BAR CODE POSITIONING SYSTEM

For positioning with millimeter accuracy over distances of up to 10 km
BAR CODE POSITIONING – SECOND GENERATION

The next generation of the BPS 300i bar code positioning system sets standards in performance and handling.

THE WHOLE IS MORE THAN THE SUM OF ITS PARTS

Your benefit lies in the combination of the many advantages offered by the BPS 300i systems. What they all have in common is the focus on simple usability with maximum possible performance reserves for fault-free operation of the devices. Highly resistant bar code tape, available in lengths of up to 10 km, facilitates precise and continuous position determination, even over extremely long distances.

availability control.

With the integrated availability control functionality, the device constantly reports its function reserves, thereby indicating, e.g., soiling in good time. As a result, soiling-related failures can be reliably avoided, since the system can be cleaned in good time.

integrated connectivity.

The integrated fieldbus permits complete configuration of the devices directly via the control. You thereby save time during installation and money by avoiding otherwise needed connector units. Should device replacement be necessary, no configuration needs to be performed, since the information is located in the control.

easy handling.

The sophisticated fastening concept enables simple and robust mounting of the devices. This saves time and prevents difficulties during commissioning. Should replacement be necessary, the devices can be exchanged position-neutral, i.e., without realigning.

BAR CODE POSITIONING WAS NEVER THIS GOOD

Ten years of practical experience has been incorporated in the second generation of our bar code positioning systems. The result is a product that sets standards both in performance characteristics as well as in ease of handling. Mounting and operation are now even simpler, faster and more reliable.

availability control.

Find the function range that is optimum for your application and pay only for what you really need.

- Various connection hoods (terminals, M12, cables) for optimum integration in your control.

- Optional display for visualization and diagnostics.

- Optional optics heating for low-temperature applications.

power reserve.

Thanks to a working range of ±60 mm, the systems, with their laser technology, are very tolerant of mechanical fluctuations. They thereby offer reliable position detection with the largest performance reserve in every environment.

Hoods with integrated connectors

MS 3xx | M12 connection
MK 3xx | Connection with terminal hood

BTU 0300 M-W
**CONFIGURE - PARAMETERIZE - DIAGNOSE**

The integrated fieldbus in the BPS 300i makes configuration quick and easy.

**THE LEUZE ELECTRONIC webCONFIG TOOL**

With the integrated webConfig tool, an operating system independent, web-technology based, multi-language user interface is available for configuring the device. The individual parameters are presented in an easy-to-understand, graphic form.

**THE BPS 300i IN THE PROFINET WORLD**

With the integrated PROFINET, it is possible to configure the BPS 300i via the module structure contained in the GSD/GSDML file directly via the HW Config. In doing so, the parameters that are set are stored in the control and, should a device need to be replaced, are automatically transferred to the new device.

**EXACT POSITION DETERMINATION CAN BE THIS COMPACT**

The BPS 8 convinces with its large working range and a compact design.

**POWER IS NOT A QUESTION OF SIZE**

Our compact BPS 8 bar code positioning system requires little space and, thanks to its large working range, is able to compensate for mechanical fluctuations reliably. It convinces with simple mounting mechanics and a standardized M12 plug connection.

The RS 232 or RS 485 interface allows the system to be incorporated in your system architecture without problem.

The BPS 8 is available either with front beam exit or with a deflecting mirror.

For positioning high-bay storage devices and lifting units, e.g., in conveyor and storage systems

For position determination of skid systems and side-tracking skates, e.g., in the automotive industry
 always know where you’re standing

Two high-tech solutions for your positioning tasks.

only the right bar code tape makes
a positioning system perfect –
flexible in length and height

The second fundamental element of a Leuze electronic bar code positioning system is the bar code tape. The photo-
setting technique is used to print a unique bar code at
regular intervals on a self-adhesive and highly flexible
plastic tape. This technology makes the tape UV resistant,
extremely resilient and mechanically durable. The position
value is also printed in “plain text” to simplify handling. This
tape, which may be up to 10,000 m in length, can be simply
affixed to the travel path and conforms well to both
horizontal as well as vertical curves. From a length of 150 m,
it is possible to adapt the length and height of the tape
individually to the application. If the tape should nevertheless
be damaged, an appropriate repair kit can be downloaded
from the Internet. By integrating so-called mark labels in the
bar code tape, the bar code reader can also control specific
functions such as velocity changes or conveyor movements.

Technical data

<table>
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<tr>
<th>Technical data</th>
<th>BPS 300i</th>
<th>BPS 8</th>
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<tbody>
<tr>
<td>Working range</td>
<td>50 – 170 mm</td>
<td>60 – 190 mm</td>
</tr>
<tr>
<td>Repeatability</td>
<td>±0.5 mm</td>
<td>±1.0 mm</td>
</tr>
<tr>
<td>Measurement value output</td>
<td>1/16 (2,000 values/s)</td>
<td>1/32 (3,000 values/s)</td>
</tr>
<tr>
<td>Integration area</td>
<td>10 m²</td>
<td>8 m²</td>
</tr>
<tr>
<td>Max. traverse rate</td>
<td>10 m/s</td>
<td>8 m/s</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>10 – 30 V DC</td>
<td>8.3 – 14.5 V DC, direct connection</td>
</tr>
<tr>
<td>Ambient temperature (operation) without heating</td>
<td>0 to +40 °C</td>
<td>0 to +40 °C</td>
</tr>
<tr>
<td>For position determination of telpher lines, e.g., in the automotive industry</td>
<td></td>
<td></td>
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<tr>
<td>For position determination of gantry cranes in intralogistics</td>
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accessories and mounting systems

In order to mount and connect the bar code positioning
system quickly and securely, we have developed matching
accessories for various installation situations.

technical data BCB / BCB 8

<table>
<thead>
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<th>BCB / BCB 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. length</td>
<td>10,000 m</td>
</tr>
<tr>
<td>Temperature range</td>
<td>-40 to +120 °C</td>
</tr>
<tr>
<td>Interface</td>
<td>RS 232 / 485</td>
</tr>
<tr>
<td>Adhesive</td>
<td>Acrylic glue</td>
</tr>
<tr>
<td>Tape height</td>
<td>47 mm</td>
</tr>
<tr>
<td>Environmental conditions</td>
<td>Scratch and wipe resistant, UV-light resistant, moisture and chemical resistant</td>
</tr>
</tbody>
</table>

always know where you’re standing

Two high-tech solutions for your
positioning tasks.

mounted quickly and securely

Our easy handling claim starts with mounting and alignment.
With regard to our product developments, we systematically place emphasis on the especially good usability of all devices. To this end, simple mounting and alignment are taken into account – just as the uncomplicated integrability of the sensors in existing field bus systems and easy configuration, e.g. via a web browser, are.

Whoever can do it all, can do nothing right. Which is why we concentrate on selected target sectors and applications. There, we are specialists and know all aspects inside out. For this purpose, we optimize our solutions and offer a comprehensive product range that makes it possible for our customers to obtain the absolute best solutions from a single source.

The technical and personal proximity to our customers, and a skilled, straightforward handling of queries and problems, are among our strengths – and will remain so. Consequently, we will continue to expand our service offerings and, indeed, also forge ahead in new directions to persistently redefine the utmost in customer service. Whether on the phone, on the Internet or on-site with our customers – regardless of when and where the expertise of the sensor people is needed at any time.

Info at: www.leuze.com