INSTRUCTION MANUAL

for TCR-Limit-Switch-Boxes with double sensors



1. Description

Signal devices are used to report and control the position of valves which are operated by pneumatic actuators. The Limit-Switch-Boxes are equipped with one inductive double sensor. With the enclosed mounting parts the boxes can be easily and quickly mounted on actuators or valves.

2. Assembling



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!
- 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 diagram in the technical data sheet. The wiring diagram can also be found in the box.

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°

If readjustment should be necessary proceed as following:

- 1. Remove the housing cover.
- 2. Push down the exterior ring of the lower switch cam. Turn it until the lower sensor of the proximity switch is activated by the metal segment in the switch cam (→ LED shines).
- 3. Bring the to actuator to position "Open".
- 4. Proceed similary with the other switch-point (upper sensor).

4. Connecting solenoid valves

The TCR-Limit-Switch-Boxes offer the possibility to additionally connect one solenoid valve on the terminal block. If you want to wire a solenoid valve additionally act on the following plan:

- 1. Replace the sideways blank plug 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 diagram in the technical data sheet. The wiring diagram 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.

Erstellt am: 10.03.2007	Erstellt durch: SH	Geändert am:	Geändert durch:
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