# **INSTRUCTION MANUAL**

## For limit-switch-boxes V3-proximity-switches



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## 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 type TPF2V3... / TIF5... 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



#### Risk of injury

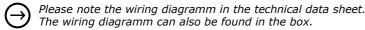
The electric components inside the box carry dangerous voltage. Moreover there is a risk of bruise by some rotating parts.

→ Do not open the housing while operating!

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

Closed: 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.



## 3. Adjusting switch-points

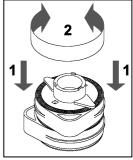
Ex factory the modules are adjusted in the following way:

Switch-point close: Position Valve/Actuator at 0° to 3° Switch-point open: Position Valve/Actuator at 87° to 90°

(Switch-points of other switches optionally)

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 (2).
- 3. Proceed similary with other switch-points.
- 4. Refasten housing cover.



Adjusting switch-points

#### 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.
- $\ensuremath{\mathsf{2}}.$  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.

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