



Part no.: 50125669
BPS 300i SM 100 D
Bar code positioning system



RS422



RS232

Figure can vary

Contents

- Technical data
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Technical data

Basic data	
Series	BPS 300i
Order guide	Bar code tape must be ordered separately Operation only possible in combination with MS 3xx, MK 3xx or KB 30x connection unit
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	
Measurement range	0 ... 10,000,000 mm
Resolution	0.01 ... 10 mm
Reproducibility (1 sigma)	0.05 mm
Measurement value output	1 ... 30 ms
Max. traverse rate	10 m/s
Electrical data	
Protective circuit	Polarity reversal protection Short circuit protected
Performance data	
Supply voltage U_B	18 ... 30 V, DC
Power consumption, max.	3.7 W
Inputs/outputs selectable	
Output current, max.	60 mA
Number of inputs/outputs selectable	2 Piece(s)
Input current, max.	8 mA
Interface	
Type	RS 232, RS 422
RS 232	
Function	Process
Transmission speed	4,800 ... 115,200 Bd
Data format	Adjustable
Start bit	1
Data bit	7,8
Stop bit	1, 2 stop bits
Parity	Adjustable
Data encoding	Binary

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Service interface

Type	USB
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USB

Function	Configuration/parameterization via integrated web server Service
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Mechanical data

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 Monochromatic graphic display, 128 x 32 pixels
Type of configuration	Via web browser

Environmental data

Ambient temperature, operation	-5 ... 50 °C
Ambient temperature, storage	-35 ... 70 °C
Relative humidity (non-condensing)	90 %

Certifications

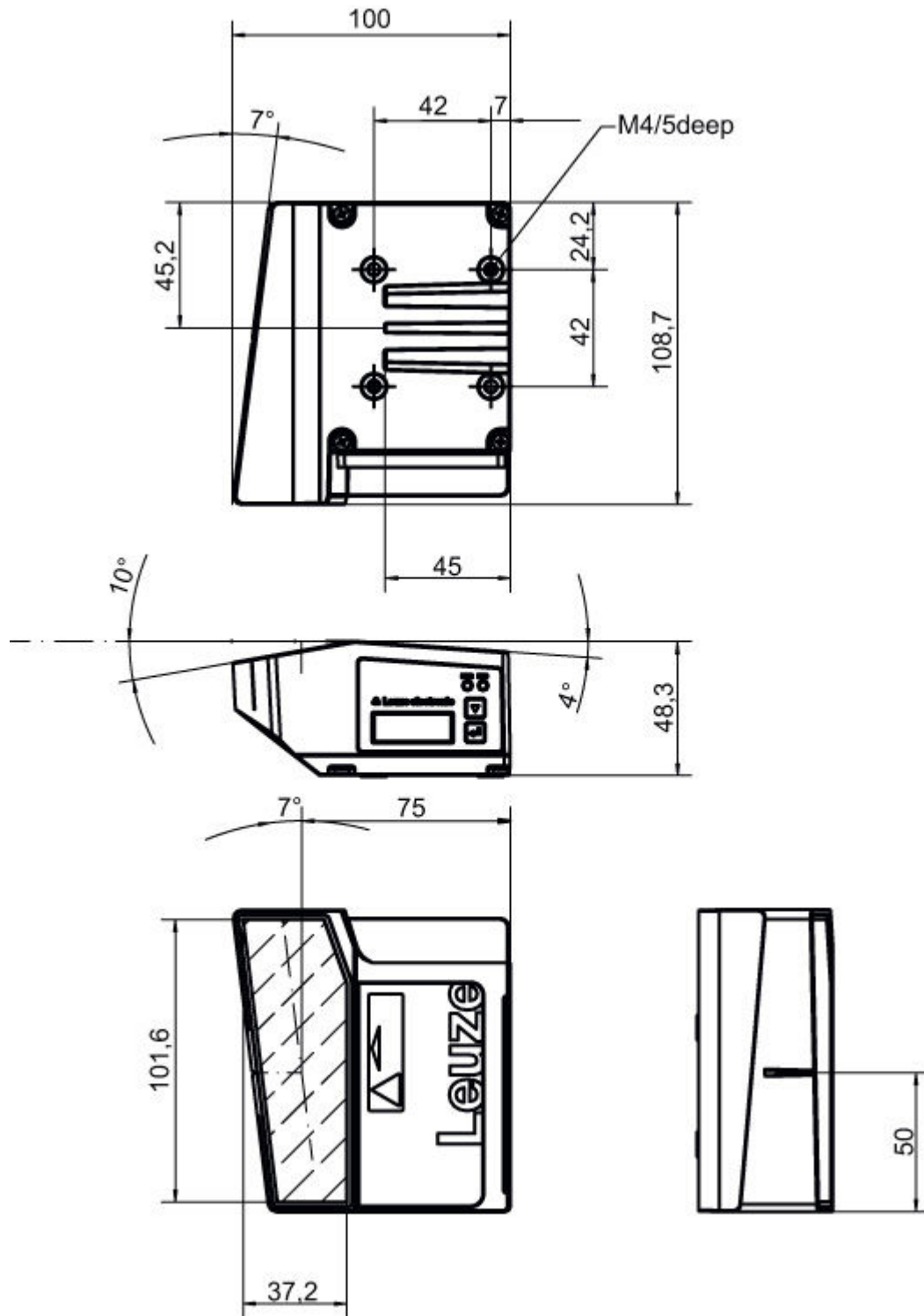
Degree of protection	IP 65, EN 60529 with various connectors or screwed-on caps
Protection class	III
Certifications	c UL US

Classification

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

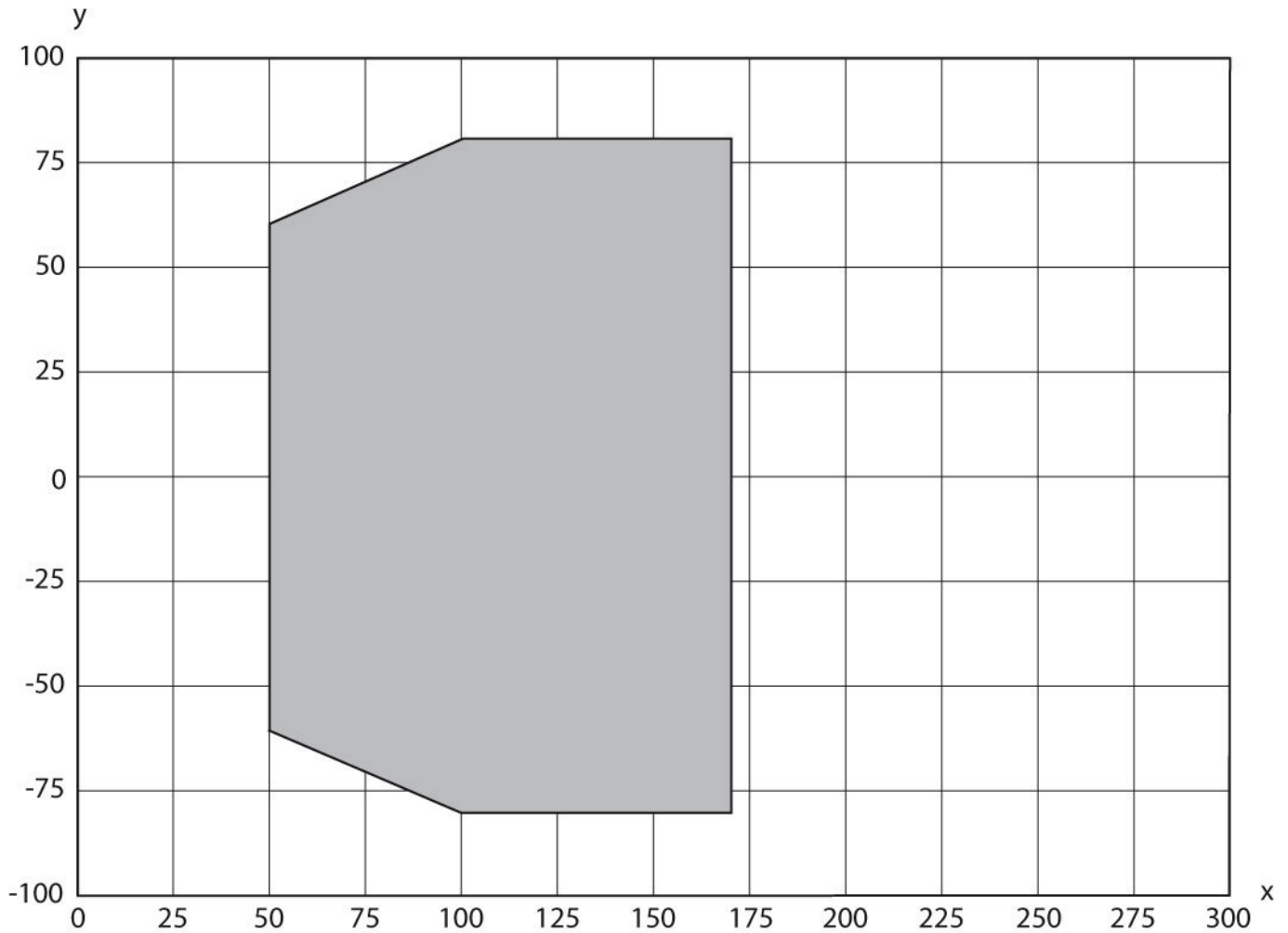
Dimensioned drawings

All dimensions in millimeters



Diagrams

Reading field curve



x Reading field distance [mm]
y 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
Y Z	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.

Accessories
Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50104170	KB SSI/ IBS-10000-BA	Connection cable	Suitable for interface: SSI, Interbus-S Connection 1: Connector, M12, Axial, Female, B-coded, 5 -pin Connection 2: Open end Shielded: Yes Cable length: 10,000 mm Sheathing material: PUR
	50104169	KB SSI/ IBS-15000-BA	Connection cable	Suitable for interface: SSI, Interbus-S Connection 1: Connector, M12, Axial, Female, B-coded, 5 -pin Connection 2: Open end Shielded: Yes Cable length: 15,000 mm Sheathing material: PUR
	50104172	KB SSI/ IBS-2000-BA	Connection cable	Suitable for interface: SSI, Interbus-S Connection 1: Connector, M12, Axial, Female, B-coded, 5 -pin Connection 2: Open end Shielded: Yes Cable length: 2,000 mm Sheathing material: PUR
	50108446	KB SSI/ IBS-30000-BA	Connection cable	Suitable for interface: SSI, Interbus-S Connection 1: Connector, M12, Female, B-coded, 5 -pin Connection 2: Open end Shielded: Yes Cable length: 30,000 mm Sheathing material: PUR
	50104171	KB SSI/ IBS-5000-BA	Connection cable	Suitable for interface: SSI, Interbus-S Connection 1: Connector, M12, Axial, Female, B-coded, 5 -pin Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR
	50132077	KD U-M12-5A- V1-020	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Open end Shielded: No Cable length: 2,000 mm Sheathing material: PVC
	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
	50132080	KD U-M12-5A- V1-100	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Open end Shielded: No Cable length: 10,000 mm Sheathing material: PVC


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Connection technology - Interconnection cables



	Part no.	Designation	Article	Description
	50114571 *	KB 301-3000	Interconnection cable	Suitable for interface: RS 232 Connection 1: Socket connector Connection 2: JST ZHR, 10 -pin, 6 -pin Shielded: Yes Cable length: 3,000 mm Sheathing material: PVC
	50120463	KB 301-3000-MA200	Interconnection cable	Suitable for interface: RS 232 Connection 1: Socket connector Connection 2: JST ZHR, 10 -pin, 6 -pin Shielded: Yes Cable length: 3,000 mm Sheathing material: PVC
	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

* Necessary accessories, please order separately

Connection technology - Connectors

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


Connection technology - Connection boxes

	Part no.	Designation	Article	Description
	50116463 *	MK 300	Connection unit	Suitable for: BCL 300i, BPS 300i Suitable for interface: RS 232 Number of connections: 3 Piece(s) Connection: Terminal
	50116468 *	MS 300	Connection unit	Suitable for: BCL 300i, BPS 300i Suitable for interface: RS 232 Number of connections: 3 Piece(s) Connection: Connector, M12



* Necessary accessories, please order separately

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Mounting technology - Mounting brackets

	Part no.	Designation	Article	Description
	50121433	BT 300 W	Mounting device	Contains: 4x M4 x 10 screw, 4x position washers, 4x lock washers 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
	50121434	BT 300 - 1	Mounting device	Contains: 4x M4 x 10 screw, 4x position washers, 4x lock washers 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: Screw type Type of mounting device: Turning, 360°, Adjustable Material: Metal
	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 Material: Metal

Bar code tape

	Part no.	Designation	Article	Description
	50038895	BCB 005	Bar code tape	Dimensions: 47 mm x 5,000 mm Grid dimension: 40 mm
	50040041	BCB 010	Bar code tape	Dimensions: 47 mm x 10,000 mm Grid dimension: 40 mm



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	Part no.	Designation	Article	Description
	50037489	BCB 020	Bar code tape	Dimensions: 47 mm x 20,000 mm Grid dimension: 40 mm
	50037491	BCB 030	Bar code tape	Dimensions: 47 mm x 30,000 mm Grid dimension: 40 mm
	50037492	BCB 040	Bar code tape	Dimensions: 47 mm x 40,000 mm Grid dimension: 40 mm
	50038894	BCB 050	Bar code tape	Dimensions: 47 mm x 50,000 mm Grid dimension: 40 mm
	50038893	BCB 060	Bar code tape	Dimensions: 47 mm x 60,000 mm Grid dimension: 40 mm
	50038892	BCB 070	Bar code tape	Dimensions: 47 mm x 70,000 mm Grid dimension: 40 mm
	50038891	BCB 080	Bar code tape	Dimensions: 47 mm x 80,000 mm Grid dimension: 40 mm
	50038890	BCB 090	Bar code tape	Dimensions: 47 mm x 90,000 mm Grid dimension: 40 mm
	50037493	BCB 100	Bar code tape	Dimensions: 47 mm x 100,000 mm Grid dimension: 40 mm
	50040042	BCB 110	Bar code tape	Dimensions: 47 mm x 110,000 mm Grid dimension: 40 mm

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	Part no.	Designation	Article	Description
	50040043	BCB 120	Bar code tape	Dimensions: 47 mm x 120,000 mm Grid dimension: 40 mm
	50040044	BCB 130	Bar code tape	Dimensions: 47 mm x 130,000 mm Grid dimension: 40 mm
	50040045	BCB 140	Bar code tape	Dimensions: 47 mm x 140,000 mm Grid dimension: 40 mm
	50040046	BCB 150	Bar code tape	Dimensions: 47 mm x 150,000 mm Grid dimension: 40 mm
	50037494	BCB 200	Bar code tape	Dimensions: 47 mm x 200,000 mm Grid dimension: 40 mm
	50102600	BCB special length 25mm height	Bar code tape	Dimensions: 25 mm
	50037495	BCB special length 47mm height	Bar code tape	Dimensions: 47 mm Grid dimension: 40 mm
	50126134	MV0 Label 40mm 10er Pack	Label set	Dimensions: 47 mm x 40 mm Grid dimension: 40 mm
	50106478	MVS label 40mm 10 pieces	Label set	Dimensions: 47 mm x 40 mm Grid dimension: 40 mm

Services

	Part no.	Designation	Article	Description
	S981001	CS10-S-110	Start-up support	<p>Details: Performed at location of customer's choosing, duration: max. 10 hours.</p> <p>Conditions: Devices and connection cables are already mounted, price not including travel costs and, if applicable, accommodation expenses.</p> <p>Restrictions: No mechanical (mounting) and electrical (wiring) work performed, no changes (attachments, wiring, programming) to third-party components in the nearby environment.</p>
	S981005	CS10-T-110	Product training	<p>Details: Location and content to be agreed upon, duration: max. 10 hours.</p> <p>Conditions: Price not including travel costs and, if applicable, accommodation expenses.</p> <p>Restrictions: Travel costs and accommodation expenses charged separately and according to expenditure.</p>