Barcode Positioning System BE 90 - PB

+ Profibus-DP Interface
+ Easy Installation and Commissioning
+ Measurement of Linear and Non-Linear
+ Movements (Curved Systems)
+ Non Contact Position Measurement
+ Position Detection Up To 10 000 m
+ Parameterizable via the PROFIBUS DP

Characteristics / Environmental conditions

Operating voltage	10 ... 30 V
Power consumption	5 W
Light source	Laser diode 650 nm
Scanning rate	1000 scans/sec.
Reproducible accuracy	±1 (2) mm
Integration time	16 (8) ms
Measurement value output	500 values/sec.
Refresh time	2 ms
Scanning depth	90 … 170 mm
Interface type	Profibus DP
Service Interface	RS232 with fixed data format, 9600 baud, 8 data bits, no parity, 1 stop bit
Ports	1 switching output, 1 switching input
LED green	device ready (Power On)
Housing	diecast aluminium
Weight	400 g

Environmental conditions:

Operation without optics heating	0°C ... +40°C
Operation with optics heating	-30°C ...+40°C
Storage	-20°C ... +60°C
Air humidity	max. 90% rel. humidity, non-condensing
Vibration	IEC 68.2.6, IEC 68.2.27 (shock), IEC 801
Electromagnetic compatibility	acc. to IEC 60947-5-2
Protection class	IP 65

[2] valid with screwed on mating connector and / or screwed together cable gland

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Barcode Band / Operating Principle

Max. length (measurement length) .....10 000 m
Construction
Manufacturing method.....Photo composition
Surface protection.....Polyester, faint
Basic material .....Polyester film 0,08 mm
Adhesive.....HU
Adhesive description HU:
Acrylate adhesive
Thickness .....0,10 mm
Temperature resistance.....-40°C ... +120°C,
short time up to +160°C

High adhesive-effect-values on low-and high-energetic surfaces with an optimized temperature resistance create permanent connections to all smooth to easily rough undergrounds.

Surface protection:
Extremely resistantly, since the bar code is protected by the polyester film.

Characteristics:
Single-edged white pigmented thin polyester film with high resistance and measure precision. Resistantly against UV-light, chemicals and solvents (restricted), scratch and wipe, humidity.
By structure of single component, low lateral attack region.

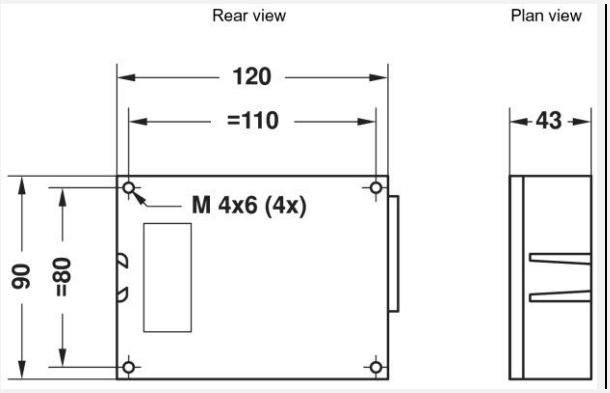
Attention!
The specifications to the barcode band, contained here, are based on test results. This does not exclude that each user must check the suitability of the product for the use planned by him himself.

Operating principle:
The BE-90 uses visible red laser light to determine its position relative to the barcode band. This essentially takes place in the following steps:

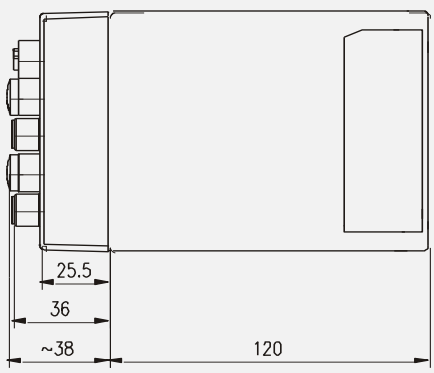
1. Reading a code on the barcode band
2. Determining the position of the read code in the scanning area of the laser beam
3. Calculating of the position to within a millimetre using the code information and the code position
4. Position output via the Profibus DP interface

Dimension drawing

(For project planning please request customized dimensional drawing!)



with connection unit



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