Technical data sheet
Stationary bar code reader
Part no.: 50143266
BCL 92 SM 802

Figure can vary

Contents

Technical data

Leuze

Basic data

Series	BCL 92

Functions

Functions	Alignment mode
	AutoConfig
	I/O
	LED indicator
	Multiple read
	Output format selectable
	Reading gate control
	Reference code comparison

Read data

Code types, readable	2/5 Interleaved
	Codabar
	Code 128
	Code 32
	Code 39
	Code 93
	EAN 128
	EAN 8/13
	EAN Addendum
	EAN/UPC
	Pharmacode (available upon consultation)
	UPC-A
	UPC-E
Scanning rate, typical	600 scans/s

Optical data

Reading distance	40 ... 275 mm
Light source	Laser, Red
Laser light wavelength	655 nm
Laser class	1, in accordance with IEC 60825-1:2014 (EN 60825-1:2014)
Transmitted-signal shape	Continuous
Usable opening angle (reading field opening)	66 °
Modulus size	0.165 ... 0.5 mm
Reading method	Line scanner
Scanning rate	600 scans/s
Beam deflection	Via rotating polygon wheel
Light beam exit	Front

Electrical data

Protective circuit	Short circuit protected

Performance data

Supply voltage U_B	10 ... 30 V, DC
Current consumption, max.	250 mA

Inputs

Number of digital switching inputs	2 Piece(s)

Switching inputs

Voltage type	DC
Switching voltage	12 ... 30 V DC +

Outputs

Number of digital switching outputs	2 Piece(s)

Switching outputs

Voltage type	DC
Switching voltage	10 ... 30V DC, 20mA

Switching output 1

Switching element	Transistor, NPN
Function	configurable

Switching output 2

Switching element	Transistor, NPN

Interface

Type	RS 232

RS 232

Function	Process
Transmission speed	4,800 ... 57,600 Bd
Data format	Adjustable
Start bit	1
Data bit	7,8
Stop bit	1.2
Parity	Adjustable
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 with connector
Cable length	800 mm
Sheathing material	PVC
Cable color	Black
Number of conductors	12 -wire
Wire cross section	0.095 mm²
Thread size	M12
Type	Male
Material	Metal
No. of pins	12 -pin
Encoding	A-coded

Mechanical data

Design	Cubic
Dimension (W x H x L)	62 mm x 23.8 mm x 43.5 mm
Housing material	Metal, Diecast zinc
Lens cover material	Glass
Net weight	210 g
Housing color	Red
	Silver
Type of fastening	Fastening thread

Technical data

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Operation and display

Type of display	LED
Number of LEDs	2 Piece(s)

Environmental data

Ambient temperature, operation	5 ... 40 °C
Ambient temperature, storage	-20 ... 60 °C
Relative humidity (non-condensing)	0 ... 90 %
Extraneous light protection, max.	2,000 lx

Certifications

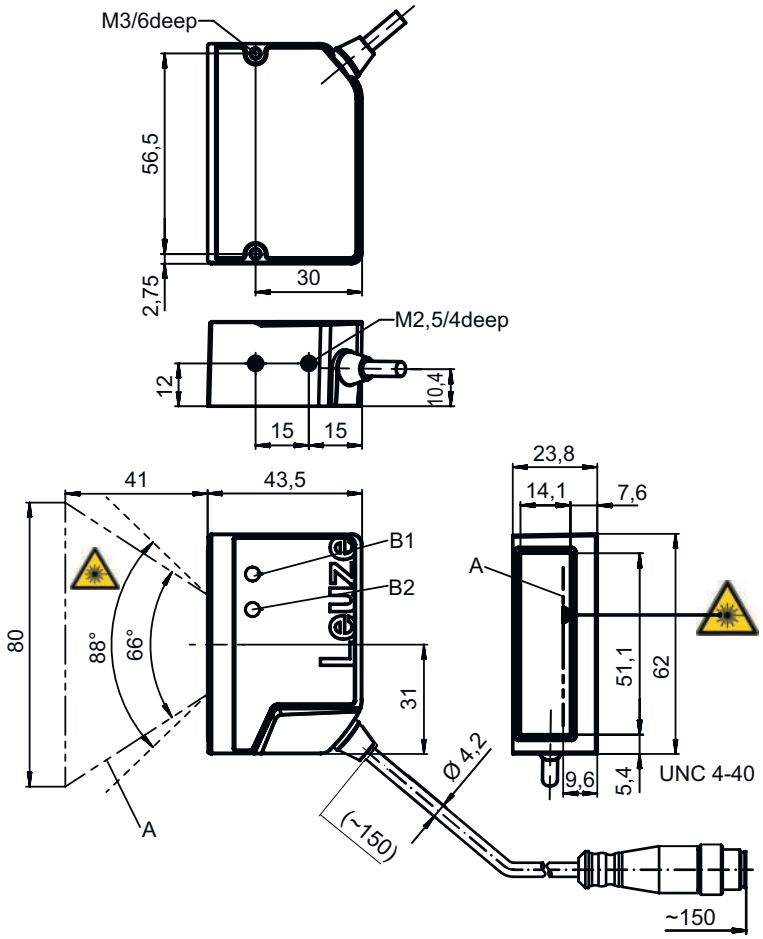
Degree of protection	IP 54
Protection class	III
Certifications	c UL US
Test procedure for EMC in accordance with standard	EN 61326-1:2013-01 FCC 15-CFR 47 Part 15 (09-07-2015) Limits Class B
Test procedure for shock in accordance with standard	IEC 60068-2-27, test Ea
Test procedure for vibration in accordance with standard	IEC 60068-2-6, test Fc

Classification

Customs tariff number	84719000
eCl@ss 8.0	27280102
eCl@ss 9.0	27280102
ETIM 5.0	EC002550
ETIM 6.0	EC002550

Dimensioned drawings

All dimensions in millimeters



A	Laser beam
B1	Decode LED
B2	Status LED
NOTE	For exact positioning of the laser beam in the application, the scanner must be aligned.

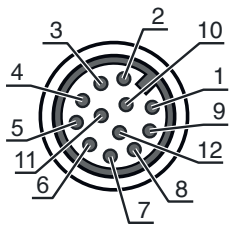
Electrical connection

Connection 1

Function	Data interface
	Signal IN
	Signal OUT
	Voltage supply
Type of connection	Cable with connector
Cable length	800 mm
Sheathing material	PVC
Cable color	Black
Number of conductors	12 -wire
Wire cross section	0.095 mm²
Thread size	M12
Type	Male
Material	Metal
No. of pins	12 -pin
Encoding	A-coded
Connector housing	FE/SHIELD

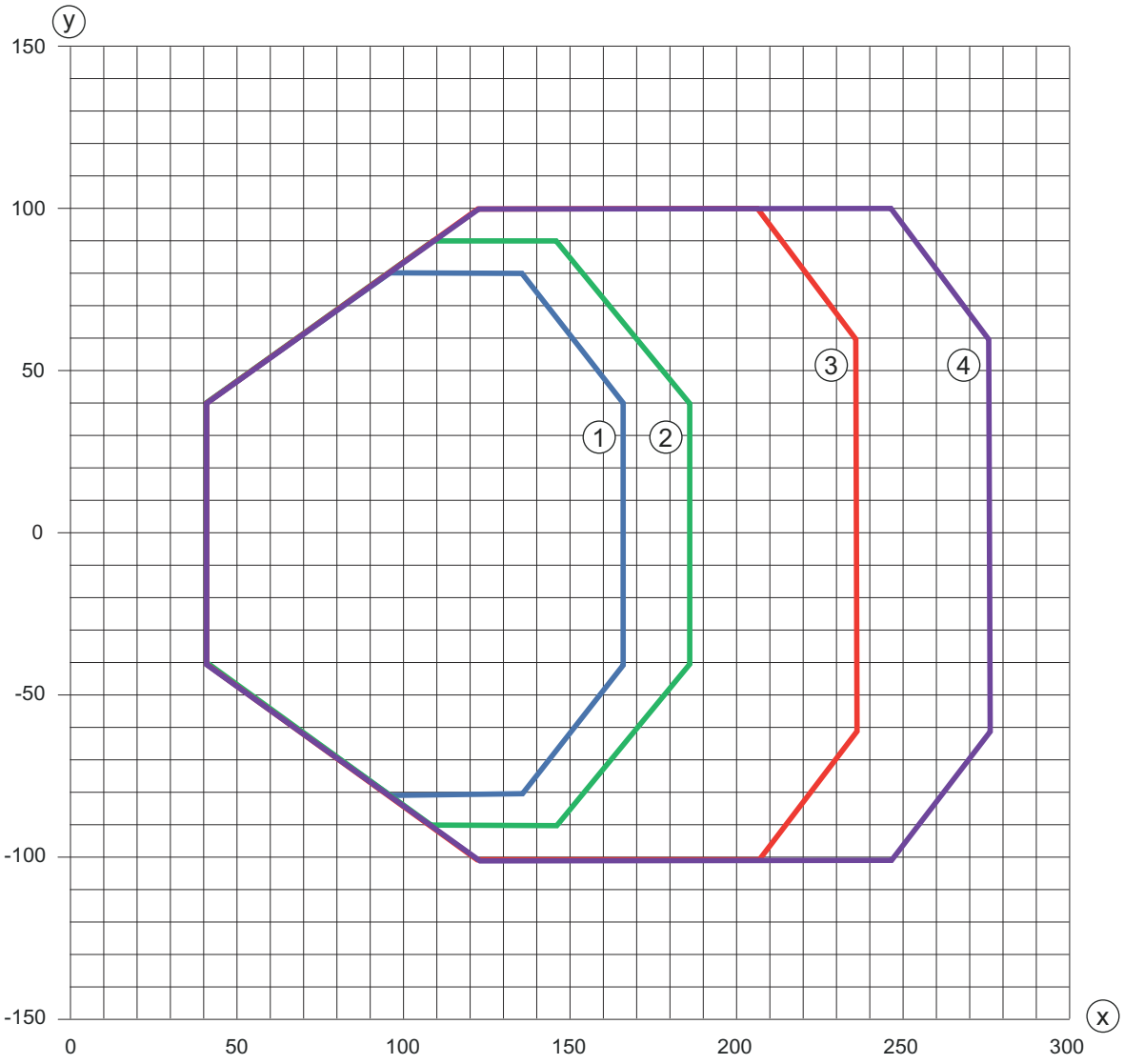
Electrical connection

Pin	Pin assignment
1	VIN
2	GNDIN
3	SWIN 1
4	SWOUT 1
5	FE
6	n.c.
7	Res.
8	Res.
9	RXD
10	TXD
11	SWIN 2
12	SWOUT 2



Diagrams

Reading field curve



x Reading field distance [mm]

y Reading field width [mm]

1 Resolution M = 0.165 mm (code type: Code 128)

2 Resolution M = 0.2 mm (code type: Code 128)

3 Resolution M = 0.3 mm (code type: 2/5 Interleaved)

4 Resolution M = 0.5 mm (code type: 2/5 Interleaved)

Operation and display

LED		Display	Meaning
1	**PWR**	Green, flashing	Initialization
		Green, continuous light	Operational readiness
		Red, flashing	Warnings
		Red, continuous light	Error
		Orange, flashing	Service operation active
2	**GOOD READ**	Green, 200 ms on	Reading successful
		Red, 200 ms off	No reading result
		Orange, continuous light	Reading gate active

Part number code

Part designation: **BCL XX YZ ABC**

BCL	**Operating principle** BCL: bar code reader
XX	**Series** 92: RS 232
Y	**Scanning principle** S: line scanner (single line)
Z	**Optics** M: Medium Density (medium distance)
A	**Electrical connection** 3: SUB-D 15-pin 8: M12 connector, 12-pin
B	**Cable length** 0: 0.8 m 1: 3.0 m
C	**Beam exit** 0: Perpendicular 2: Front

Note

- A list with all available device types can be found on the Leuze website at

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.

For UL applications:

- For UL applications, use is only permitted in Class 2 circuits in accordance with the NEC (National Electric Code).

WARNING! LASER RADIATION – CLASS 1 LASER PRODUCT

The device satisfies the requirements of IEC 60825-1:2014 (EN 60825-1:2014) safety regulations for a product of **laser class 1**

- Observe the applicable statutory and local laser protection regulations.
- The device must not be tampered with and must not be changed in any way.
  There are no user-serviceable parts inside the device.
  Repairs must only be performed by

Accessories

Connection technology - Connection unit

	Part no.	Designation	Article	Description
	50130109	MA 150	Modular connection unit	Supply voltage: 18 ... 30 V Current consumption, max.: 150 mA Connections: 5 Piece(s) Degree of protection: IP 67

Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	50130284	KDS S-M12-CA-M12-CA-P1-020	Interconnection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 12 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 12 -pin Shielded: Yes Cable length: 2,000 mm Sheathing material: PUR
	50130285	KDS S-M12-CA-M12-CA-P1-050	Interconnection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 12 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 12 -pin Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
	50118542	BT 200M.5	Mounting bracket	Design of mounting device: Angle, L-shape Fastening, at system: Through-hole mounting Mounting bracket, at device: Screw type, Suited for M3 screws Type of mounting device: Adjustable Material: Stainless steel

Mounting technology - Rod mounts

	Part no.	Designation	Article	Description
	50119331	BTU 900M-D12	Mounting system	Design of mounting device: Mounting system Fastening, at system: For 12 mm rod, Sheet-metal mounting Mounting bracket, at device: Screw type Type of mounting device: Clampable, Swiveling, Turning, 360° Material: Metal

Note

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