**Z-Nano™ tool probing**

The Z-Nano™ precision probing head allows tool lengths to be measured quickly, precisely and automatically, as well as a wide variety of tools to be checked.

The functional principle with linear guidance is absolutely free of transverse forces, so that even sensitive and very small tools can be measured. The precise tool length sensor Z-Nano™ can be used for the machine systems M8, M36, M7, ML, MV and M10.

The DATRON CNC software supports the following measuring functions:

- Automatic measurement of the tool length
- Automatic tool length correction
- Tool breakage detection

**Scope of delivery:**

- Sensor
- Depending on the type of machine, a special mounting plate might be required

**Options/accessories:**

- Blow-off station for Z-Nano, (article No. 0A01115N)

<table>
<thead>
<tr>
<th>Technical data</th>
<th>Z-Nano™</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device protection</td>
<td>IP67</td>
</tr>
<tr>
<td>Repeat ability</td>
<td>± 0.5 μm</td>
</tr>
<tr>
<td>Tool diameter (min)</td>
<td>&gt; 0.5 mm</td>
</tr>
<tr>
<td>Max. tool diameter</td>
<td>20 mm</td>
</tr>
<tr>
<td>Diameter of the measuring surface</td>
<td>22 mm</td>
</tr>
<tr>
<td>Planeness of the measuring surface</td>
<td>± 10 μm</td>
</tr>
<tr>
<td>Measuring force</td>
<td>2.5 N</td>
</tr>
<tr>
<td>Maximum stroke</td>
<td>10 mm</td>
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</tbody>
</table>

**Order specification**

- Z-Nano tool sensor, M8, M36  0A01115A
- Z-Nano tool sensor, M7, ML, MV 0A01115B
- Z-Nano tool sensor, M10  0A01115D

**Advantages:**

- Very low measuring force
- For tools up to 20 mm diameter
- Very high precision

**Application:**

- Precise tool length measurement
- Automatic correction of length tolerances
- Tool breakage control
Tool length sensor WLS

The DATRON tool length sensor automatically measures the tool length. A precision probe is controlled via the measuring tappet.

The DATRON CNC software supports the following measuring functions:
- Automatic measurement of the tool length
- Automatic tool length correction
- Tool-breakage detection

Properties:
- Mechanical tool length sensor
- Tracer pin diameter 13 mm
- Suitable for tools with a diameter up to max. 12 mm

Scope of delivery:
- Tool length sensor
- Software for tool management

Advantages:
- No presetting of the tool length
- High precision
- Small space requirement

Application:
- Tool length measurement
- Automatic correction of length tolerances
- Tool breakage detection

<table>
<thead>
<tr>
<th>Order specification</th>
<th>Article number</th>
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<tbody>
<tr>
<td>Tool length sensor, single station, incl. software</td>
<td>0A01114S</td>
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