Diagrams

Motoric Valve Drive 24 V (AM3) · https://faqdoc.info/en/systemauswahl/motoric-valve-drive-6/motoric-valve-drive-24-v-am3-en/diagrams-2/

Feedback

The following diagrams only apply when the appropriate valve adapter is used:

Functional diagram Mode MPR,
without valve path recognition, fixed valve path

Functional diagram Mode MPV/MPO,
with valve path recognition

The mechanical backlash between the actuator and the valve adapter, as well as backlash in the gear unit of the actuator, are detected as valve path. This has an effect on the position display and the control bandwidth is minimally reduced. Deviating from the actual valve lift, an approx. 1 mm higher valve path is shown in the display.

3-point mode (M3P): The OEM Motoric Valve Drive 6: 24 V Proportional in 3-point mode is controlled via the two electrical connections L1-1 and L1-2. The desired moving direction is selected via a 24 V signal at one of the connections, extracting or retracting the valve pressure plate. A 24 V signal at L1-2 retracts the valve pressure plate, a signal at L1-1 extends it. The minimum pulse length is 2 seconds.

2-point mode: The OEM Motoric Valve Drive 6: 24 V Proportional in 3-point mode can also be used for 2-point control. For this, a continuous voltage of 24 V must be applied to the electric connection L1-1. The activation is done via the connection L1-2. A 24 V signal at L1-2 retracts the valve pressure plate. The valve pressure plate remains retracted until the 24 V signal at L1-2 is switched off. If the voltage at L1-2 is switched off, the valve pressure plate extends to the end position.

.NOTE.

(valid for 2- and 3-point modes)

When **valve travel detection is activated**, the motor switches off when the plunger no longer makes contact with the valve pressure plate of the actuator.

When **valve travel detection is deactivated**, the actuator retracts the valve pressure plate to the internal stop. Only then the motor switches off. The actuator travels uselessly, the control reacts sluggishly.