8049-2

Quick-Start Guide Positioner Type 8049-2

The device may only be assembled and commissioned by specialist employees who are familiar with the assembly, commissioning and operation of this product.

"Specialist employees" in terms of these installation and operation instructions are persons who, based on their professional training, knowledge, experience as well as their knowledge of the relevant standards, are able to evaluate the work assigned to them and recognise potential dangers.

WARNING

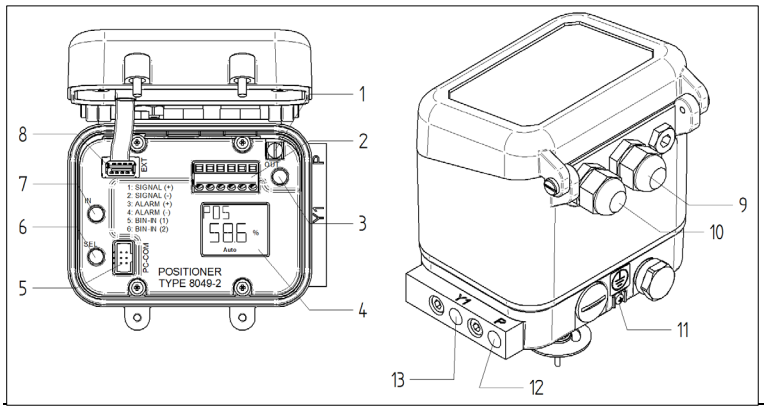
Risk of severe damage to property and personal injury as a result of improper installation.

▶ Observe national safety regulations (e.g. VDE 0100) during assembly, commisioning and operation

▶ All work may only be performed provided that the system is not live

ATTENTION

Pay attention to the manual



1. Ground terminal
2. Terminal block
3. „OUT“ button
4. Display
5. Connector for PC connection
6. „SEL“ button
7. „IN“ button
8. Connector for additional module
9. Cable screw connection / alternatively, plug 2
10. Cable screw connection / alternatively, plug 1
11. Ground terminal
12. Supply air „P“ connection
13. Actuator „Y1“ connection

Assembly on linear and part-turn actuators

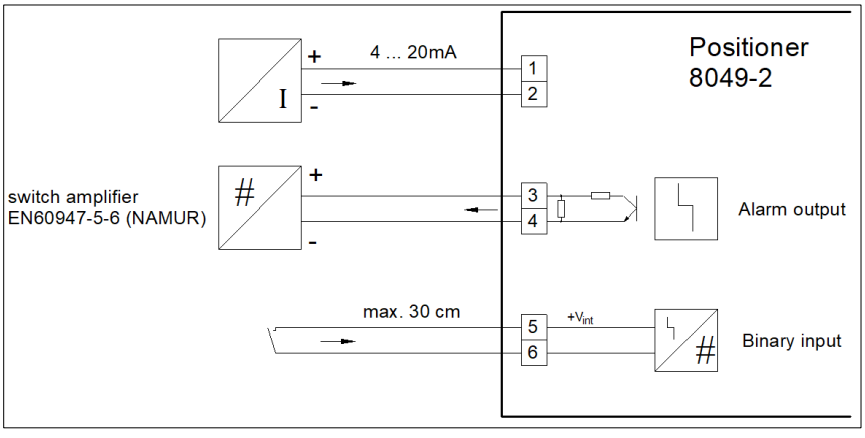
- Apply the positioner incl. feedback pin and return spring on the adjustment kit
- For part-turn actuators turn the coupling until the rotation angle indicator points to 0° (for NO to 90°).
- Tighten the 3 threaded pins on the side of the fastening ring.
- Connect the "Y1" output with the valve actuator.

ATTENTION

Ensure that the compressed air connection is leak-tight as this will otherwise lead to the piezo valves in the positioner constantly operating.

- Open the positioner cover and establish the electrical connections.
- Connect the supply air (connection "P").
- Perform a self-adjustment on the positioner.
- Close the cover of the positioner.

Electrical connection



The positioner can also be configured to other control signals in the range of 4-20 mA.

The load rating is approximately 6,5 V.

The alarm output is designed in a two-wire method according to EN 60947-5-6 (NAMUR) for downstream switching amplifiers (e.g. steel 9170/20-12-11)

Depending on the version of the positioner other connections may be used (e.g. plug connection). Observe the connection diagram inside of the cover.

Self-adaption mode

NOTE

The self-adjustment of the installed positioner was carried out at the factory. It is normally only necessary after replacing or repairing the valve

After a new or replaced positioner has been mounted to the valve, it must be adjusted as follows.

- Press both “IN” and “OUT” buttons until “AdA” (for adaptation) appears on the display (after 2-3 seconds)
- The valve opens and closes several times and starts to cycle at different points. The required control parameters are determined in the process.
- After the adjustment has been completed, the controller automatically switches back to automatic mode if the adjustment was error-free and displays the current valve position in %.
- If an error occurs during calibration, the corresponding error code is shown on the display.

Manual adjustment

Switching to “Manual adjustment” mode is done by pressing the “OUT” button on the connection board for approx. three seconds.

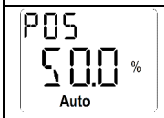
The valve is opened or closed by pressing the “IN” (supply air to the actuator) or “OUT” (actuator is vented) buttons.

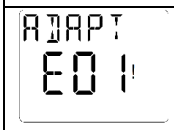
The manual override is switched off by briefly pressing the “IN” and “OUT” buttons. The valve returns to the starting position according to the control signal applied.

NOTE

If both buttons are pressed for too long (more than approx. 2 - 3 seconds), the positioner goes into the adjustment range.

Operating states / Error messages

Display	Operating state	Anzeige	Betriebszustand
	Automatic mode Display of the valve position in %		Self-adaption The positioner performs a self-adaption.

Display	Error	Meaning	Display	Error	Meaning
	Controller not adapted	Perform self adaption.		Control error	The valve does not reach its target position
	Target value signal error	The control signal is outside the valid range		Other error	EEPROM error, valve path, switch figures, etc. exceeded

By using the "DeviceConfig" software, the user can determine which operating states and error notifications should be issued via the alarm output.

Only the "control error" is issued as standard.