Warnings
Avoid shock and vibration to the sensor. 
Damage to or destruction of the sensor and/or the plunger 
The oscillator (supply) voltage may not exceed the specified limits (ampli-
titude and frequency). 
Failure of the measuring device 
Do not transport the sensor on the plunger. 

Sensor Mounting
Use peripheral clamping on the sensor housing to mount the sensor. 
This offers the highest reliability because the sensor is clamped over a board area by its cylindrical housing. 
Mount the sensor using radial point clamping with set screws at 
installation locations where there are no forces and vibrations. 
Plastic set screws must be used so that the sensor housing is not damaged or deformed. 
Screw the plunger of displacement sensors to the measurement object using the thread. 
The screw joint must either be secured with a screw locking compound (e.g. Loctite ...) or counter-screwed with the lock-nut supplied. When mounting, it must be ensured that the plunger remains freely movable in 
the sensor and that tilting is avoided. 
Connect the sensor to the amplifier electronics by connectors or by 
wiring terminals depending on the version used (pin assignment). 
Ready-made connecting leads are available for sensors with plug connec-
tor. 

Notes on CE Identification
Inductive displacement sensors are not automatically operable devices (components). An EC declaration of conformity or CE identification is there-
fore not required by EMC law. 
An EMC check of the sensors was done 
together with the series MSC 710 signal conditioning electronics. 

Proper Environment
Protection class: 
- Displacement sensor type TA, SA, LA, SR: IP 40 / IP 67 
- Displacement sensor type CA, CR: IP 67 
- Operating temperature: 
  -20 °C up to 80 °C (4 °F up to +176 °F) 
- Storage temperature: 
  -40 °C up to 80 °C (-40 °F up to +176 °F) 
- Humidity: 5 - 95 % (no condensation) 
- Atmospheric pressure: Atmospheric pressure 
1) Depends on used mating connector 

Assembly Instructions 

Assembly Instructions induSENSOR, LVDT series

Installation and Assembly
Precautions
Do not drop the free moving plunger of an inductive displacement sensor. 
Protect the cable sheath of the sensor cable from sharp edges and pointed or heavy objects. The minimum bending radius must not be exceeded. 
Avoid kinks. 
Check the plug connections for firm. 

Sensor Mounting
Use peripheral clamping on the sensor housing to mount the sensor. 
This offers the highest reliability because the sensor is clamped over a board area by its cylindrical housing. 
Mount the sensor using radial point clamping with set screws at 
installation locations where there are no forces and vibrations. 
Plastic set screws must be used so that the sensor housing is not damaged or deformed. 
Screw the plunger of displacement sensors to the measurement object using the thread. 
The screw joint must either be secured with a screw locking compound (e.g. Loctite ...) or counter-screwed with the lock-nut supplied. When mounting, it must be ensured that the plunger remains freely movable in 
the sensor and that tilting is avoided. 
Connect the sensor to the amplifier electronics by connectors or by 
wiring terminals depending on the version used (pin assignment). 
Ready-made connecting leads are available for sensors with plug connec-
tor. 

Proper Environment
Protection class: 
- Displacement sensor type TA, SA, LA, SR: IP 40 / IP 67 
- Displacement sensor type CA, CR: IP 67 
- Operating temperature: 
  -20 °C up to 80 °C (4 °F up to +176 °F) 
- Storage temperature: 
  -40 °C up to 80 °C (-40 °F up to +176 °F) 
- Humidity: 5 - 95 % (no condensation) 
- Atmospheric pressure: Atmospheric pressure 
1) Depends on used mating connector 

Assembly Instructions induSENSOR, LVDT series

Installation and Assembly
Precautions
Do not drop the free moving plunger of an inductive displacement sensor. 
Protect the cable sheath of the sensor cable from sharp edges and pointed or heavy objects. The minimum bending radius must not be exceeded. 
Avoid kinks. 
Check the plug connections for firm. 

Sensor Mounting
Use peripheral clamping on the sensor housing to mount the sensor. 
This offers the highest reliability because the sensor is clamped over a board area by its cylindrical housing. 
Mount the sensor using radial point clamping with set screws at 
installation locations where there are no forces and vibrations. 
Plastic set screws must be used so that the sensor housing is not damaged or deformed. 
Screw the plunger of displacement sensors to the measurement object using the thread. 
The screw joint must either be secured with a screw locking compound (e.g. Loctite ...) or counter-screwed with the lock-nut supplied. When mounting, it must be ensured that the plunger remains freely movable in 
the sensor and that tilting is avoided. 
Connect the sensor to the amplifier electronics by connectors or by 
wiring terminals depending on the version used (pin assignment). 
Ready-made connecting leads are available for sensors with plug connec-
tor. 

Proper Environment
Protection class: 
- Displacement sensor type TA, SA, LA, SR: IP 40 / IP 67 
- Displacement sensor type CA, CR: IP 67 
- Operating temperature: 
  -20 °C up to 80 °C (4 °F up to +176 °F) 
- Storage temperature: 
  -40 °C up to 80 °C (-40 °F up to +176 °F) 
- Humidity: 5 - 95 % (no condensation) 
- Atmospheric pressure: Atmospheric pressure 
1) Depends on used mating connector 

Assembly Instructions induSENSOR, LVDT series

Installation and Assembly
Precautions
Do not drop the free moving plunger of an inductive displacement sensor. 
Protect the cable sheath of the sensor cable from sharp edges and pointed or heavy objects. The minimum bending radius must not be exceeded. 
Avoid kinks. 
Check the plug connections for firm. 

Sensor Mounting
Use peripheral clamping on the sensor housing to mount the sensor. 
This offers the highest reliability because the sensor is clamped over a board area by its cylindrical housing. 
Mount the sensor using radial point clamping with set screws at 
installation locations where there are no forces and vibrations. 
Plastic set screws must be used so that the sensor housing is not damaged or deformed. 
Screw the plunger of displacement sensors to the measurement object using the thread. 
The screw joint must either be secured with a screw locking compound (e.g. Loctite ...) or counter-screwed with the lock-nut supplied. When mounting, it must be ensured that the plunger remains freely movable in 
the sensor and that tilting is avoided. 
Connect the sensor to the amplifier electronics by connectors or by 
wiring terminals depending on the version used (pin assignment). 
Ready-made connecting leads are available for sensors with plug connec-
tor. 

Proper Environment
Protection class: 
- Displacement sensor type TA, SA, LA, SR: IP 40 / IP 67 
- Displacement sensor type CA, CR: IP 67 
- Operating temperature: 
  -20 °C up to 80 °C (4 °F up to +176 °F) 
- Storage temperature: 
  -40 °C up to 80 °C (-40 °F up to +176 °F) 
- Humidity: 5 - 95 % (no condensation) 
- Atmospheric pressure: Atmospheric pressure 
1) Depends on used mating connector 

Assembly Instructions induSENSOR, LVDT series

Installation and Assembly
Precautions
Do not drop the free moving plunger of an inductive displacement sensor. 
Protect the cable sheath of the sensor cable from sharp edges and pointed or heavy objects. The minimum bending radius must not be exceeded. 
Avoid kinks. 
Check the plug connections for firm. 

Sensor Mounting
Use peripheral clamping on the sensor housing to mount the sensor. 
This offers the highest reliability because the sensor is clamped over a board area by its cylindrical housing. 
Mount the sensor using radial point clamping with set screws at 
installation locations where there are no forces and vibrations. 
Plastic set screws must be used so that the sensor housing is not damaged or deformed. 
Screw the plunger of displacement sensors to the measurement object using the thread. 
The screw joint must either be secured with a screw locking compound (e.g. Loctite ...) or counter-screwed with the lock-nut supplied. When mounting, it must be ensured that the plunger remains freely movable in 
the sensor and that tilting is avoided. 
Connect the sensor to the amplifier electronics by connectors or by 
wiring terminals depending on the version used (pin assignment). 
Ready-made connecting leads are available for sensors with plug connec-
tor. 

Proper Environment
Protection class: 
- Displacement sensor type TA, SA, LA, SR: IP 40 / IP 67 
- Displacement sensor type CA, CR: IP 67 
- Operating temperature: 
  -20 °C up to 80 °C (4 °F up to +176 °F) 
- Storage temperature: 
  -40 °C up to 80 °C (-40 °F up to +176 °F) 
- Humidity: 5 - 95 % (no condensation) 
- Atmospheric pressure: Atmospheric pressure 
1) Depends on used mating connector 

Assembly Instructions induSENSOR, LVDT series

Installation and Assembly
Precautions
Do not drop the free moving plunger of an inductive displacement sensor. 
Protect the cable sheath of the sensor cable from sharp edges and pointed or heavy objects. The minimum bending radius must not be exceeded. 
Avoid kinks. 
Check the plug connections for firm. 

Sensor Mounting
Use peripheral clamping on the sensor housing to mount the sensor. 
This offers the highest reliability because the sensor is clamped over a board area by its cylindrical housing. 
Mount the sensor using radial point clamping with set screws at 
installation locations where there are no forces and vibrations. 
Plastic set screws must be used so that the sensor housing is not damaged or deformed. 
Screw the plunger of displacement sensors to the measurement object using the thread. 
The screw joint must either be secured with a screw locking compound (e.g. Loctite ...) or counter-screwed with the lock-nut supplied. When mounting, it must be ensured that the plunger remains freely movable in 
the sensor and that tilting is avoided. 
Connect the sensor to the amplifier electronics by connectors or by 
wiring terminals depending on the version used (pin assignment). 
Ready-made connecting leads are available for sensors with plug connec-
tor. 

Proper Environment
Protection class: 
- Displacement sensor type TA, SA, LA, SR: IP 40 / IP 67 
- Displacement sensor type CA, CR: IP 67 
- Operating temperature: 
  -20 °C up to 80 °C (4 °F up to +176 °F) 
- Storage temperature: 
  -40 °C up to 80 °C (-40 °F up to +176 °F) 
- Humidity: 5 - 95 % (no condensation) 
- Atmospheric pressure: Atmospheric pressure 
1) Depends on used mating connector
Sensor type - LA with axial stranded wire

Sensor type - CR with integral (radial) cable

Sensor type - SR with radial plug connection

Dimensions in mm (inches), not to scale

Basic model

<table>
<thead>
<tr>
<th>DTA-15D-</th>
<th>DTA-25D-</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA</td>
<td>CA</td>
</tr>
<tr>
<td>LA</td>
<td>CA</td>
</tr>
</tbody>
</table>

1) Plunger in zero position; (± 10 % of measuring range ±1 mm)

Housing dimensions for sensors with ±15 mm measuring range

<table>
<thead>
<tr>
<th>Housing diameter mm (inches)</th>
<th>20 (0.79)</th>
</tr>
</thead>
</table>

Pin Assignment

Read the detailed instruction manual before using the sensor. The manual is available online on: