

Limit switch boxes for standard applications



Original Manual

To secure the function and for your own safety, please read this manual attentively before you start the installation. Should there be any open questions, please contact EUROTEC Antriebszubehor GmbH.

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1. Description

Limit switch boxes are used for the feedback and control of valves, which are operated by pneumatic part-turn actuators. The modules are easily to be mounted on the actuator or valve with the enclosed mounting kit. The shaft of the limit switch box is connected form-fit to the shaft of the actuator. The shaft of the limit switch box will turn when you actuate the actuator. The cams which are mounted on the shaft of the limit switch box will then actuate the switches which are responsible for the transmission of the electrical signal.

2. General conditions

The equipment may only be installed, connected and put into operation by specialists. The specialists must have knowledge about regulations and ordinances for the application.

!!! Any liability of our legal person expires in case of non-compliance with these leads, as well as in case of non-appropriate intervention. Furthermore expires the warranty on the equipment and the accessories !!!

- Please consider the leads in this manual as well as the operational conditions and the approved information from the labels on the equipment.

- Please consider the generally accepted rules of technology for the choice and installation of equipment.
- Please take appropriate measures to avoid accidental activation and to avoid invalid damage.

WARNING, Danger of injury!! The electric parts inside of the casing are highly energised. The turning parts may cause a risk of hand or foot injury.



3. Labeling and utilization

The limit switch boxes are to be used for applications in non-explosive atmospheres. The label on the limit switch box contains the following information:

- Article code
- Material of casing
- Switch type
- Electrical information
- Brief address
- Logo

4. Important leads

1. Verify if the classification on the label is appropriate to your application.
2. Consider the respective national regulations and legal requirements as well as the requirements of the manufacturer.
3. Do not remove existing cable entry devices until inserting the cables to ensure that any dirt remains outside the limit switch box.
5. Avoid stress on the clamps or fix them properly.
6. Never disconnect the cables when they are energised.
7. The product may only be operated in fully assembled status.
8. Protect the products and cables successfully against any damage.

5. Material

Casings with various materials can be used in non-explosive atmospheres. In explosive atmospheres you have to use conductive materials as vestamid or aluminum. For more information please see the technical data sheet.

6. Assembly

1. Align the shaft of the limit switch box to the shaft of the actuator. Mount the limit switch box on the actuator using the mounting bracket and the enclosed mounting kit which was prepared in accordance with VDI/VDE 3845 (NAMUR). Tighten the screws firmly.
2. Open the cover by loosening the 4 cover screws. Take care that they are still plugged into the cover.

3. Now connect the cables with the limit switch box. Consider the instructions on the wiring diagram on the cover of the limit switch box or on the technical data sheet.
4. Close the cover of the limit switch box. Take care that the sealing of the cover is in a proper position when you apply the cover to the casing. Tighten the 4 screws firmly.

7. Disassembly

1. Consider the lead of chapter 4.
2. Open the cover of the limit switch box by loosening the 4 cover screws. Take care that the screws remain plugged into the cover.
3. Disconnect the cable of the system from the limit switch box.
4. Loosen the 4 screws which fix the mounting bracket to the actuator. Now remove the limit switch box from the actuator.

8. Setting of cams

The setting of cams is an important process. The cams are always preset by EUROTEC on a swivel range of 0-90°. If you need another swivel range, please execute the following steps:

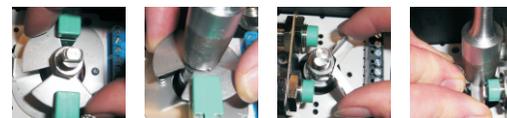
Rectangular limit switches:

- Remove the visual indicator.
- Bring the actuator in the desired end position 1. Adjust the lower cam first. Press the cam down and turn it into the position in which it actuates the switch. Now let the cam engage again with the tothing.
- Bring the actuator in the desired end position 2. Press the upper cam down and turn it into the position in which it actuates the switch. Now let the cam engage again with the tothing.
- Finally verify your presetting through repeated switching.
- Mount the visual indicator to the shaft of the limit switch box.



Cylindrical sensors and slot type sensors:

- Remove the visual indicator.
- Loosen the nut M6.
- Bring both cams into the position that you need for your application and tighten the nut M6 again firmly.
- Finally verify your presetting through repeated switching.
- Mount the visual indicator to the shaft of the limit switch box.



9. Connection of solenoid valve

Depending on the model, the limit switch boxes of EUROTEC provide the possibility to connect one or two solenoid valves or one dual stable solenoid valve. Connect the solenoid valve to the cable that is lead outside the limit switch box. Follow the instruction manual of the manufacturer of the solenoid valve.

10. Maintenance

The sealings of the shaft and inside of the cover may become brittle in case of long-time external use or use in high or low ambient temperatures. A secure operation can only be guaranteed in a leak-proof casing. Sealings must be exchanged after they are worn-out or at the latest of 5 years. The required sealings can be ordered from EUROTEC.

11. Interferences

Check the cables, connectors and the position of the cams. Check additionally if there is condensation water inside of the casing and if the valve and the actuator operate properly. Repair occurring defects. If the interference is still valid, disconnect the box from the system and contact authorised and skilled specialists of the manufacturer.

12. Area of application

This manual is applicable for limit switch boxes of EUROTEC Antriebszubehor GmbH for the use in non-explosive atmospheres. The following products are considered:

EPP_M-...	EPP_I-...	EPP_S-...
EPE_M-...	EPE_I-...	EPE_S-...
EVP_M-...	EVP_I-...	EVP_S-...
EVE_M-...	EVE_I-...	EVE_S-...
EAE_M-...	EAE_I-...	EAE_S-...
EBPS_M-...	EBPS_I-...	EBPS_S-...
EBPL_M-...	EBPL_I-...	EBPL_S-...
EBAS_M-...	EBAS_I-...	EBAS_S-...
EBAL_M-...	EBAL_I-...	EBAL_S-...

