Warnings
Avoid shock and vibration to the gauging sensor.
> Damage to or destruction of the gauging sensor
The oscillator voltage may not exceed the specified limits (amplitude and frequency).
> Damage to or destruction of the gauging sensor
Protect the sensor cable against damage.
> Damage to the gauging sensor
Failure of the measuring device
Do not clamp gauging sensors with a grub screw on its clamping cylinder.
> Damage to the gauging sensor.
Do not transport the sensor on the probe tip.
> Risk of damage to the probe tip.
Correctly lay the compressed air hose for gauging sensors with pneumatic drive (avoid kinks in the hose and do not pull over sharp edges, comply with the permissible bending radius).
Check the pneumatic system for tight sealing.
> Damage to the gauging sensor, loss of functionality
Supply gauging sensors having pneumatic drive with clean compressed air (free of oil, dust and water).
Install maintenance units with water and oil traps and with fine filters (5 μm).
Notes on CE Identification
Inductive gauging sensors on the UDT principle are not automatically operable devices (components). An EC declaration of conformity or CE identification is therefore not required by EMC law. An EMC check of the gauging sensors was done together with the series MSC 710 signal conditioning electronics. Sources: EMC law, Guidelines on the application of council directive 2004/108/EC
Proper Environment
- Protection class:
  > with bellows:  IP 65
  > without bellows: IP 54
- Operating temperature:
  > with bellows: 0 °C up to 80 °C (+32 up to +176 °F)
  > without bellows: -20 °C up to +80 °C (-4 up to +176 °F)
- Storage temperature: -40 °C up to +80 °C (-40 up to +176 °F)
- Humidity: 5 - 95 % (no condensation)
- Ambient pressure: Atmospheric pressure
Installation and Assembly
Precautions
There must be no radial forces acting on the probe tip of gauging sensors.
Protect the cable sheath of the sensor cable from sharp edges and pointed or heavy objects.
The minimum bending radius of the cable must not be exceeded. Avoid kinks.
Sensor Mounting
Use circumferential clamping on the housing (gauging sensors) to mount the sensor.
This offers the highest reliability because the gauging sensor is clamped flatly on its cylindrical housing.
The probe tip on the gauging sensor is pressed onto the measurement object by the integral spring.
Connect the gauging sensors to the controller by connectors or by wire terminals (see pin assignment) depending on the version used.

Assembly Instructions
InduSENSOR, LVDT series
Gauging Sensor

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Dimensional Drawings

Cable diameter approx. 3.1 mm
Cable length 3 m (open ends)
Crimp

Housing dimensions for gauging sensor DTA-xG8-3-CA

For pneumatic connection 3 x 0.5 mm

Cable diameter approx. 3.1 mm
Cable length 3 m (open ends)

Housing dimensions for gauging sensor DTA-xG8-3-CA-V

Model A (zero setting) B

<table>
<thead>
<tr>
<th>Model</th>
<th>A (zero setting)</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTA-1G8-3-CA</td>
<td>83 mm (3.27)</td>
<td>64.3 mm (2.53)</td>
</tr>
<tr>
<td>DTA-3G8-3-CA</td>
<td>89 mm (3.50)</td>
<td>68.3 mm (2.69)</td>
</tr>
<tr>
<td>DTA-5G8-3-CA</td>
<td>118 mm (4.65)</td>
<td>89.5 mm (3.52)</td>
</tr>
<tr>
<td>DTA-10G8-3-CA</td>
<td>155 mm (6.10)</td>
<td>121.7 mm (4.80)</td>
</tr>
</tbody>
</table>

Dimensions in mm (inches), not to scale

Pin Assignment

Model A (zero setting) B

<table>
<thead>
<tr>
<th>Model</th>
<th>A (zero setting)</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTA-1G8-3-CA-V</td>
<td>95 mm (3.74)</td>
<td>76.3 mm (3.00)</td>
</tr>
<tr>
<td>DTA-3G8-3-CA-V</td>
<td>103 mm (4.06)</td>
<td>82.3 mm (3.24)</td>
</tr>
<tr>
<td>DTA-5G8-3-CA-V</td>
<td>134 mm (5.28)</td>
<td>105.3 mm (4.15)</td>
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<tr>
<td>DTA-10G8-3-CA-V</td>
<td>170.8 mm (6.72)</td>
<td>137.3 mm (5.41)</td>
</tr>
</tbody>
</table>

Pin assignment for electrical connections

Shrink during shortening of the sensor cable and using the controller MSC 710 before assembly of the insulation displacement connector (IDC) on each strand the enclosed shrinking hose (shrink temperature Tmax = 130 °C).

For further informations about the gauging sensor read the instruction manual. You will find this online at: www.micro-epsilon.com/download/manuals/man--induSENSOR-Serie-LVDT-Meistaster-de-en.pdf