CR100M2

Bar code reader

5 V
DC
....

RS 232

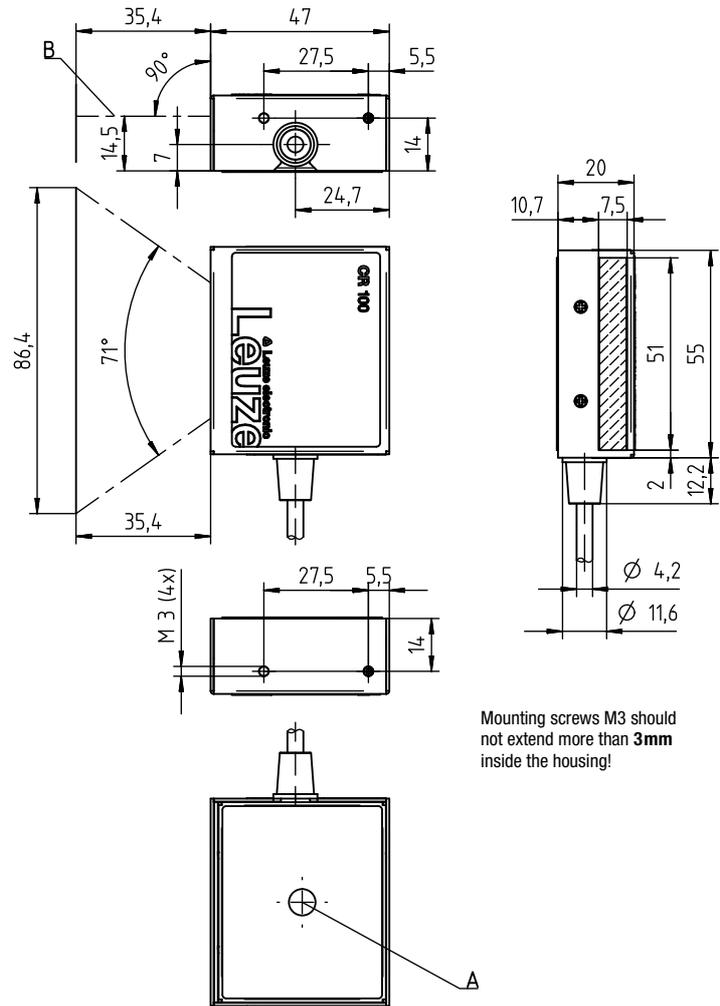BARCODE

- CCD linear scanner for all common 1D bar codes
- Scanning rate 700scans/s
- Models with different scanning beam exit directions
- RS 232 interface
- Switching input and switching output
- Sheet metal case
- Simple mounting and fastening

CE c**UL**us

IP 40

Accessories:

(available separately)

- Adapter wiring board with spring clamps for contacting the single wires to a 9-pole SUB-D-type connector

Dimensioned drawing

A Status LED
B Optical axis

Mounting screws M3 should not extend more than **3mm** inside the housing!

Electrical connection

Wire color	Signal	Description	IN / OUT
Red	+5VDC	Power supply 5VDC	IN
Violet	GND	Power supply 0VDC / Ground	IN
Black	SW OUT	Switching output	OUT
Orange	SW IN	Switching input	IN
White	RS 232 RxD	Serial interface	IN
Green	RS 232 TxD	Serial interface	OUT

Specifications

Optical data

Optical System	CCD Linear Imager
Light source	LED 660nm (red light)
Scanning rate	700 scans/s
Resolution	m = 0.15 … 0.5mm / 6 … 20mil
Read distance	see reading fields
Beam exit	at the front
Code types	2/5 Interleaved, Code 39, Code 128, EAN 128, EAN/UPC, EAN Addendum, Codabar, Code 93
Software features	selectable output format, multiple read, real time decoding, control of switching input and switching output

Electrical data

Operating voltage	4.75 … 5.4VDC (PELV) [1]
Power consumption	1.25W
Current consumption	nominal 250mA at 5VDC
LEDs	1 device/read status
Ports	1 switching input 5VDC
	1 switching output 5 … 30V, 20mA

Interface

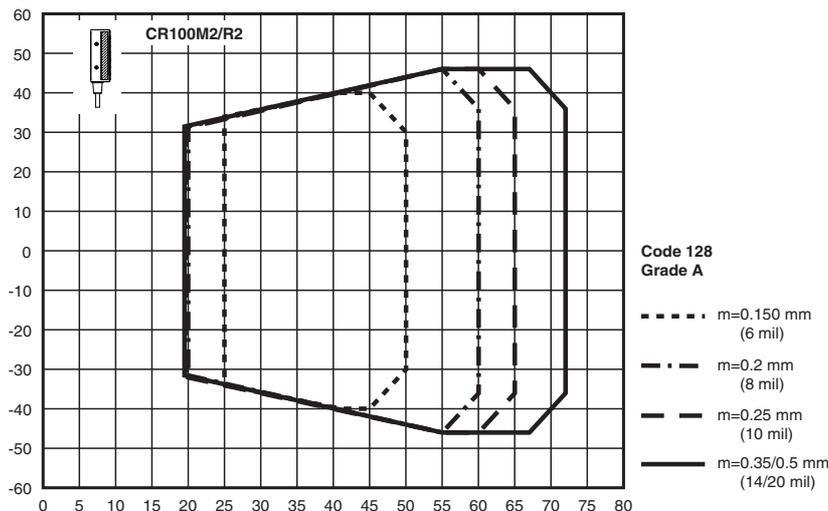|	
Interface type	RS 232
Baud rate	4800 … 57600Bd
Data formats	data bits: 7, 8
	parity: none, even, odd
	stop bits: 1, 2
Protocols	framing protocol with/without handshake
	software handshake X ON / X OFF
Service interface	RS 232 with fixed data format:
	9600Bd, 8 data bits, no parity, 1 stop bit
	<STX> data <CR> <LF>

Mechanical data

Housing	sheet metal, painted
Protection class	IP 40
Dimensions (WxDxH)	55mm x 20mm x 47mm
Weight	approx. 100g (without cable)
Connection type	fixed cable, 2m long, 6 x 0.081mm^2 (6 x 28 AWG)

Environmental data

Ambient temperature (operation)	0°C … +45°C
Ambient temperature (storage)	-25°C … +60°C
Air humidity	max. 90 % rel. humidity, non-condensing
Ambient light	max. 5000Lux
Electromagnetic compatibility	EN 55022, EN 55024, IEC 61000-4-2, -3, -4 and -6
Conformity	CE, FCC Class B
Certifications	UL

1) For UL applications: for use in class 2 circuits according to NEC only

Reading fields

CR100M2/R2

Code 128
Grade A

- - - - m=0.150 mm (6 mil)
— · — m=0.2 mm (8 mil)
– – – m=0.25 mm (10 mil)
——— m=0.35/0.5 mm (14/20 mil)

Tables

Status LED

Color	Meaning
Orange, flashing	Start-up phase
Orange, continuous light	Reading gate active
Green	Good Read
Red	No code read

Remarks

Operate in accordance with 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 the intended use.

Order guide

	Designation	Part No.
Beam exit / connection type		
at the front / fixed cable, 2m long	CR100M2/R2	50127450