

Technical data sheet Stationary bar code reader

Part no.: 50135041

BCL 338i S M 100



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Technical data



Basic data		Interface	
Series	BCL 300i	Туре	EtherCAT
Special version		EtherCAT	
Special version	Heating	Function	Process
Functions	3	Transmission protocol	EtherCAT, CoE and EoE
Tulictions		Service interface	
Functions	Alignment mode	Туре	USB 2.0
	AutoConfig	Туре	00B 2.0
	AutoControl	USB	
	AutoReflAct	Function	Configuration via software
	Code fragment technology LED indicator		Service
	Reference code comparison	Connection	
Characteristic parameters		Number of connections	1 Piece(s)
MTTF	110 years	Connection 1	
		Function	BUS IN
Read data			BUS OUT
Code types, readable	2/5 Interleaved		Connection to device
	Codabar		Data interface
	Code 128		PWR / SW IN / OUT
	Code 39		Service interface
	Code 93	Type of connection	Plug connector, It is essential to use a
	EAN 8/13		connection unit when commissioning the
	GS1 Databar Expanded	No. of the	device.
	GS1 Databar Limited	No. of pins	32 -pin
	GS1 Databar Omnidirectional	Туре	Male
	UPC	Mechanical data	
Scanning rate, typical	1,000 scans/s		
Bar codes per reading gate, max.	64 Piece(s)	Design	Cubic
number		Dimension (W x H x L)	103 mm x 44 mm x 96 mm
Outlead date		Housing material	Metal
Optical data		Metal housing	Diecast aluminum
Reading distance	30 290 mm	Lens cover material	Glass
Light source	Laser, Red	Net weight	370 g
Wavelength	655 nm	Housing color	Red
Laser class	1, IEC/EN 60825-1:2014		Silver
Transmitted-signal shape	Continuous	Type of fastening	Dovetail grooves
Usable opening angle (reading field	60 °		Fastening on back
opening)			Via optional mounting device
Modulus size	0.2 0.5 mm	Operation and display	
Reading method	Line scanner with deflecting mirror		
Beam deflection	By means of rotating polygon mirror wheel + deflecting mirror	Type of display	LED
Light beam exit	Lateral with deflecting mirror	Number of LEDs	2 Piece(s)
Light bouil oxit	Edicial With deliceting militor	Type of configuration	Via web browser
Electrical data		Environmental data	
Protective circuit	Polarity reversal protection	Ambient temperature, operation	0 40 °C
Performance data		Ambient temperature, storage	-20 70 °C
Supply voltage U _B	18 30 V, DC	Relative humidity (non-condensing)	0 90 %
Power consumption, max.	4.5 W		
. Oner consumption, max.	1.0 11		
Inputs/outputs selectable	60 mA		
Output current may	OU IIIA		
Output current, max.			
Output current, max. Number of inputs/outputs selectab Input current, max.			

Technical data



Certifications

Degree of protection	IP 65
Protection class	III
Approvals	c UL US
Test procedure for EMC in accordance	EN 55022
with standard	EN 61000-4-2, -3, -4, -6
Test procedure for shock in accordance with standard	IEC 60068-2-27, test Ea
Test procedure for continuous shock in accordance with standard	IEC 60068-2-29, test Eb
Test procedure for vibration in accordance with standard	IEC 60068-2-6, test Fc

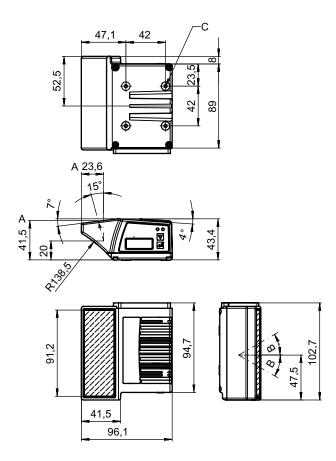
Classification

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
ETIM 5.0	EC002550
ETIM 6.0	EC002550
ETIM 7.0	EC002550
ETIM 8.0	EC002550
ETIM 9.0	EC002550
ETIM 10.0	EC002550

Dimensioned drawings

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All dimensions in millimeters



- Optical axis
- Deflection angle of the laser beam: ± 30°
- M4 thread (5 mm deep)

Electrical connection

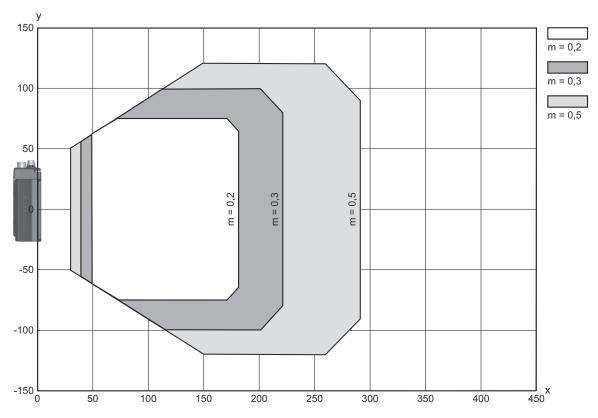
Connection 1

Function	BUS IN
	BUS OUT
	Connection to device
	Data interface
	PWR / SW IN / OUT
	Service interface
Type of connection	Plug connector
Type of connection	It is essential to use a connection unit when commissioning the device.
No. of pins	32 -pin
Туре	Male

Diagrams



Reading field curve



- Reading field distance [mm]
- Reading field width [mm]

Operation and display

LED	Display	Meaning		
1 PWR	Green, flashing	Device ok, initialization phase		
	Green, continuous light	Device OK		
	Green, briefly off - on	Reading successful		
	Green, briefly off - briefly red - on	Reading not successful		
	Orange, continuous light	Service mode		
	Red, flashing	Device OK, warning set		
	Red, continuous light	Error, device error		
2 BUS	Green, flashing	Initialization		
	Green, continuous light	Bus operation ok		
	Red, flashing	Communication error		
	Red, continuous light	Bus error		

Part number code



Part designation: BCL XXXX YYZ AAA BB CCCC

BCL	Operating principle BCL: bar code reader
XXXX	Series/interface (integrated fieldbus technology) 300i: RS 232 / RS 422 (stand-alone) 301i: RS 485 (multiNet slave) 304i: PROFIBUS DP 308i: EtherNet TCP/IP, UDP 338i: EtherCAT 348i: PROFINET RT 358i: EtherNet/IP
YY	Scanning principle S: line scanner (single line) R1: line scanner (raster) O: oscillating-mirror scanner (oscillating mirror)
Z	Optics N: High Density (close) M: Medium Density (medium distance) F: Low Density (remote) L: Long Range (very large distances) J: ink-jet (depending on the application)
AAA	Beam exit 100: lateral 102: front
ВВ	Special equipment D: With display H: with heating DH: optionally with display and heating P: plastic exit window
cccc	Functions F007: optimized process data structure F099: OPC-UA function

Note



🖔 A list with all available device types can be found on the Leuze website at www.leuze.com.

Notes



Observe intended use!



- This product is not a safety sensor and is not intended as personnel protection.
- Only use the product in accordance with its intended use.

ATTENTION! LASER RADIATION - CLASS 1 LASER PRODUCT



The device satisfies the requirements of IEC/EN 60825-1:2014 safety regulations for a product of laser class 1 and complies with 21 CFR 1040.10 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019.

- 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 Leuze electronic GmbH + Co. KG.

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Accessories



Connection technology - Connection cables

	Part no.	Designation	Article	Description
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	50132079	KD U-M12-5A-V1- 050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5.000 mm Sheathing material: PVC
¥	50135074	KS ET-M12-4A-P7- 050	Connection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connector, LED: No Connection 2: Open end Shielded: Yes Cable length: 5.000 mm Sheathing material: PUR

Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	50117011	KB USB A - USB miniB	Service line	Suitable for interface: USB Connection 1: USB Connection 2: USB Shielded: Yes Cable length: 1,500 mm Sheathing material: PVC
	50137078	KSS ET-M12-4A- M12-4A-P7-050	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: Connector, M12, Axial, Male, D-coded, 4 -pin Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR
	50135081	KSS ET-M12-4A- RJ45-A-P7-050	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: RJ45 Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

Connection technology - Connection boxes

	Part no.	Designation	Article	Description
6	50134929 *	ME 338 103	Connection unit	Suitable for: BCL 338i, BPS 338i Interface: EtherCAT Number of connections: 4 Piece(s) Connection: Cable with connector, M12, 900 mm
6	50134927 *	ME 338 104	Connection unit	Suitable for: BCL 338i Interface: EtherCAT Number of connections: 5 Piece(s) Connection: Cable with connector, M12, 900 mm
60	50134928 *	ME 338 214	Connection unit	Suitable for: BCL 338i Interface: EtherCAT Number of connections: 5 Piece(s) Connection: Cable with connector, M12, 600 mm

Accessories



Part no.	Designation	Article	Description
50134931 *	MK 338	Connection unit	Suitable for: BCL 338i, BPS 338i Interface: EtherCAT Number of connections: 4 Piece(s) Connection: Terminal
50134930 *	MS 338	Connection unit	Suitable for: BCL 338i, BPS 338i Interface: EtherCAT Number of connections: 4 Piece(s) Connection: Connector, M12

^{*} Necessary accessories, please order separately

Mounting technology - Mounting brackets

Part no.	Designation	Article	Description
50121433	BT 300 W	Mounting device	Design of mounting device: Angle, L-shape Fastening, at system: Through-hole mounting Mounting bracket, at device: Screw type Type of mounting device: Adjustable Material: Metal

Mounting technology - Rod mounts

Part no.	Designation	Article	Description
50121435	BT 56 - 1	Mounting device	Functions: Static applications Design of mounting device: Mounting system Fastening, at system: For 12 mm rod, For 14 mm rod, For 16 mm rod Mounting bracket, at device: Clampable Material: Metal Tightening torque of the clamping jaws: 8 N·m

Mounting technology - Other

Part no.	Designation	Article	Description
50124941	BTU 0300M-W	Mounting device	Fastening, at system: Through-hole mounting Mounting bracket, at device: Clampable, Groove mounting, Suited for M4 screws Material: Metal Shock absorber: No

Accessories



Reflective tapes for standard applications

Part no.	Designation	Article	Description
50106119	REF 4-A-100x100	Reflective tape	Design: Rectangular Reflective surface: 100 mm x 100 mm Material: Plastic Chemical designation of the material: PMMA Fastening: Self-adhesive

Services

	Part no.	Designation	Article	Description
<u>В</u>	S981020	CS30-E-212	Hourly rate	Details: Compilation of the application data, selection and suggestion of suitable sensor system, drawing prepared as assembly sketch. Conditions: Completed questionnaire or project specifications with a description of the application have been provided.
	S981014	CS30-S-110	Start-up support	Details: Performed at location of customer's choosing, duration: max. 10 hours. Conditions: Devices and connection cables are already mounted, price not including travel costs and, if applicable, accommodation expenses.
	S981019	CS30-T-110	Product training	Details: Location and content to be agreed upon, duration: max. 10 hours. Conditions: Price not including travel costs and, if applicable, accommodation expenses.
 	S981021	CS30-V-212	Hourly rate	Details: REA evaluation with creation of a test report, evaluation of the code quality. Conditions: Original bar codes to be provided by the client.

Note



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