ZEISS AIMax Inline and ZEISS AIMax BestFit
Product information
ZEISS AIMax Inline and ZEISS AIMax BestFit
Stationary and mobile 3D sensors for process inspection

ZEISS AIMax Inline and BestFit
The AIMax Inline and AIMax BestFit fixed sensors from ZEISS are compact, optical 3D geometry sensors designed for industrial use with in-line measuring technology. A comprehensive technology package allows you to complete various tasks such as quality assurance, location recognition and production-control jobs, including robot guidance.

Benefits
- Insensitivity to fluctuating ambient brightness and extraneous light through the use of special filters and matched LEDs
- Additional integrated light sources for diffuse illumination of measurement objects
- Easy to use and configure
- Compact sizes
- High temperature stability through active compensation
- Temperature capture and the storage of calibration and temperature compensation data in the sensor

Applications
- Inspection of assembly and welding processes
- Extensive measuring functions
- Precision car body construction and metalworking
- Location recognition and positioning (parts, car bodies)
- Component attachment (doors, windows, covers)
- Robot guidance
- Form & pierce

ZEISS AIMax BestFit
The optical sensor is suitable for particularly difficult-to-reach areas. It can also be used in stationary fixed sensor cells and directly on the robot. The compact size enables a large number of sensors to be integrated in a small space.

ZEISS AIMax Inline
The stationary optical 3D geometry sensor features a wide range of measuring distances and enables solutions for diverse measuring tasks, e.g. quality assurance, location recognition and production-control jobs.
The robot-based ZEISS AIMax cloud is used to generate point clouds.

Typical measuring features from the form & pierce area such as edges (see left image) and boreholes (see right image).

Examples of measurable characteristics

ZEISS AIMax Inline is a sensor intended exclusively for stationary in-line use.

ZEISS AIMax BestFit can be used as a stationary sensor as well as on the robot.

The robot-based ZEISS AIMax cloud is used to generate point clouds.
Technical data: ZEISS AIMax Inline

Camera: Digital (GigE) camera technology (monochrome)

Camera resolution: 1280 pixels x 1024 pixels

Illumination: Red light (hyper red, 635 nm) or near infrared (NIR, 850 nm)

Laser class: 2M

Measuring time: < 0.1-0.5 seconds, image acquisition including evaluation

Sizes (in mm) for ZEISS AIMax Inline:

<table>
<thead>
<tr>
<th>Measuring distance</th>
<th>400</th>
<th>600</th>
<th>900</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewing panel</td>
<td>93 x 74 x 60</td>
<td>85 x 70 x 60</td>
<td>125 x 100 x 90</td>
</tr>
<tr>
<td>Dimensions</td>
<td>425 x 60 x 87.5</td>
<td>425 x 60 x 87.5</td>
<td>610 x 60 x 87.5</td>
</tr>
<tr>
<td>Weight</td>
<td>3600 g</td>
<td>3600 g</td>
<td>5100 g</td>
</tr>
</tbody>
</table>

Technical data: ZEISS AIMax BestFit

Camera: Digital (GigE) camera technology (monochrome)

Camera resolution: 1280 pixels x 1024 pixels

Illumination: Red light (hyper red, 635 nm)

Laser class: 2M

Measuring time: < 0.1-0.5 seconds, image acquisition including evaluation

Sizes (in mm) for ZEISS AIMax BestFit:

<table>
<thead>
<tr>
<th>Measuring distance</th>
<th>60</th>
<th>120</th>
<th>250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewing panel</td>
<td>70 x 55 x 10</td>
<td>75 x 60 x 55</td>
<td>120 x 95 x 85</td>
</tr>
<tr>
<td>Dimensions</td>
<td>115 x 91 x 65</td>
<td>115 x 91 x 65</td>
<td>115 x 91 x 65</td>
</tr>
<tr>
<td>Weight</td>
<td>900 g</td>
<td>900 g</td>
<td>900 g</td>
</tr>
</tbody>
</table>

Example: ZEISS AIMax Inline 600, see table for additional sizes

Example: ZEISS AIMax BestFit 120, see table for additional sizes