Light Array

High-resolution light beam allows for numerous measuring modes

During manufacturing processes or quality control, there is the need to identify and qualify objects of numerous sizes and shapes with high precision and accuracy. The new BLA high-resolution laser light array is ideal for this type of task. This laser light band identifies, compares, and sorts objects based on minimal size and height differences.

The intuitive nature of the BLA laser light band makes it easy to use. It consists of two modules: the emitter module where the powerful red-light laser resides, and the receiver module where the high-precision CCD is housed. The device operates completely independent of any other accessories, such as a controller, PC, or special software.

The BLA laser light band has a continuous, easily visible light beam, and an excellent resolution of 0.01 mm and a range of up to 2 m.

### Monitoring bottle height and diameter

In this application, the BLA light bands are used to check whether the bottles in a filling machine are correctly filled and sealed. One light band immediately detects the width of the bottle neck and compares the received value with previously taught-in values. The use of digital outputs allows quick, error-free selection of the correct sealing cap. Once the cap is screwed on, the other light band checks whether the seal is complete and correctly fits tightly against the bottle. To do this, the device determines the height of the bottle and compares it with the permissible reference value. Here, too, only digital outputs are used.

### Wire winding machine

In the application illustrated above, a wire is automatically wound onto the reel. In doing so, the thickness of the wire must not change and, at the same time, the wire must wind evenly across the entire width of the reel. The BLA laser light band provides a single, reliable solution to this application by monitoring the wire for both cases simultaneously. Thanks to two analog outputs and three digital outputs, the position and the thickness of the wire can be determined and displayed alongside each other.

<table>
<thead>
<tr>
<th>Ordering code</th>
<th>Part number</th>
<th>Description</th>
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<tbody>
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<td>BLA 50A-001-S115</td>
<td>Light array, 50mm light band, laser class 1, 2m range</td>
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