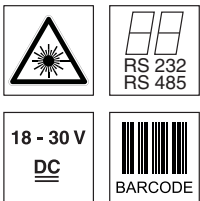


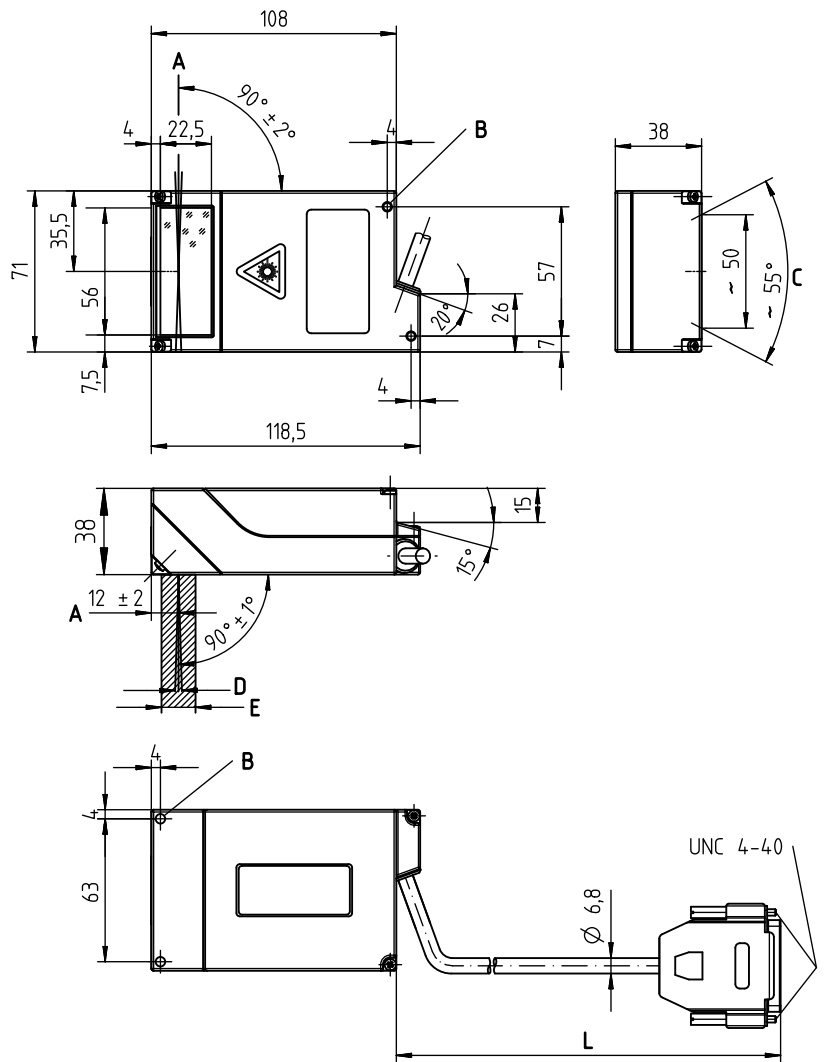
en 02-2018/07 50130095



30 ... 310mm

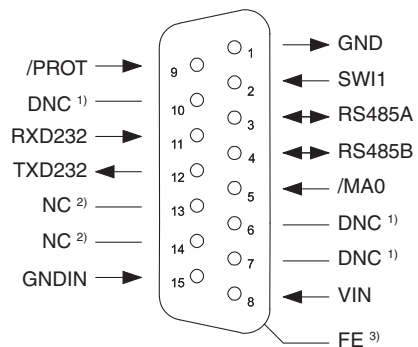
- Compact scanner
- Focus adjustment
- Reading distance up to 310mm
- Integrated decoder
- High-resolution optics
- High scanning rate

Dimensioned drawing



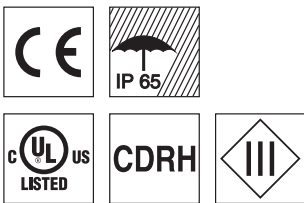
- A** Optical axis
- B** Mounting threads M4 - 4mm deep (4 x)
- C** Laser beam
- D** Rastering max. 3mm at a distance of 200mm
- E** Optical beam path, approx. 15mm wide
- L** Cable length approx. 0.9m

Electrical connection



- 1) DNC = Do Not Connect
- 2) NC = Not Connected
- 3) FE = Functional Earth (connected to metal sleeve)

We reserve the right to make changes • DS_BCL148V340B_en_50130095.fm



Specifications

Optical data

Light source	laser diode 650nm
Laser class	2 according to IEC 60825-1:2007+2014
Wavelength	650nm (visible red light)
Pulse duration	110µs
Max. output power (peak)	1.3mW
Scanning rate	750 scans/s
Reading distance	30mm ... 290mm for module width from 150µm, 30mm ... 310mm for module width from 200µm, 70mm ... 110mm for module width of 127µm
Reading field height	min. 60mm at reading distance from 30mm, min. 80mm at reading distance from 50mm
Focus response time	<250ms

Code specifications

Code types	2/5 Interleaved Code 39 ¹⁾ 2/5 IATA 2/5 Industrial UPC (A, E) EAN Code 128, EAN 128 ¹⁾ Pharmacode Add-On (EAN) Codabar (5) 6.5 ... 20mil / (127) 167 ... 500µm
Module width (distance dependent) Print quality Pitch	ANSI X3, 123 or DIN EN 1635 class A, B 10°

Electrical data

Interface type Service interface	RS 232 or RS 485 RS 232 with fixed data format, 8 data bits, no parity, 1 stop bit
Baud rate Data formats	110 ... 57,600Bd data bits: 7, 8, 9 parity: none, even, odd stop bits: 1, 2
Protocols Ports	application specific 1 switching input 1 addressing
Operating voltage U_B ²⁾ Power consumption	18 ... 30VDC max. 9W

Mechanical data

Weight	615g
Dimensions (HxWxD)	119x71x38mm
Fastening	4 holes M4
Housing	diecast zinc
Optics cover	glass
Connection type	approx. 0.9m cable with 15 pin Sub-D connector

Environmental data

Ambient temperature (operation)	+5°C ... +40°C
Air humidity	10 ... 85% rel. humidity, non-condensing
VDE safety class	III
Protection class	IP 65
Certifications	UL 60950-1, CSA C22.2 No.60950-1-07 ²⁾

1) Presetting, number of digits: 2 ... 63

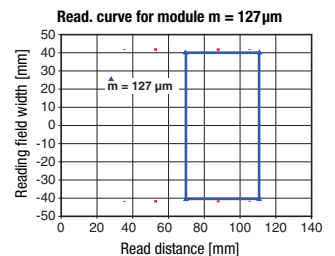
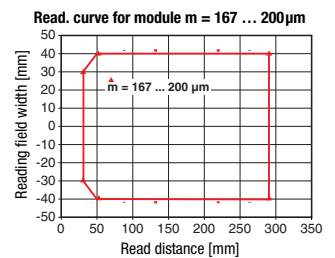
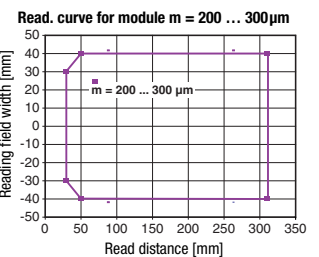
2) For UL applications: for use in class 2 circuits according to NEC only

Order guide

Type	Description	Part no.
BCL 148 V 340 B	Single line scanner, RS 232 or RS 485 interface, 310mm reading distance	50131538

Tables

Diagrams



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.



ATTENTION

**Supplied by LPS/NEC
Class 2 only!**

Laser safety notices**ATTENTION, LASER RADIATION – LASER CLASS 2****Never look directly into the beam!**

The device satisfies the requirements of IEC 60825-1:2014 (EN 60825-1:2014) and IEC 60825-1:2007 (EN 60825-1:2007) safety regulations for a product in **laser class 2** as well as the U.S. 21 CFR 1040.10 regulations with deviations corresponding to "Laser Notice No. 50" from June 24th, 2007.

Conforms to the applicable requirements of 21 CFR Subchapter J.

⚠ Never look directly into the laser beam or in the direction of reflecting laser beams!

If you look into the beam path over a longer time period, there is a risk of injury to the retina.

⚠ Do not point the laser beam of the device at persons!

⚠ Interrupt the laser beam using a non-transparent, non-reflective object if the laser beam is accidentally directed towards a person.

⚠ When mounting and aligning the device, avoid reflections of the laser beam off reflective surfaces!

⚠ CAUTION! The use of controls or adjustments or performance of procedures other than specified herein may result in hazardous light exposure.

The glass optics cover is the only aperture through which laser radiation may be observed on this product.

⚠ Adhere to the applicable legal and local regulations regarding protection from laser beams in its latest version.

⚠ 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 Leuze electronic GmbH + Co. KG.

If the scanner motor fails during the emission of laser radiation, the limit value of laser class 2 in accordance with IEC 60825-1 Edition 2.0 (2007) and Edition 3.0 (2014) could be exceeded. The device has safeguards to prevent this occurrence.

⚠ If the emitted laser beam is at a standstill, immediately disconnect the faulty bar code reader from the voltage supply.

The BCL 148 emits scanned optical radiation at a wavelength of 650 nm (red). Looking at the device's mirror and operating at the lowest scanning rate (500 scans/s) at a viewing distance of 100mm results in pulses with a pulse duration of 110µs on the retina of the eye.

The total pulse peak power at the exit window is less than 1.3mW. The average laser power is, thus, less than 1 mW, corresponding to laser class 2 in accordance with EN 60825-1, Edition 3.0 (2014) and IEC 60825-1, Edition 3.0 (2014) and in accordance with EN 60825-1, Edition 2.0 (2007) and IEC 60825-1, Edition 2.0 (2007).

NOTICE

Affix laser information and warning signs!

Laser information and warning signs are affixed to the device (see ①). In addition, self-adhesive laser information and warning signs (stick-on labels) are supplied in several languages (see ②).

↳ Affix the laser information sheet with the language appropriate for the place of use to the device.

When using the device in the US, use the stick-on label with the "Complies with 21 CFR 1040.10" notice.

↳ Affix the laser information and warning signs near the device if no signs are attached to the device (e.g. because the device is too small) or if the attached laser information and warning signs are concealed due to the installation position.

Affix the laser information and warning signs so that they are legible without exposing the reader to the laser radiation of the device or other optical radiation.

①

A Laser exit opening
B Laser warning sign
C Laser information sign with laser parameters

②

50136744

<p style="text-align: center;">LASERSTRAHLUNG NICHT IN DEN STRAHL BLICKEN</p> <p>Max. Leistung (peak): 1,3 mW Impulsdauer: 110 µs Wellenlänge: 650 nm</p> <p style="text-align: center;">LASER KLASSE 2 DIN EN 60825-1:2015-07</p>	<p style="text-align: center;">RADIAZIONE LASER NON FISSARE IL FASCIO</p> <p>Potenza max. (peak): 1,3 mW Durata dell'impulso: 110 µs Lunghezza d'onda: 650 nm</p> <p style="text-align: center;">APPARECCHIO LASER DI CLASSE 2 EN 60825-1:2014</p>
<p style="text-align: center;">LASER RADIATION DO NOT STARE INTO BEAM</p> <p>Maximum Output (peak): 1,3 mW Pulse duration: 110 µs Wavelength: 650 nm</p> <p style="text-align: center;">CLASS 2 LASER PRODUCT EN 60825-1:2014</p>	<p style="text-align: center;">RAYONNEMENT LASER NE PAS REGARDER DANS LE FASCIEAU</p> <p>Puissance max. (crête): 1,3 mW Durée d'impulsion: 110 µs Longueur d'onde: 650 nm</p> <p style="text-align: center;">APPAREIL A LASER DE CLASSE 2 EN 60825-1:2014</p>
<p>AVOID EXPOSURE - LASER RADIATION IS EMITTED FROM THIS APERTURE</p>	<p>EXPOSITION DANGEREUSE - UN RAYONNEMENT LASER EST EMIS PAR CETTE OUVERTURE</p>
<p style="text-align: center;">RADIACIÓN LASER NO MIRAR FIJAMENTE AL HAZ</p> <p>Potencia máx. (peak): 1,3 mW Duración del impulso: 110 µs Longitud de onda: 650 nm</p> <p style="text-align: center;">PRODUCTO LASER DE CLASE 2 EN 60825-1:2014</p>	<p style="text-align: center;">RADIAÇÃO LASER NÃO OLHAR FIXAMENTE O FEIXE</p> <p>Potência máx. (peak): 1,3 mW Período de pulso: 110 µs Comprimento de onda: 650 nm</p> <p style="text-align: center;">EQUIPAMENTO LASER CLASSE 2 EN 60825-1:2014</p>
<p style="text-align: center;">LASER RADIATION DO NOT STARE INTO BEAM</p> <p>Maximum Output (peak): 1,3 mW Pulse duration: 110 µs Wavelength: 650 nm</p> <p style="text-align: center;">CLASS 2 LASER PRODUCT IEC 60825-1:2007 Complies with 21 CFR 1040.10</p>	<p style="text-align: center;">激光辐射 勿直视光束</p> <p>最大输出 (峰值): 1,3 mW 脉冲持续时间: 110 µs 波长: 650 nm</p> <p style="text-align: center;">2 类激光产品 GB7247.1-2012</p>