
Housing material	Metal
Metal housing	Sheet metal plate shaped
Lens cover material	Plastic
Net weight	200 g
Housing color	Red
	Silver
Type of fastening	Fastening on back
	Side mounting with thread

Operation and display

Type of display	LED
Number of LEDs	1 Piece(s)

Technical data

Environmental data

Ambient temperature, operation	0 ... 45 °C
Ambient temperature, storage	-25 ... 60 °C
Relative humidity (non-condensing)	90 %

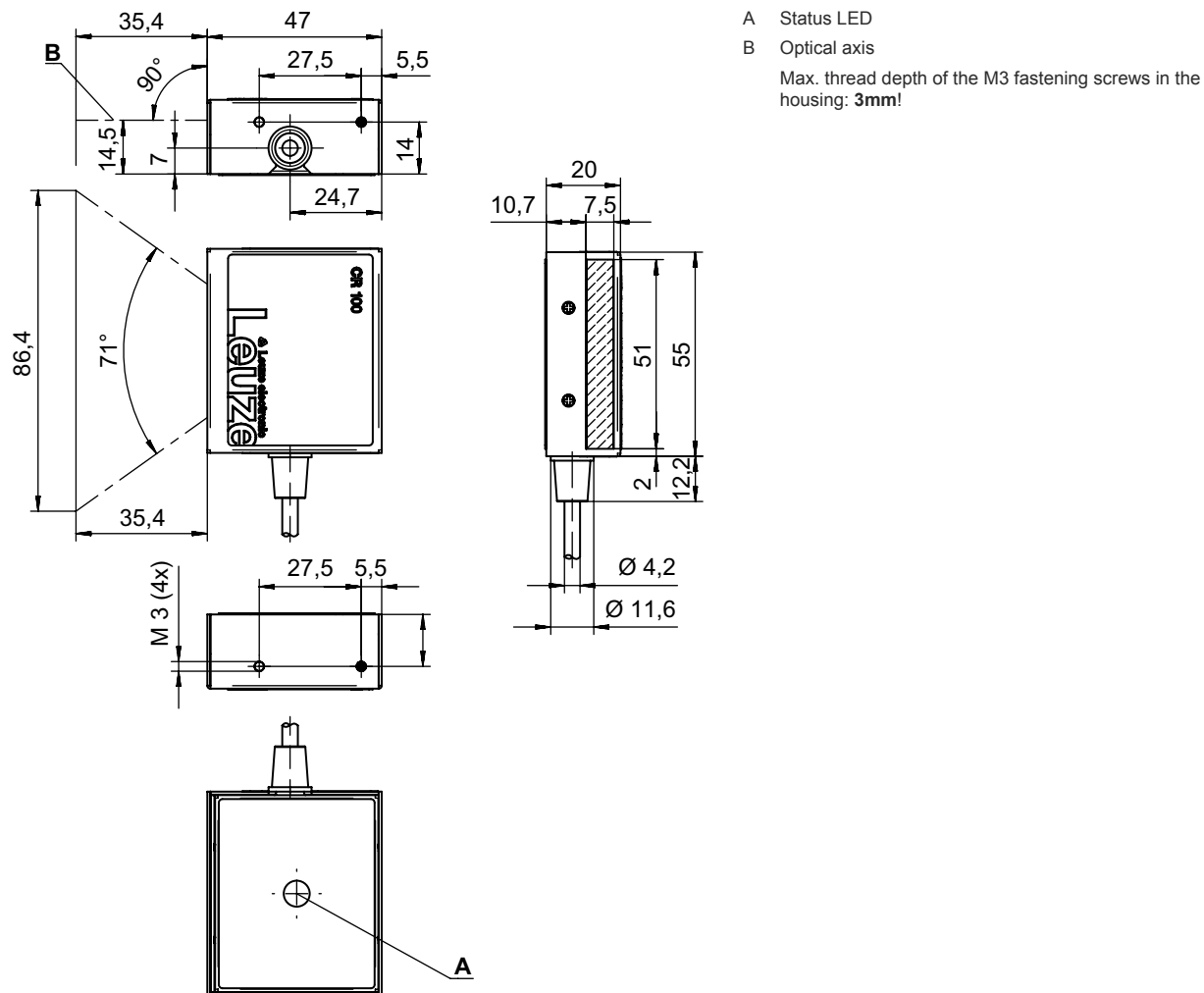
Certifications

Degree of protection	IP 40
Protection class	III
Approvals	cUR us
Test procedure for EMC in accordance with standard	EN 55022
	EN 55024
	EN 61000-4-2, -3, -4, -6

Classification

Customs tariff number	84719000
ECLASS 5.1.4	27280102
ECLASS 8.0	27280102
ECLASS 9.0	27280102
ECLASS 10.0	27280102
ECLASS 11.0	27280102
ECLASS 12.0	27280102
ECLASS 13.0	27280102
ECLASS 14.0	27280102
ECLASS 15.0	27280102
ECLASS 16.0	27280102
ETIM 5.0	EC002550
ETIM 6.0	EC002550
ETIM 7.0	EC002550
ETIM 8.0	EC002550
ETIM 9.0	EC002550
ETIM 10.0	EC002550

All dimensions in millimeters



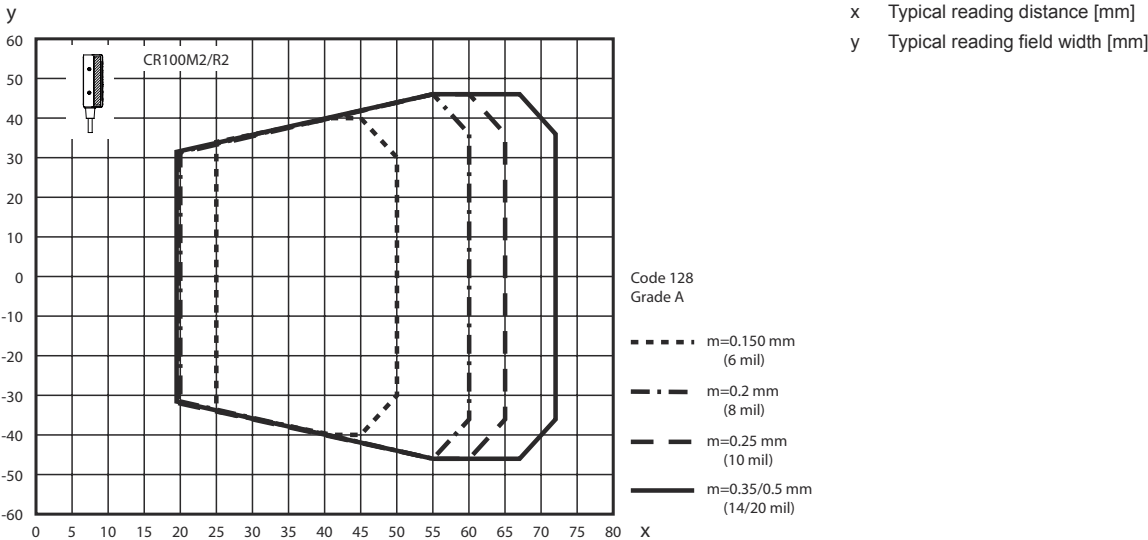
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	Signal IN
	Signal OUT
	Voltage supply
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Cable length	2,000 mm
Sheathing material	PUR
Cable color	Black
Number of conductors	6 -wire
Wire cross section	0.081 mm²

Electrical connection

Conductor color	Conductor assignment
Red	V+
Violet	GND
Black	SW OUT
Orange	SW IN
White	RS 232 RxD
Green	RS 232 TxD

Diagrams

Reading field



Operation and display

LED	Display	Meaning
1	Orange, flashing	Initialization
	Orange, continuous light	Reading gate active
	Green, continuous light	Reading successful
	Red, continuous light	No reading result

Notes

Observe intended use!

⚠ This product is not a safety sensor and is not intended as personnel protection.

⚠ The product may only be put into operation by competent persons.

⚠ Only use the product in accordance with its intended use.

Accessories

Start-up/diagnosis

	Part no.	Designation	Article	Description
	50128204	MA-CR	Module	Description: Adapter circuit board for laboratory and test purposes Type of interface: RS 232

Note



A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.