



Part no.: 50037188
BPS 37 S M 100
Bar code positioning system



Figure can vary

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Technical data

Basic data	
Series	BPS 30
Order guide	Bar code tape must be ordered separately
Optical data	
Depth of field	90 ... 170 mm
Light source	Laser, Red
Laser class	2, IEC/EN 60825-1:2007
Light beam exit	Lateral at angle less than 100°
Measurement data	
Measurement range	0 ... 10,000,000 mm
Resolution	0.01 ... 1,000 mm
Reproducibility (3 sigma)	1 mm
Measurement value output	2 ms
Max. traverse rate	10 m/s
Electrical data	
Protective circuit	Polarity reversal protection
Performance data	
Supply voltage U_B	10 ... 30 V, DC
Current consumption, max.	500 mA
Inputs	
Number of digital switching inputs	1 Piece(s)
Outputs	
Number of digital switching outputs	1 Piece(s)
Interface	
Type	SSI
SSI	
Function	Process
Clock frequency	80 ... 800 kHz
Data bit	Adjustable
Service interface	
Type	RS 232
RS 232	
Function	Configuration via software Service
Connection	
Number of connections	1 Piece(s)
Connection 1	
Type of connection	Sub-D
Function	Connection to device
Mechanical data	
Dimension (W x H x L)	90 mm x 120 mm x 43 mm

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Housing material	Metal, Diecast aluminum
Lens cover material	Glass
Net weight	400 g
Housing color	Black Red
Type of fastening	Dovetail grooves Mounting thread Via optional mounting device

Environmental data

Ambient temperature, operation	0 ... 40 °C
Ambient temperature, storage	-30 ... 60 °C
Relative humidity (non-condensing)	0 ... 90 %

Certifications

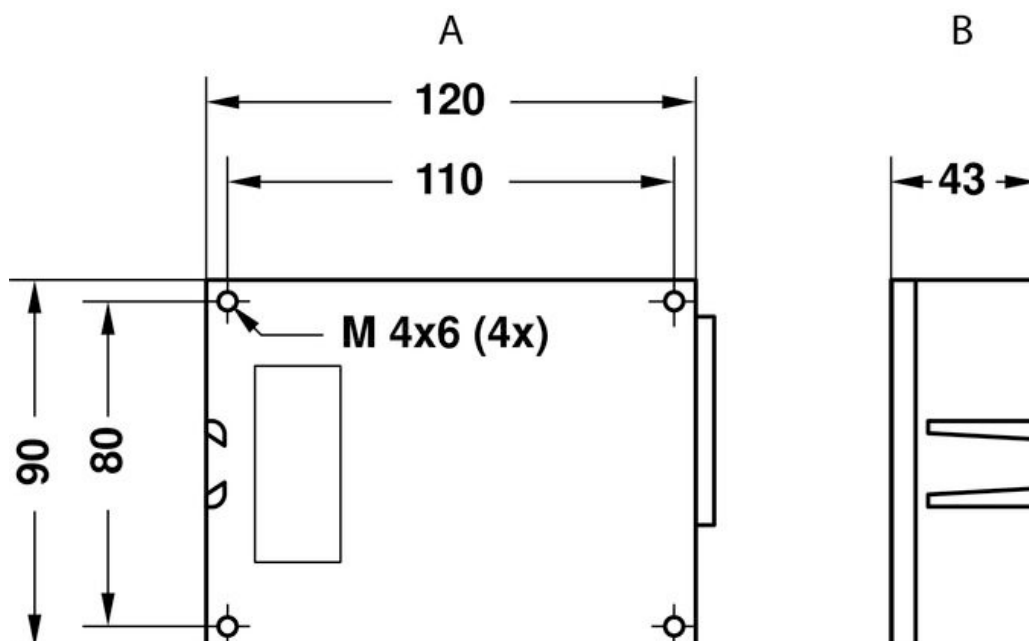
Degree of protection	IP 65, EN 60529 with various connectors or screwed-on caps
Protection class	III
Certifications	c UL US

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



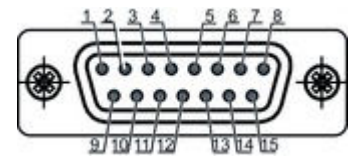
A Rear side

B Top view

Electrical connection

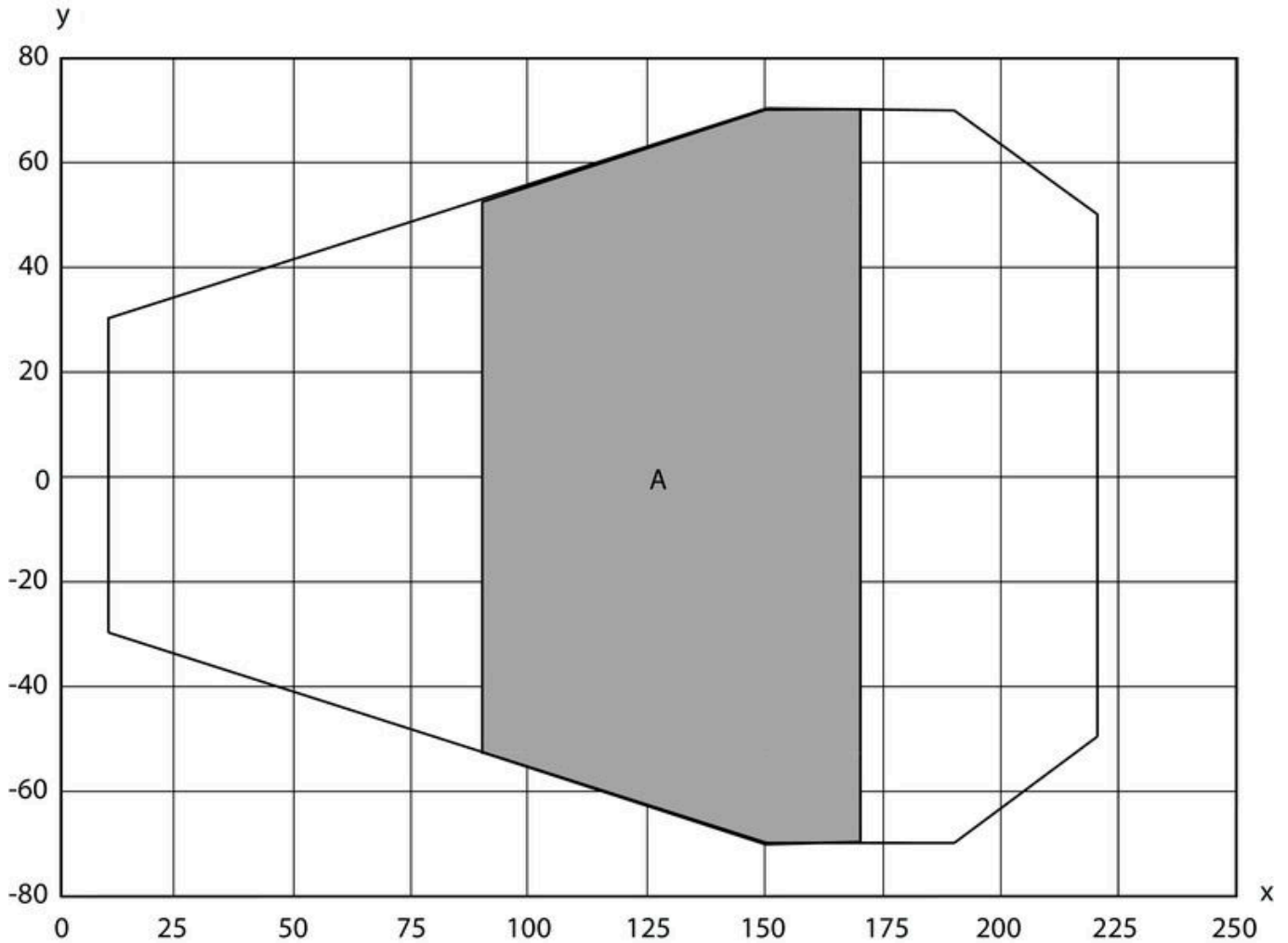
Connection 1	
Type of connection	Sub-D
Function	Connection to device
Type	Male
No. of pins	15 -pin

Pin	Pin assignment
1	GND
2	SWIN 1
3	SSI DATA+
4	SSI DATA-
5	Reserved
6	SSI CLK+
7	/Serv
8	VIN
9	SSI CLK-
10	SWO 1
11	RxD
12	TXD
13	SCL
14	SDA
15	GNDIN



Diagrams

Reading field curve



x Reading distance [mm]
y Reading field width [mm]
A Working range

Part number code

Part designation: **BPS 3X SM 100 YZ**


BPS	Operating principle: BPS: bar code positioning system
3X	Series: 34: 34 series with PROFIBUS DB 37: 37 series with SSI interface
SM	Scanning principle / optics: S: line scanner (single line) M: Medium Density (medium distance)
100	Beam exit: 100: lateral
YZ	Special equipment: n/a: no special equipment H: with heating HT: extended temperature range

Note






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

Accessories




Connection technology - Connection unit

	Part no.	Designation	Article	Description
	50037325	MA 4 D.7	Connection unit	Supply voltage: 10 ... 30 V Connections: 2 Piece(s) Degree of protection: IP 54
	50037324	MA 4.7	Connection unit	Supply voltage: 10 ... 30 V Connections: 2 Piece(s) Degree of protection: IP 54


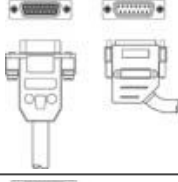
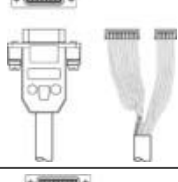

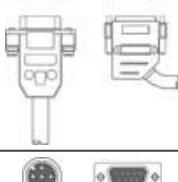

Connection technology - Connection cables

	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

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	Part no.	Designation	Article	Description
	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

Connection technology - Interconnection cables


	Part no.	Designation	Article	Description
	50103621	KB 031-1000	Interconnection cable	Suitable for interface: RS 232, RS 485 Connection 1: Sub-D, Axial, Female, 15 -pin Connection 2: JST ZHR, 16 -pin Shielded: Yes Cable length: 1,000 mm Sheathing material: PVC
	50104025	KB 031-2000-01	Interconnection cable	Connection 1: Sub-D, Axial, Female, 15 -pin Connection 2: Sub-D Shielded: Yes Cable length: 2,000 mm
	50035355	KB 031-3000	Interconnection cable	Suitable for interface: RS 232, RS 485 Connection 1: Sub-D, Axial, Female, 15 -pin Connection 2: JST ZHR Shielded: Yes Cable length: 3,000 mm
	50104754	KB 031-3000-01	Interconnection cable	Connection 1: Sub-D, Axial, Female, 15 -pin Connection 2: Open end Shielded: Yes Cable length: 3,000 mm
	50104026	KB 031-7000-01	Interconnection cable	Connection 1: Sub-D, Axial, Female, 15 -pin Connection 2: Sub-D Shielded: Yes Cable length: 7,000 mm
	50110155	KB-Service-3000	Service line	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Sub-D, Axial, Female, 9 -pin Shielded: Yes Cable length: 3,000 mm Sheathing material: PVC

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Connection technology - Connectors

	Part no.	Designation	Article	Description
	50040097	KD 01-5-BA	Connector	Connection: Connector with screw terminals, M12, Axial, Female, A-coded, 5 -pin
	50040098	KD 01-5-SA	Connector	Connection: Connector, M12, Axial, Male, A-coded, 5 -pin
	50101943	KD 01-5-SR	Connector	Connection: Connector, M12, Angled, Male, A-coded, 5 -pin

Connection technology - Connection boxes

	Part no.	Designation	Article	Description
	50107684	MS 37 103	Connection unit	Suitable for: BPS 37 Suitable for interface: SSI Supply voltage: DC Number of connections: 3 Piece(s) Connection: Connector, M12 Type of fastening: Dovetail grooves

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
	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
	50026204	UMS 96	Mounting system	Design of mounting device: Mounting system Fastening, at system: For 10 mm rod, For 12 mm rod, For 14 mm rod, For 16 mm rod Mounting bracket, at device: Clampable Type of mounting device: Turning, 360°, Adjustable 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
	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

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	Part no.	Designation	Article	Description
	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
	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