



the sensor people





Part no.: 50136336 BPS 348i SM 100 H Bar code positioning system











Figure can vary

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### **Technical data**

Basic data			
Series Series	BPS 300i		
Order guide	Bar code tape must be ordered separately Operation only possible in combination with MS 3xx, MK 3xx or ME 348 103 connection unit		
Special design			
Special design	Heating		
Optical data			
Depth of field	50 170 mm		
Light source	Laser , Red		
Laser class	2 , IEC/EN 60825-1:2007		
Light beam exit	Lateral		
Measurement data	0 40,000,000 mm		
Measurement range	0 10,000,000 mm		
Resolution	0.001 10 mm		
Reproducibility (1 sigma)	0.05 mm		
Measurement value output	2 ms		
Max. traverse rate	10 m/s		
Electrical data			
Protective circuit	Polarity reversal protection Short circuit protected		
Performance data			
Supply voltage U <sub>B</sub>	18 30 V , DC		
Power consumption, max.	17.7 W		
Inputs/outputs selectable			
Output current, max.	60 mA		
Number of inputs/outputs selectable	2 Piece(s)		
Input current, max.	8 mA		
Interface			
<i>тепасе</i> Туре	PROFINET		
Profinet			
Conformance class	В		
Protocol	PROFINET RT		
Switch functionality	Integrated		
Transmission speed	100 Mbit/s		
Service interface	LIED		
Туре	USB		
USB	Outforward and CODM 1		
Function	Configuration via GSDML modules Service		
Mechanical data	400 mm v 400 7 mm v 40 0 mm		
Dimension (W x H x L)	100 mm x 108.7 mm x 48.3 mm		



Housing material	Metal , Diecast aluminum
Lens cover material	Glass
Net weight 580 g	
Housing color	Red Silver
Type of fastening	Dovetail grooves Fastening on back Via optional mounting device

Operation and display	
Type of display	LED
Type of configuration	Via web browser

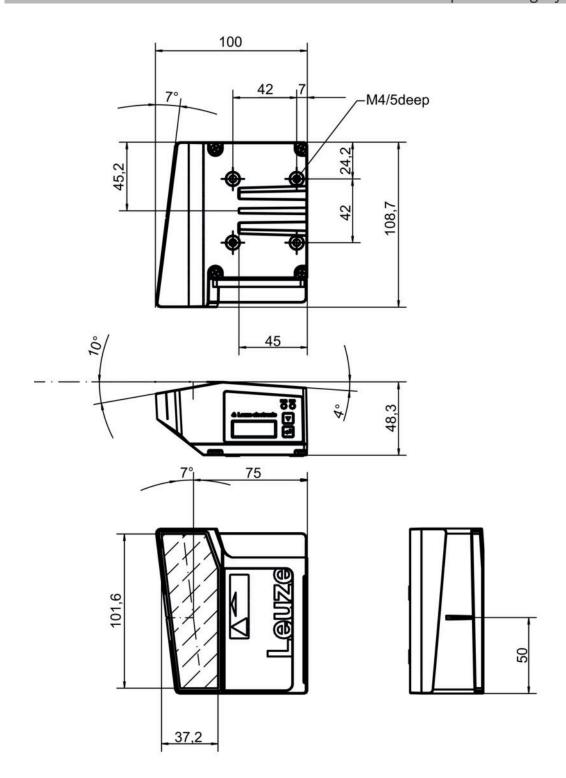
Environmental data		
Ambient temperature, operation	-35 50 °C	
Ambient temperature, storage	-35 70 °C	
Relative humidity (non-condensing)	90 %	

Certifications	
Degree of protection	IP 65 , EN 60529 with various connectors or screwed-on caps
Protection class	III
Certifications	c UL US

Classification		
Customs tariff number	84719000	
eCl@ss 8.0	27280190	
eCl@ss 9.0	27280190	
ETIM 5.0	EC001825	
ETIM 6.0	EC001825	

## **Dimensioned drawings**

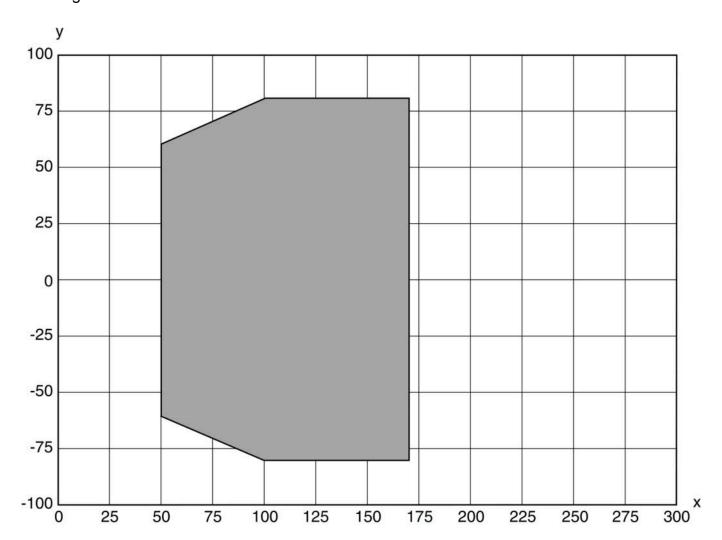
All dimensions in millimeters





### **Diagrams**

### Reading field curve



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

### Part number code

Part designation: BPS 3XXi SM 100 Y Z

BPS	Operating principle: BPS: bar code positioning system
3XXi	Series/interface (integrated fieldbus technology): 300i: RS 232 / RS 422 (stand-alone) 301i: RS 485 304i: PROFIBUS DP 307i: SSI 348i: PROFINET RT
SM	Scanning principle / optics: S: line scanner (single line) M: Medium Density (medium distance)
100	Beam exit: 100: lateral
ΥZ	Special equipment: n/a: no special equipment D: with display H: with heating D H: optionally with display and heating



Note

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

#### **Notes**

#### WARNING! LASER RADIATION - CLASS 2 LASER PRODUCT

#### Do not stare into beam!

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

- Never look directly into the laser beam or in the direction of reflected 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! Use of controls or adjustments or performance of procedures other than specified herein may result in hazardous light exposure.
- 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.

#### **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 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 Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

## Connection technology - Interconnection cables

Part no.	Designation	Article	Description
50137077	KSS ET-M12-4A- M12-4A-P7-020		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: 1,000 mm Sheathing material: PUR

Leuze electronic GmbH + Co. KG, In der Braike 1, 73277 Owen Phone: +49 7021 573-0, Fax: +49 7021 573-199



Part no.	Designation	Article	Description
50135080	KSS ET-M12-4A- RJ45-A-P7-020	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: RJ45 Shielded: Yes Cable length: 2,000 mm Sheathing material: PUR

## Connection technology - Connectors

	Part no.	Designation	Article	Description
1	50020501	KD 095-5A	Connector	Connection: Connector with screw terminals, M12, Axial, Female, A-coded, 5 -pin

### Connection technology - Connection boxes

	Part no.	Designation	Article	Description
6	50131256 *	ME 348 103	Connection unit	Suitable for: BCL 348i Suitable for interface: PROFINET Number of connections: 4 Piece(s) Connection: Cable with connector, M12, 900 mm
	50116467 *	MK 348	Connection unit	Suitable for: BCL 348i, BPS 348i Suitable for interface: PROFINET Number of connections: 4 Piece(s) Connection: Terminal
	50116471 *	MS 348	Connection unit	Suitable for: BCL 348i, BPS 348i Suitable for interface: PROFINET Number of connections: 4 Piece(s) Connection: Connector, M12

<sup>\*</sup> Necessary accessories, please order separately

## Mounting technology - Rod mounts

Part no.	Designation	Article	Description
50027375	BT 56	Mounting device	Functions: Static applications Design of mounting device: Mounting system Fastening, at system: For 16 mm rod, For 18 mm rod, For 20 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

### Bar code tape

Part no.	Designation	Article	Description
50040041	BCB 010	Bar code tape	Dimensions: 47 mm x 10,000 mm Grid dimension: 40 mm
50037489	BCB 020	Bar code tape	Dimensions: 47 mm x 20,000 mm Grid dimension: 40 mm

### Services

Part no.	Designation	Article	Description
S981001	CS10-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. Restrictions: No mechanical (mounting) and electrical (wiring) work performed, no changes (attachments, wiring, programming) to third-party components in the nearby environment.
S981005	CS10-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. Restrictions: Travel costs and accommodation expenses charged separately and according to expenditure.

#### Note

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