



Part no.: 50038007
BPS 34 S M 100
Bar code positioning system



Figure can vary

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- Dimensioned drawings
- Electrical connection
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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	PROFIBUS DP
PROFIBUS DP	
Function	Process
Classification	V0
Transmission speed	0.0096 ... 12 Mbit/s
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

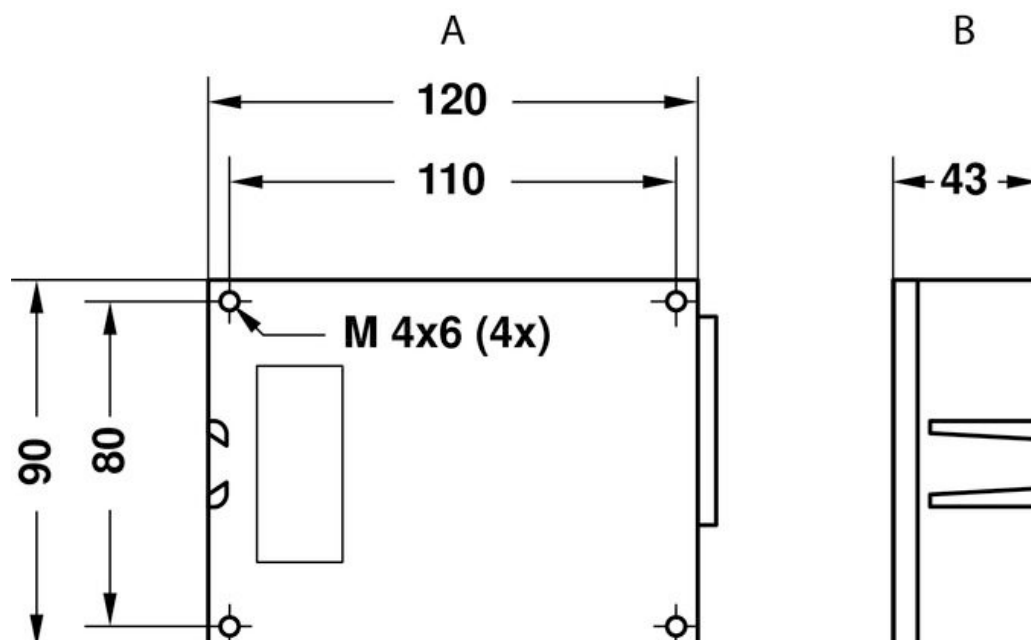
Degree of protection	IP 65, EN 60529 with various connectors or screwed-on caps
Protection class	III
Certifications	c UL US PROFIBUS

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

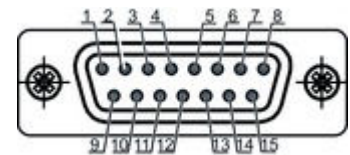


A Rear side
B Top view

Electrical connection

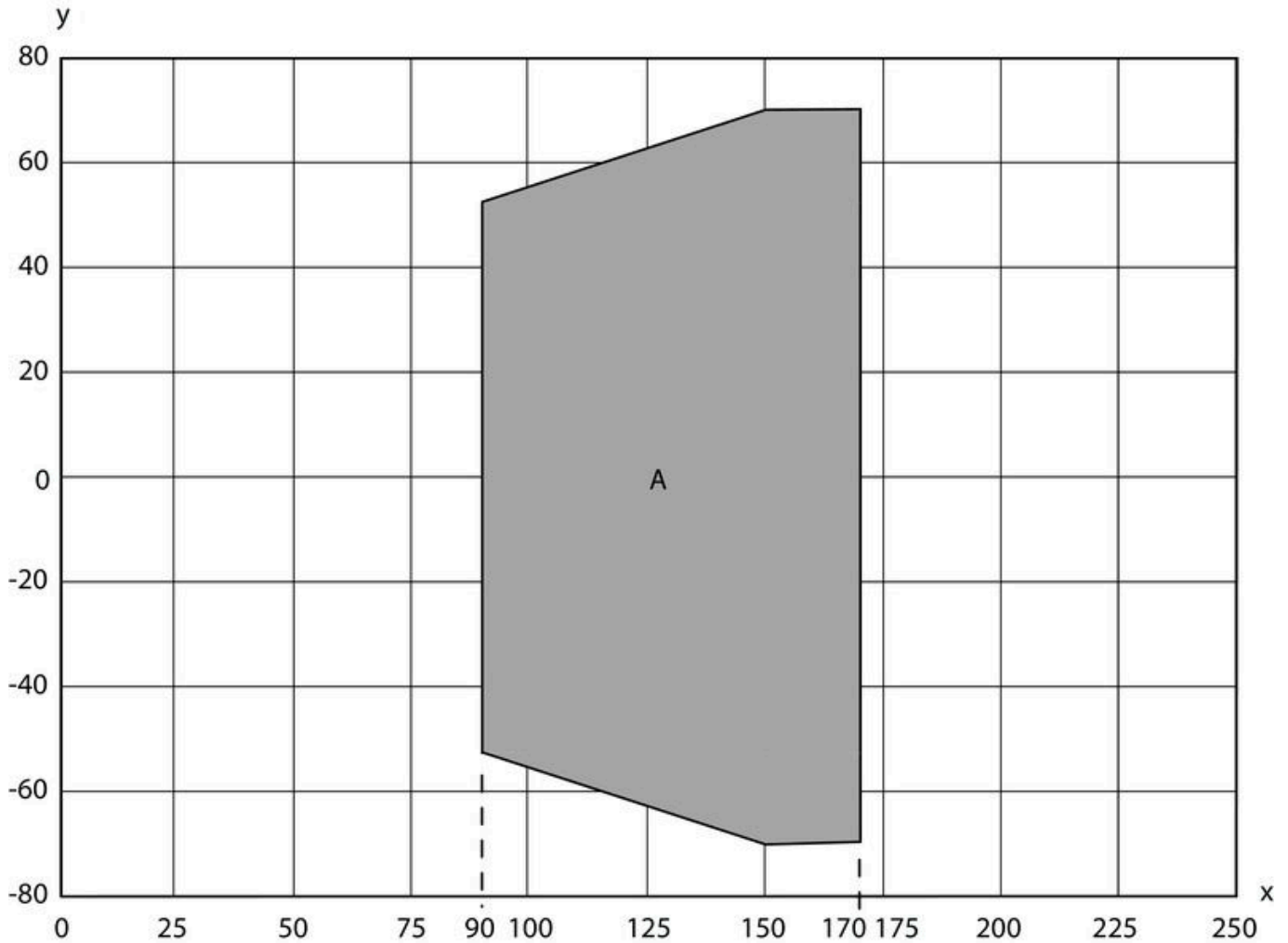
Connection 1	
Type of connection	Sub-D
Function	Connection to device
Type	Male
No. of pins	15 -pin

Pin	Pin assignment
1	GND
2	SWIN 1
3	RS 485 A
4	RS 485 B
5	/INT_MA
6	VP
7	/Serv
8	VIN
9	RTS485
10	SWO 1
11	RxD
12	TXD
13	SCL_MA
14	SDA_MA
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



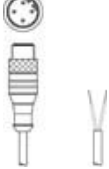
Note

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

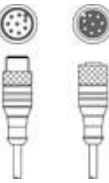
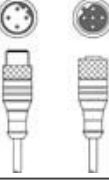
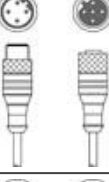

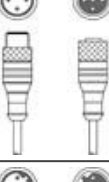
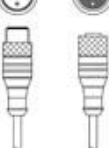
Accessories
Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50135243	KD PB-M12-4A-P3-050	Connection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Female, B-coded, 4 -pin Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR
	50135244	KD PB-M12-4A-P3-100	Connection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Female, B-coded, 4 -pin Connection 2: Open end Shielded: Yes Cable length: 10,000 mm Sheathing material: PUR
	50135245	KD PB-M12-4A-P3-150	Connection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Female, B-coded, 4 -pin Connection 2: Open end Shielded: Yes Cable length: 15,000 mm Sheathing material: PUR
	50135246	KD PB-M12-4A-P3-300	Connection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Female, B-coded, 4 -pin Connection 2: Open end Shielded: Yes Cable length: 30,000 mm Sheathing material: PUR
	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
	50135247	KS PB-M12-4A-P3-020	Connection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Male, B-coded, 4 -pin Connection 2: Open end Shielded: Yes Cable length: 2,000 mm Sheathing material: PUR
	50135248	KS PB-M12-4A-P3-050	Connection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Male, B-coded, 4 -pin Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

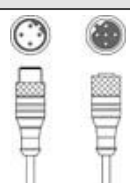
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	Part no.	Designation	Article	Description
	50135249	KS PB-M12-4A-P3-100	Connection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Male, B-coded, 4 -pin Connection 2: Open end Shielded: Yes Cable length: 10,000 mm Sheathing material: PUR
	50135250	KS PB-M12-4A-P3-150	Connection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Male, B-coded, 4 -pin Connection 2: Open end Shielded: Yes Cable length: 15,000 mm Sheathing material: PUR
	50135251	KS PB-M12-4A-P3-300	Connection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Male, B-coded, 4 -pin Connection 2: Open end Shielded: Yes Cable length: 30,000 mm Sheathing material: PUR




Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	429278	CB-M12-2000E-8TP	Interconnection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 8 -pin Shielded: Yes Cable length: 2,000 mm Sheathing material: PUR
	50135252	KDS PB-M12-4A-M12-4A-P3-010	Interconnection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Female, B-coded, 2 -pin Connection 2: Connector, M12, Axial, Male, B-coded, 4 -pin Shielded: Yes Cable length: 1,000 mm Sheathing material: PUR
	50135253	KDS PB-M12-4A-M12-4A-P3-020	Interconnection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Female, B-coded, 2 -pin Connection 2: Connector, M12, Axial, Male, B-coded, 4 -pin Shielded: Yes Cable length: 2,000 mm Sheathing material: PUR
	50135254	KDS PB-M12-4A-M12-4A-P3-050	Interconnection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Female, B-coded, 2 -pin Connection 2: Connector, M12, Axial, Male, B-coded, 4 -pin Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR
	50135255	KDS PB-M12-4A-M12-4A-P3-100	Interconnection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Female, B-coded, 2 -pin Connection 2: Connector, M12, Axial, Male, B-coded, 4 -pin Shielded: Yes Cable length: 10,000 mm Sheathing material: PUR
	50135256	KDS PB-M12-4A-M12-4A-P3-150	Interconnection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Female, B-coded, 2 -pin Connection 2: Connector, M12, Axial, Male, B-coded, 4 -pin Shielded: Yes Cable length: 15,000 mm Sheathing material: PUR


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	Part no.	Designation	Article	Description
	50135257	KDS PB-M12-4A-M12-4A-P3-300	Interconnection cable	Suitable for interface: PROFIBUS DP Connection 1: Connector, M12, Axial, Female, B-coded, 2 -pin Connection 2: Connector, M12, Axial, Male, B-coded, 4 -pin Shielded: Yes Cable length: 30,000 mm Sheathing material: PUR



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 - Terminating resistors




	Part no.	Designation	Article	Description
	50038539	TS 02-4-SA	Terminator plug	Suitable for: MultiNet Plus, PROFIBUS DP Connection 1: Connector, M12, Axial, Male, B-coded, 4 -pin Function: Bus termination

Connection technology - Connection boxes

	Part no.	Designation	Article	Description
	50037230	MS 34 103	Connection unit	Suitable for: BCL 34, BPS 34 Suitable for interface: PROFIBUS DP Number of connections: 3 Piece(s) Connection: Connector, M12
	50037231	MS 34 105	Connection unit	Suitable for: BCL 34, BPS 34 Suitable for interface: PROFIBUS DP Number of connections: 5 Piece(s) Connection: Connector, M12

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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, 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

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	Part no.	Designation	Article	Description
	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
	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

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	Part no.	Designation	Article	Description
	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