Manual

for TCR-Modules with slotted proximity switches

ROTECH SYSTEMKOMPONENTEN

1. Description

Signal devices are used to report and control the position of valves which are operated by pneumatic actuators. Depending on their design the signal boxes are equipped with up to four proximity switches. With the enclosed mounting parts the boxes can be easily and quickly mounted on actuators or valves.

2. Assembling

WARNING	**Risk of injury** The electric components inside the box carry dangerous voltage. Moreover there is a risk of bruise by some rotating parts. → Do not open the housing while operating!

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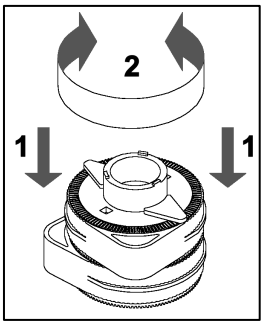
1. Bring the actuator to a completely "Open" or "Close" position.

   Close: *Valve is closed, Channel position is abreast the actuators longitudinal axis.*
   Open: Valve is open, *Channel position towards actuator axis.*

2. *Equate the modules axis with the actuator.*
3. Attach the box with bracket on the actuator or valve and fix it.
4. Adapt the control unit by leading the system cable through the cable gland and wiring the single conductors with the terminal block.

   Please note the wiring diagramm in the technical data sheet.
   The wiring diagramm can also be found in the box.



Adjusting switch-points

3. Adjusting switch-points

Ex factory the modules are adjusted as following:

Switch-point close: Position Valve/Actuator at 0°
Switch-point open: Position Valve/Actuator at 90°
(Switch-points of other switches optionally)

You can choose between two different settings:

End position undamped: The switch plates are adjusted so that the sensors are not active anymore when they reached their end position. At run time the switches are active.

End position damped: The switch plates are adjusted so that the sensors are active when they reached their end position. At run time the switches are inactive.

If readjustment should be necessary proceed as following:

1. Open screws and remove the housing cover.
2. Push down the exterior ring of the switch cam of the switch, which has to be readjusted (1). Turn the switch cam until the wanted position has been reached.
3. Proceed similary with other switch-points.
4. Refasten housing cover.

4. Connecting solenoid valves

Depending on their design the switch-boxes offer the possibility to additionally connect up to two solenoid valves on the terminal block. If you want to wire solenoid valves additionally act on the following plan:

1. Replace the sideways blank plugs by a suitable cable gland.
2. Open screws and remove the housing cover.
3. Remove the cable covering.
4. Lead the system cable through the cable gland and wire it with the terminal block.

   Please note the wiring diagramm in the technical data sheet.
   The wiring diagramm can also be found in the box.

5. Refasten cable covering and housing cover.

5. Maintenance

Long time outdoor usage can cause gaskets to become brittle after some time. Safe operation can only be guaranteed with leak-proof boxes.

Seals should be exchanged immediately if they are damaged, or at least after five years.
Seals and other parts can be ordered at all times.