

Technical data sheet Stationary bar code reader Part no.: 50116446 BCL 348i S L 100 D



The Sensor People In der Braike 1, D-73277 Owen/Germany

Leuze electronic GmbH + Co. KG

info@leuze.com • www.leuze.com changes Phone: +49 7021 573-0 • Fax: +49 7021 573-199 eng • 2025-04-03

UK CA

1/9

Technical data

Basic data

Series	BCL 300i
Functions	
Functions	Alignment mode
	AutoConfig
	AutoControl
	AutoReflAct
	Code fragment technology
	LED indicator
	Reference code comparison
Characteristic parameters	
MTTF	110 years
Read data	
Read data Code types, readable	2/5 Interleaved
	2/5 Interleaved Codabar
	Codabar
	Codabar Code 128
	Codabar Code 128 Code 39
	Codabar Code 128 Code 39 Code 93
	Codabar Code 128 Code 39 Code 93 EAN 8/13
	Codabar Code 128 Code 39 Code 93 EAN 8/13 GS1 Databar Expanded
	Codabar Code 128 Code 39 Code 93 EAN 8/13 GS1 Databar Expanded GS1 Databar Limited
	Codabar Code 128 Code 39 Code 93 EAN 8/13 GS1 Databar Expanded GS1 Databar Limited GS1 Databar Omnidirectional

Optical data

Reading distance	70 670 mm
Light source	Laser, Red
Wavelength	655 nm
Laser class	1, IEC/EN 60825-1:2014
Transmitted-signal shape	Continuous
Usable opening angle (reading field opening)	60 °
Modulus size	0.35 0.8 mm
Reading method	Line scanner with deflecting mirror
Beam deflection	By means of rotating polygon mirror wheel + deflecting mirror
Light beam exit	Lateral with deflecting mirror
Electrical data	
Protective circuit	Polarity reversal protection
Performance data	
Supply voltage U _B	18 30 V, DC
Power consumption, max.	4.5 W
Power consumption, max. Inputs/outputs selectable	4.5 W
• •	4.5 W 60 mA
Inputs/outputs selectable	60 mA
Inputs/outputs selectable Output current, max.	60 mA

Туре

PROFINET

Leuze

Conformance classBProtocolPROFINET RTSwitch functionalityIntegratedTransmission speed10 Mbit/sService interface10 Mbit/sService interfaceUSB 2.0USBEnnectionFunctionConfiguration via software ServiceServiceServiceConnection1 Piece(s)Mumber of connections1 Piece(s)Connection 1BUS IN BUS OUT Connection to device Data interfaceFunctionPUR / SW IN / OUT Service interfaceType of connectionPUR / SW IN / OUT Service interfaceType of connectionPUR / SW IN / OUT Service interfaceMo. of pins Type32 -pin MaleMechanical dataMaleMechanical dataSo gMetal housing Lens cover material SilverSo gNet weight Housing color SilverSo gType of fastening Dovetail grooves Fastening on back Via optional mounting deviceOperation and displayLED	PROFINET	
Protocol PROFINET RT Switch functionality Integrated Transmission speed 10 Mbit/s 100 Mbit/s Service interface Type USB Configuration via software Service Connection Number of connections 1 Piece(s) Connection 1 Function BUS IN BUS OUT Connection 1 Function PWR / SW IN / OUT Service interface PWR / SW IN / OUT Service interface Type of connection Plug connector, It is essential to use a connection unit when commissioning the device. No. of pins 32 -pin Type Male Mechanical data Metal Met		Process
Switch functionality Integrated Transmission speed 10 Mbit/s Transmission speed 10 Mbit/s Service interface 10 Mbit/s Type USB 2.0 Function Configuration via software Service Connection 1 Piece(s) Number of connections 1 Piece(s) Connection 1 BUS IN BUS OUT Connection to device Data interface Function BUS IN BUS OUT Connection to device Type of connection Plug connector, It is essential to use a connection unit when commissioning the device. No. of pins 32 -pin Type Male Mechanical data Design Design Cubic Dimension (W x H x L) 103 mm x 44 mm x 96 mm Housing material Metal Metal housing Diecast aluminum Lens cover material Glass Net weight 350 g Housing color Red Silver Dovetail grooves Fastening on back Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 3 pixels Number of LEDs		-
Transmission speed10 Mbit/s10 Mbit/sService interfaceTypeUSB 2.0USBConfiguration via software ServiceFunctionConfiguration via software ServiceConnection1 Piece(s)Number of connections1 Piece(s)FunctionBUS IN BUS OUT Connection to device Data interface PWR / SW IN / OUT Service interfaceType of connectionPlug connector, It is essential to use a connection unit when commissioning the device.No. of pins32 -pinTypeMaleMechanical dataMetalDimension (W x H x L)103 mm x44 mm x 96 mmHousing material Metal housing Lens cover material SilverGlassNet weight Housing color SilverSo gType of displayLED Monochromatic graphic display, 128 x 3 pixelsType of configuration Via web browser Operational controlsLED Monochromatic graphic display, 128 x 3 pixelsFurther of LEDs Type of configuration2 Piece(s)Type of configuration Via web browserSutor(s)Environmental dataSutor(s)Environmental dataAutor(s)Environmental dataAutor(s)Ambient temperature, operation0 40 °C Ambient temperature, storage-20 70 °C-20 70 °C		
100 Mbit/s Service interface Type USB 2.0 USB Configuration via software Service Connection Configuration via software Service Connection 1 Piece(s) Connection 1 BUS IN BUS OUT Connection to device Data interface PWR / SW IN / OUT Service interface Type of connection Plug connector, It is essential to use a connection unit when commissioning the device. No. of pins 32 - pin Type Male Male Mechanical data Discast aluminum Metal housing Discast aluminum Lens cover material Glass Not weight 350 g Housing color Sliver Type of fastening Diovetail grooves Fastening on back Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 3 pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Suton(s)		
Service interface Type USB 2.0 Function Configuration via software Service Service Connection I Piece(s) Number of connections 1 Piece(s) Function BUS IN BUS IN BUS OUT Connection to device Data interface PWR / SW IN / OUT Service interface PUB connector, It is essential to use a connection unit when commissioning the device. No. of pins 32 - pin Type Male Mechanical data Oubic Dimension (W x H x L) 103 mm x 44 mm x 96 mm Housing material Metal Metweight 350 g Housing color Silver Type of fastening Dovetail grooves Fastening on back Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 3 pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Buton(s) Environmental data Suton(s) Environmental data Ambient temperature, operation	Transmission speed	
Type USB 2.0 USB - Function Configuration via software Service Connection Number of connections 1 Piece(s) Connection 1 Function 1 Function 1 Function 1 Function 1 Function 1 Function 1 Function 2 Function 1 Function 2 Function 1 Function 2 Function 2 F		100 Mbit/s
USB Configuration via software Service Connection I Piece(s) Number of connections 1 Piece(s) Connection 1 BUS IN BUS OUT Connection to device Data interface PWR / SW IN / OUT Service interface Type of connection Plug connector, It is essential to use a connector unit when commissioning the device. No. of pins 32 -pin Type Male Mechanical data Direcast aluminum Design Cubic Dimension (W x H x L) 103 mm x 44 mm x 96 mm Housing material Metal Metal housing Direcast aluminum Lens cover material Glass Net weight 350 g Housing color Red Silver Type of fastening Dovetail grooves Fastening on back Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 33 pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Ambient temperature, operation	Service interface	
Function Configuration via software Service Connection I Piece(s) Number of connections 1 Piece(s) Function BUS IN BUS OUT Connection to device Data interface PWR / SW IN / OUT Service interface PWR / SW IN / OUT Service interface Type of connection Plug connector, It is essential to use a connection unit when commissioning the device. No. of pins 32 -pin Type Male Mechanical data Design Design Cubic Dimension (W x H x L) 103 mm x 44 mm x 96 mm Housing material Metal Metal housing Diecast aluminum Lens cover material Glass Net weight 350 g Housing color Fastening on back Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 3 pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Ambient temperature, operation	Туре	USB 2.0
Service Connection I Piece(s) Number of connections 1 Piece(s) Function BUS IN BUS OUT Connection to device Data interface PWR / SW IN / OUT Service interface Type of connection Plug connector, it is essential to use a connection unit when commissioning the device. No. of pins 32 -pin Type Male Mechanical data Ouble Design Cubic Dimension (W x H x L) 103 mm x 44 mm x 96 mm Housing material Metal Metal housing Discast aluminum Lens cover material Glass Net weight 350 g Housing color Red Silver Type of fastening Dovetail grooves Fastening on back Via optional mounting device Monochromatic graphic display, 128 x 3 pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Autor(s) Environmental data Autor(s)	USB	
Connection 1 Piece(s) Function BUS IN Function BUS OUT Connection to device Data interface PVWR / SW IM / OUT Service interface Plug connector, It is essential to use a connection unit when commissioning the device. No. of pins No. of pins 32 -pin Type Male Mechanical data Usic Design Cubic Dimension (W x H x L) 103 mm x 44 mm x 96 mm Housing material Metal Metal housing Diecast aluminum Lens cover material Glass Net weight 350 g Housing color Red Silver Silver Type of display LED Monochromatic graphic display, 128 x 3 pixels pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Maton(s)	Function	Configuration via software
Number of connections 1 Piece(s) Connection 1 BUS IN Function BUS OUT Connection to device Data interface PWR / SW IN / OUT Service interface PWR / SW IN / OUT Service interface Put of connection Plug connector, It is essential to use a connection unit when commissioning the device. No. of pins 32 - pin Type Male Mechanical data Cubic Design Cubic Dimension (W x H x L) 103 mm x 44 mm x 96 mm Housing material Metal Metal housing Diecast aluminum Lens cover material Glass Net weight 350 g Housing color Red Silver Silver Type of fastening Dovetail grooves Fastening on back Via optional mounting device Operation and display 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Monochromatic graphic display, 128 x 3. Number of LEDs 2 Piece(s) <		Service
Connection 1 BUS IN Function BUS OUT Connection to device Data interface PWR / SW IN / OUT Service interface Type of connection Plug connector, It is essential to use a connection unit when commissioning the device. No. of pins 32 -pin Type Male Mechanical data Male Mechanical data Design Cubic 103 mm x 44 mm x 96 mm Housing material Metal Metal housing Diecast aluminum Lens cover material Glass Net weight 350 g Housing color Red Silver Silver Type of fastening Dovetail grooves Fastening on back Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 3 pixels pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Ambient temperature, operation Ambient temperature, storage -20 70 °C <	Connection	
Function BUS IN BUS OUT Connection to device Data interface PWR / SW IN / OUT Service interface PWR / SW IN / OUT Type of connection Plug connector, It is essential to use a connection unit when commissioning the device. No. of pins 32 -pin Type Male Mechanical data Cubic Design Cubic Dimension (W x H x L) 103 mm x 44 mm x 96 mm Housing material Metal Metal housing Diecast aluminum Lens cover material Glass Net weight 350 g Housing color Red Silver Type of fastening Dovetail grooves Fastening on back Via optional mounting device Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 3 pixels Number of LEDs Type of configuration Via web browser Operational controls Button(s) Environmental data -20 70 °C	Number of connections	1 Piece(s)
Function BUS IN BUS OUT Connection to device Data interface PWR / SW IN / OUT Service interface PWR / SW IN / OUT Type of connection Plug connector, It is essential to use a connection unit when commissioning the device. No. of pins 32 -pin Type Male Mechanical data Cubic Design Cubic Dimension (W x H x L) 103 mm x 44 mm x 96 mm Housing material Metal Metal housing Diecast aluminum Lens cover material Glass Net weight 350 g Housing color Red Silver Type of fastening Dovetail grooves Fastening on back Via optional mounting device Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 3: pixels pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Ambient temperature, operation	Connection 4	
BUS OUT Connection to device Data interface PWR / SW IN / OUT Service interface PWR / SW IN / OUT Service interface PUg connector, It is essential to use a connection unit when commissioning the device. No. of pins 32 -pin Type Male Mechanical data Male Metal housing Discast aluminum Housing material Metal Metal housing Discast aluminum Lens cover material Glass Net weight 350 g Housing color Red Silver Dovetail grooves Fastening on back Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 33: pixels Divels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Ambient temperature, operation Ambient temperature, storage -20 70 °C		BUS IN
Data interface PWR / SW IN / OUT Service interface Type of connection Plug connector, It is essential to use a connection unit when commissioning the device. No. of pins 32 -pin Type Male Mechanical data 0 Design Cubic Dimension (W x H x L) 103 mm x 44 mm x 96 mm Housing material Metal Metal housing Diecast aluminum Lens cover material Glass Net weight 350 g Housing color Red Silver Dovetail grooves Fastening on back Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 3 pixels pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Ambient temperature, operation		
Data interface PWR / SW IN / OUT Service interface Type of connection Plug connector, It is essential to use a connection unit when commissioning the device. No. of pins 32 -pin Type Male Mechanical data 0 Design Cubic Dimension (W x H x L) 103 mm x 44 mm x 96 mm Housing material Metal Metal housing Diecast aluminum Lens cover material Glass Net weight 350 g Housing color Red Silver Dovetail grooves Fastening on back Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 3 pixels pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Ambient temperature, operation		
Type of connection Service interface Type of connection Plug connector, It is essential to use a connection unit when commissioning the device. No. of pins 32 -pin Type Male Mechanical data Cubic Design Cubic Dimension (W x H x L) 103 mm x 44 mm x 96 mm Housing material Metal Metal housing Diecast aluminum Lens cover material Glass Net weight 350 g Housing color Red Silver Dovetail grooves Fastening Dovetail grooves Fastening on back Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 3 pixels pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Ambient temperature, operation		
Type of connectionPlug connector, It is essential to use a connection unit when commissioning the device.No. of pins32 -pinTypeMaleMechanical dataCubicDesignCubicDimension (W x H x L)103 mm x 44 mm x 96 mmHousing materialMetalMetal housingDiecast aluminumLens cover materialGlassNet weight350 gHousing colorRedType of fasteningDovetail groovesFastening on backVia optional mounting deviceOperation and displayLEDNumber of LEDs2 Piece(s)Type of configurationVia web browserOperational controlsButton(s)Environmental data0 40 °CAmbient temperature, operation0 40 °CAmbient temperature, storage-20 70 °C		PWR / SW IN / OUT
No. of pins32 -pinTypeMaleMechanical dataCubicDesignCubicDimension (W x H x L)103 mm x 44 mm x 96 mmHousing materialMetalMetal housingDiecast aluminumLens cover materialGlassNet weight350 gHousing colorRedSilverDovetail groovesType of fasteningDiverating on backVia optional mounting deviceOperation and displayLEDNumber of LEDs2 Piece(s)Type of configurationUia web browserOperational controlsButton(s)Environmental data0 40 °CAmbient temperature, operation0 40 °C		Service interface
No. of pins32 -pinTypeMaleMechanical dataMaleDesignCubicDimension (W x H x L)103 mm x 44 mm x 96 mmHousing materialMetalMetal housingDiecast aluminumLens cover materialGlassNet weight350 gHousing colorRedType of fasteningDovetail groovesFastening on back Via optional mounting deviceOperation and displayLED Monochromatic graphic display, 128 x 33 pixelsNumber of LEDs2 Piece(s)Type of configurationVia web browserOperational controlsButton(s)Environmental dataC 40 °C -20 70 °C	Type of connection	connection unit when commissioning the
TypeMaleMechanical dataCubicDesignCubicDimension (W x H x L)103 mm x 44 mm x 96 mmHousing materialMetalMetal housingDiecast aluminumLens cover materialGlassNet weight350 gHousing colorRedType of fasteningDovetail groovesFastening on backVia optional mounting deviceOperation and displayLEDNumber of LEDs2 Piece(s)Type of configurationVia web browserOperational controlsButton(s)Environmental data0 40 °CAmbient temperature, operation0 70 °C	No of nins	
DesignCubicDimension (W x H x L)103 mm x 44 mm x 96 mmHousing materialMetalMetal housingDiecast aluminumLens cover materialGlassNet weight350 gHousing colorRedSilverDovetail groovesType of fasteningDovetail groovesPeration and displayLEDType of displayLEDNumber of LEDs2 Piece(s)Type of configurationVia web browserOperational controlsButton(s)Environmental data-20 70 °C		•
Dimension (W x H x L) 103 mm x 44 mm x 96 mm Housing material Metal Metal housing Diecast aluminum Lens cover material Glass Net weight 350 g Housing color Red Silver Dovetail grooves Type of fastening Dovetail grooves Poperation and display LED Monochromatic graphic display, 128 x 32 pixels Discess Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data -20 70 °C	Mechanical data	
Dimension (W x H x L)103 mm x 44 mm x 96 mmHousing materialMetalMetal housingDiecast aluminumLens cover materialGlassNet weight350 gHousing colorRedType of fasteningDovetail groovesFastening on backVia optional mounting deviceOperation and displayLEDType of displayLEDNumber of LEDs2 Piece(s)Type of configurationVia web browserOperational controlsButton(s)Environmental data	Design	Cubic
Housing materialMetalMetal housingDiecast aluminumLens cover materialGlassNet weight350 gHousing colorRedType of fasteningDovetail groovesFastening on backVia optional mounting deviceOperation and displayLEDType of displayLEDNumber of LEDs2 Piece(s)Type of configurationVia web browserOperational controlsButton(s)Environmental data		103 mm x 44 mm x 96 mm
Lens cover material Glass Net weight 350 g Housing color Red Silver Type of fastening Dovetail grooves Fastening on back Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 33 pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Ambient temperature, operation 0 40 °C Ambient temperature, storage -20 70 °C		Metal
Net weight 350 g Housing color Red Silver Dovetail grooves Fastening on back Fastening on back Via optional mounting device Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 3 pixels Pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data -20 70 °C	Metal housing	Diecast aluminum
Housing color Red Silver Dovetail grooves Type of fastening Dovetail grooves Fastening on back Via optional mounting device Operation and display LED Monochromatic graphic display, 128 x 3: pixels Pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data 0 40 °C Ambient temperature, operation 0 40 °C	Lens cover material	Glass
Type of fastening Silver Type of fastening Dovetail grooves Fastening on back Via optional mounting device Operation and display LED Type of display LED Monochromatic graphic display, 128 x 3: pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data 0 40 °C Ambient temperature, operation 0 70 °C	Net weight	
Type of fastening Dovetail grooves Fastening on back Fastening on back Via optional mounting device Via optional mounting device Operation and display LED Type of display LED Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data 0 40 °C Ambient temperature, operation 0 40 °C		350 g
Fastening on back Via optional mounting device Operation and display Type of display LED Monochromatic graphic display, 128 x 3: Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data 0 40 °C Ambient temperature, operation 0 70 °C	Housing color	•
Via optional mounting device Operation and display Type of display LED Monochromatic graphic display, 128 x 32 pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data 0 40 °C Ambient temperature, operation 0 40 °C	Housing color	Red
Operation and display LED Type of display LED Monochromatic graphic display, 128 x 33: pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data 0 40 °C Ambient temperature, operation 0 40 °C	-	Red Silver
Type of display LED Monochromatic graphic display, 128 x 32 pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data 0 40 °C Ambient temperature, operation 0 40 °C	-	Red Silver Dovetail grooves
Monochromatic graphic display, 128 x 32 pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data Ambient temperature, operation Ambient temperature, storage -20 70 °C	-	Red Silver Dovetail grooves Fastening on back
Monochromatic graphic display, 128 x 3. pixels Number of LEDs 2 Piece(s) Type of configuration Via web browser Operational controls Button(s) Environmental data	Type of fastening	Red Silver Dovetail grooves Fastening on back
Type of configuration Via web browser Operational controls Button(s) Environmental data Ambient temperature, operation 0 40 °C Ambient temperature, storage -20 70 °C	Type of fastening Operation and display	Red Silver Dovetail grooves Fastening on back Via optional mounting device
Operational controls Button(s) Environmental data 0 40 °C Ambient temperature, storage -20 70 °C	Type of fastening Operation and display	Red Silver Dovetail grooves Fastening on back Via optional mounting device
Environmental data Ambient temperature, operation 0 40 °C Ambient temperature, storage -20 70 °C	Type of fastening Operation and display Type of display Number of LEDs	Red Silver Dovetail grooves Fastening on back Via optional mounting device LED Monochromatic graphic display, 128 x 32 pixels 2 Piece(s)
Ambient temperature, operation0 40 °CAmbient temperature, storage-20 70 °C	Type of fastening Operation and display Type of display Number of LEDs Type of configuration	Red Silver Dovetail grooves Fastening on back Via optional mounting device LED Monochromatic graphic display, 128 x 32 pixels 2 Piece(s)
Ambient temperature, storage -20 70 °C	Type of fastening Operation and display Type of display Number of LEDs Type of configuration	Red Silver Dovetail grooves Fastening on back Via optional mounting device LED Monochromatic graphic display, 128 x 3 pixels 2 Piece(s) Via web browser
	Type of fastening Operation and display Type of display Number of LEDs Type of configuration Operational controls	Red Silver Dovetail grooves Fastening on back Via optional mounting device LED Monochromatic graphic display, 128 x 3 pixels 2 Piece(s) Via web browser
Relative humidity (non-condensing) 0 90 %	Type of fastening Operation and display Type of display Number of LEDs Type of configuration Operational controls Environmental data	Red Silver Dovetail grooves Fastening on back Via optional mounting device LED Monochromatic graphic display, 128 x 3 pixels 2 Piece(s) Via web browser Button(s)
	Type of fastening Operation and display Type of display Number of LEDs Type of configuration Operational controls Environmental data Ambient temperature, operation	Red Silver Dovetail grooves Fastening on back Via optional mounting device LED Monochromatic graphic display, 128 x 32 pixels 2 Piece(s) Via web browser Button(s) 0 40 °C
	Type of fastening Operation and display Type of display Number of LEDs Type of configuration Operational controls Environmental data Ambient temperature, operation Ambient temperature, storage	Red Silver Dovetail grooves Fastening on back Via optional mounting device LED Monochromatic graphic display, 128 x 3 pixels 2 Piece(s) Via web browser Button(s) 0 40 °C -20 70 °C
	Type of fastening Operation and display Type of display Number of LEDs Type of configuration Operational controls Environmental data Ambient temperature, operation Ambient temperature, storage	Red Silver Dovetail grooves Fastening on back Via optional mounting device LED Monochromatic graphic display, 128 x 3 pixels 2 Piece(s) Via web browser Button(s) 0 40 °C -20 70 °C

Technical data

Leuze

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

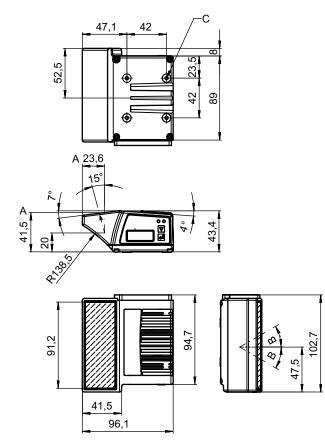
Classification	sification	
----------------	------------	--

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

All dimensions in millimeters





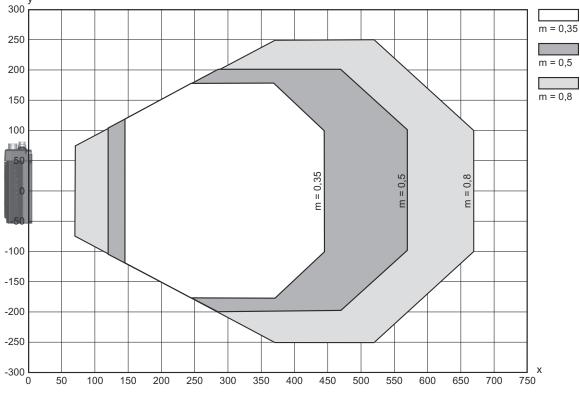
- A Optical axis
- B Deflection angle of the laser beam: \pm 30 $^{\circ}$
- C M4 thread (5 mm deep)

Electrical connection

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] х Reading field width [mm] y

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

Leuze

We reserve the right to make technical Leuze electronic GmbH + Co. KG info@leuze.com • www.leuze.com changes The Sensor People In der Braike 1, D-73277 Owen/Germany Phone: +49 7021 573-0 • Fax: +49 7021 573-199 eng • 2025-04-03

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



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

Notes

	⚠
~	% Т
	% Т
	₿ (

Observe intended use!

- $\ensuremath{\mathfrak{B}}$ This product is not a safety sensor and is not intended as personnel protection.
- $\ensuremath{\overset{\scriptstyle \ensuremath{\scriptstyle \bigtriangledown}}{\mapsto}}$ The product may only be put into operation by competent persons.
- b 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.

Accessories

Leuze

Connection technology - Connection cables

	Part no.	Designation	Article	Description
W D	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
Ŵ	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	50131256 *	ME 348 103	Connection unit	Suitable for: BCL 348i Interface: PROFINET Number of connections: 4 Piece(s) Connection: Cable with connector, M12, 900 mm
6	50131259 *	ME 348 104	Connection unit	Suitable for: BCL 348i Interface: PROFINET Number of connections: 5 Piece(s) Connection: Cable with connector, M12, 900 mm
60	50131258 *	ME 348 214	Connection unit	Suitable for: BCL 348i Interface: PROFINET Number of connections: 5 Piece(s) Connection: Cable with connector, M12, 600 mm

Accessories

 Part no.	Designation	Article	Description
50116467 *	MK 348	Connection unit	Suitable for: BCL 348i, BPS 348i Interface: PROFINET Number of connections: 4 Piece(s) Connection: Terminal
50116471 *	MS 348	Connection unit	Suitable for: BCL 348i, BPS 348i Supply voltage: DC Interface: PROFINET Number of connections: 4 Piece(s) Connection: Connector, M12

* Necessary accessories, please order separately

Mounting technology - Mounting brackets

P	Part no.	Designation	Article	Description
5	0121433	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

Leuze

Accessories

Leuze

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
D S	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.

