

# Positioner D400, Software Revision 3.00

## Commissioning procedure



Always observe all safety instructions and precautions in the operating instructions.

1. Turn on the air supply to the positioner.
2. Turn on electrical power supply to the positioner.  
Apply the 4...20 mA input signal to the analog input (terminals +11/-12).

If the emergency shutdown module is installed, the supply voltage for this module needs to be 24 V DC (terminals +85 / -86) and the switch needs to be in its center position. Otherwise, the device has no pneumatic function.

3. Check for proper mounting.
  - Press and hold **MODE**. Additionally briefly press **↑** or **↓** until mode 1.3 (manual adjustment within the sensor range) is displayed. Then release **MODE**.
  - Press **↑** or **↓** to move the actuator to its mechanical limit stops in both directions, and note the values. The angle of rotation is indicated in degrees.  
Recommended range:  
between -28° and +28° for linear actuators  
between -57° and +57° for rotary actuators  
**Minimum angle: 25°**

**Important:**

The positioner should be mounted/adjusted such that the portions of the sensor's operating range above and below the center point are nearly identical. Use the rotation angle of the position sensor in the positioner to its utmost extent.

4. Run the standard Autoadjust function

**Important:**

The standard autoadjustment function described here is only available with software rev. 2.XX and higher.

For a linear actuator:

- Press and hold **MODE**, until **ADJ\_LIN** appears in the display, then release **MODE**.
- Press and hold **MODE** again, until the countdown is finished. Then release **MODE**.  
Standard autoadjustment is started.

For a rotary actuator:

- Press and hold **ENTER**, until **ADJ\_ROT** appears in the display, then release **ENTER**.
- Press and hold **ENTER** again, until the countdown is finished. Then release **ENTER**.  
Standard autoadjustment is started.

When the standard autoadjustment procedure is finished **successfully**, the parameter settings are **automatically** saved in the non-volatile memory, and the positioner returns to operating mode 1.1.

If standard autoadjustment should fail, the procedure is automatically interrupted, and an error code is indicated. In this case press and hold **↑** or **↓** for 3 seconds. The positioner returns to mode 1.3 MAN\_SENS at the operating level. Check the assembly for proper mounting and, if

required, readjust it. Repeat the standard autoadjustment function.

## Operating modes

Procedure for mode selection from operating level:

- Press and hold **MODE**.
  - Additionally briefly press **↑** as often as required. The selected operating mode is indicated.
  - Release **MODE**
  - The position is indicated as a percentage or rotation angle
- Overview:

Mode	Mode display	Position display
1.0 Adaptive control mode		
1.1 Fixed control mode		
1.2 Manual adjustment within stroke range Press <b>↑</b> or <b>↓</b> to adjust *		
1.3 Manual adjustment within sensor range Press <b>↑</b> or <b>↓</b> to adjust *		

\*) For quick motion: press **↑** and **↓** together.

