Initialization

Motoric Valve Drive 6: 24 V modbus · https://faqdoc.info/en/systemauswahl/motoric-valve-drive-6/motoric-valve-drive-6-24-v-modbus-en/initialization-2/

The OEM Motoric Valve Drive: 24 V Modbus RTU is equipped with a stepper motor, a microcontroller and a gearing mechanism.

Only use the device in perfect condition. The manufacturer is not liable for other uses or modifications. Commissioning should be carried out with a valve. The actuator recognizes when it is operated without a valve and travels the maximum mechanical distance.

.NOTE.

The spindle of the actuator must be retracted for subsequent installation on a valve. Failure to do so may result in damage to the actuator. The actuator must be disconnected from the power supply during installation.

After switching on the power supply, the OEM Motoric Valve Drive: 24 V Modbus RTU performs an initialization. During the initialization phase, the actuator determines the travel distance. Indication in the display: "In" (for initialization).

Sequence

1. The valve pressure plate retracts completely.
   The inner end stop of the drive is determined.
2. The valve pressure plate extends.
   The valve open position (NO valve) is determined when the plunger is touched. The end of the valve travel is reached when the actuator has come to a standstill
3. Valve path recognition is complete.
   The actuator positions the valve according to the register content.
4. Calculation of the actuating position to be approached from the set register value, set valve path, determined plunger contact or measured path.
   Precise approach to the adjustment position.

.NOTES.

For an initialization phase, the OEM Motoric Valve Drive requires: 24 V Modbus RTU max. 7 min.
During initialization, the actuator does not respond to positioning control commands.
The mechanical backlash in the gearing mechanism and between the actuator and valve adapter is recognized as valve path. This backlash affects the position display. The control bandwidth is minimally reduced. The display shows a valve travel that is approx. 1 mm longer than the actual valve travel.