# **INSTRUCTION MANUAL**

# for COM-limit-switch-boxes with cylindrical sensors



## 1. Description

Signal devices are used to report and control the position of valves which are operated by pneumatic actuators. The COM-Limit-Switchboxes are equipped with two cylindrical 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.

- 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.

# 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°



In the end positions the sensors are always damped. This means that the switch flag is adjusted so that the sensors are active only when the end positions (0° and 90°) has been reached. During the rotating process the sensors are inactive.

If readjustment should be necessary proceed as following:

- 1. Remove the housing cover.
- 2. Unscrew the screw nuts between the sensors. Move the sensor fowards or backwards until the wanted position has been reached.

At the end positions the switch flag must not touch the frontside of the sensor. Moreover the rated operating distance of the sensor has to be noticed.

3. Tighten screw nuts and 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. Open screws and remove the housing cover.
- 2. 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.*
- 3. Refasten 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: 29.07.2008	Erstellt durch: SH	Geändert am:	Geändert durch:
ROTECH Antriebselemente GmbH		Tel.: +49(0) 7243-5931-0	http://www.rotech.de
		Fax: +49(0) 7243-5931-31	E-Mail: info@rotech.de