



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



Figure can vary

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## Technical data

<b>Basic data</b>	
Series	BPS 30
Order guide	Bar code tape must be ordered separately
<b>Optical data</b>	
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°
<b>Measurement data</b>	
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
<b>Electrical data</b>	
Protective circuit	Polarity reversal protection
<b>Performance data</b>	
Supply voltage $U_B$	10 ... 30 V , DC
Current consumption, max.	500 mA
<b>Inputs</b>	
Number of digital switching inputs	1 Piece(s)
<b>Outputs</b>	
Number of digital switching outputs	1 Piece(s)
<b>Interface</b>	
Type	SSI
<b>SSI</b>	
Function	Process
Clock frequency	80 ... 800 kHz
Data bit	Adjustable
<b>Service interface</b>	
Type	RS 232
<b>RS 232</b>	
Function	Configuration via software Service
<b>Connection</b>	
Number of connections	1 Piece(s)
<b>Connection 1</b>	
Type of connection	Sub-D
Function	Connection to device
<b>Mechanical data</b>	
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

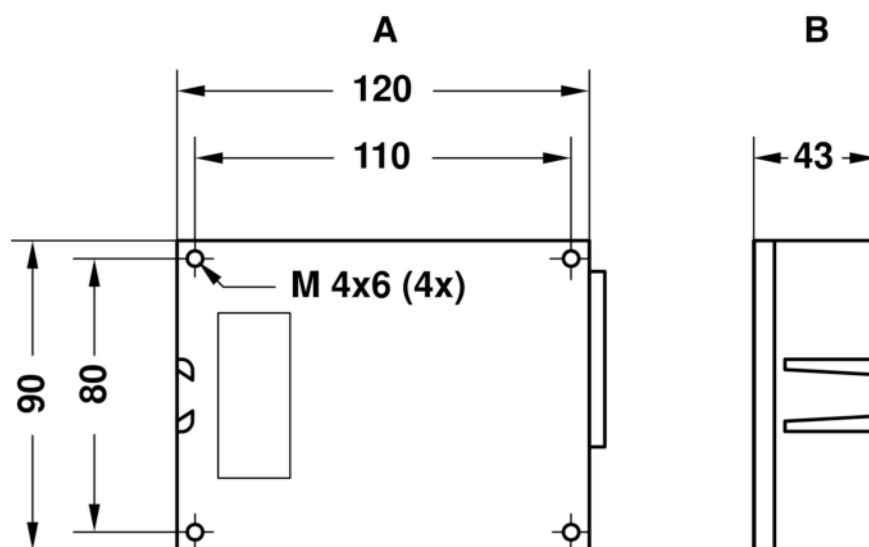
Degree of protection	IP 65 , EN 60529 with various connectors or screwed-on caps
Protection class	III
Certifications	c UL US

### 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

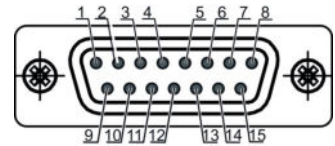


A Rear side  
B Top view

## Electrical connection

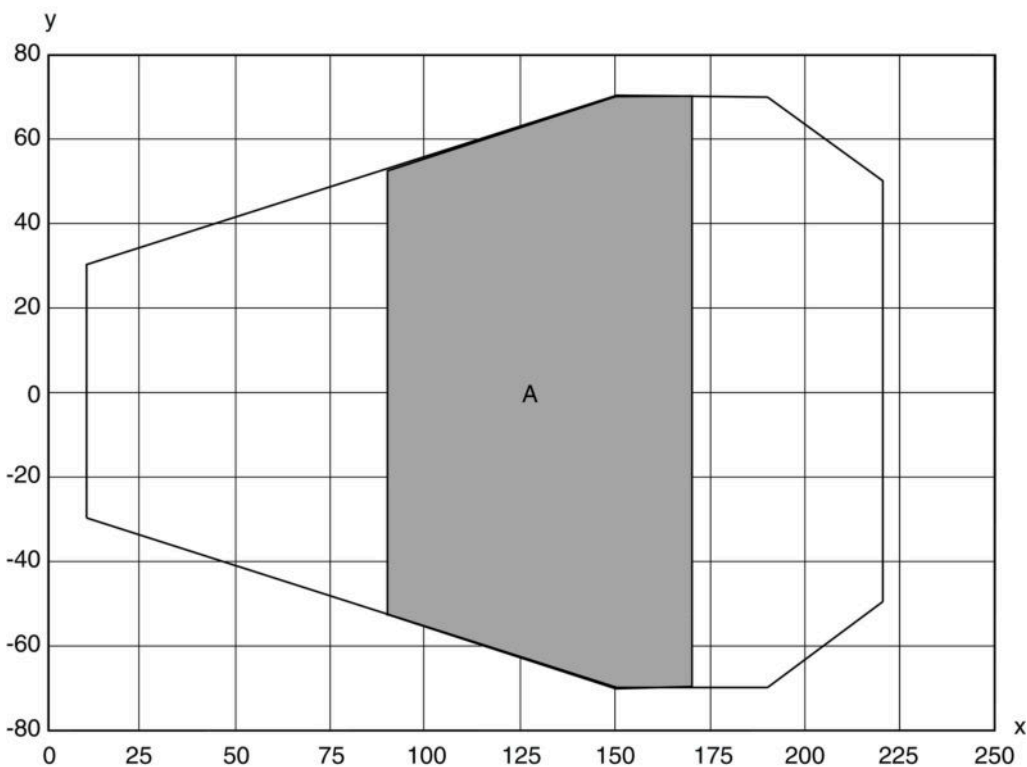
Connection 1	
Type of connection	Sub-D
Function	Connection to device
Type	Male
No. of pins	15 -pin

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



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

### Part number code

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


BPS	<b>Operating principle:</b> BPS: bar code positioning system
3X	<b>Series:</b> 34: 34 series with PROFIBUS DB 37: 37 series with SSI interface
SM	<b>Scanning principle / optics:</b> S: line scanner (single line) M: Medium Density (medium distance)
100	<b>Beam exit:</b> 100: lateral
YZ	<b>Special equipment:</b> 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](http://www.leuze.com).

### Accessories

#### Connection technology - Connection unit


	Part no.	Designation	Article	Description
	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
	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
	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

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## Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	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


## 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

## 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

### Note

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