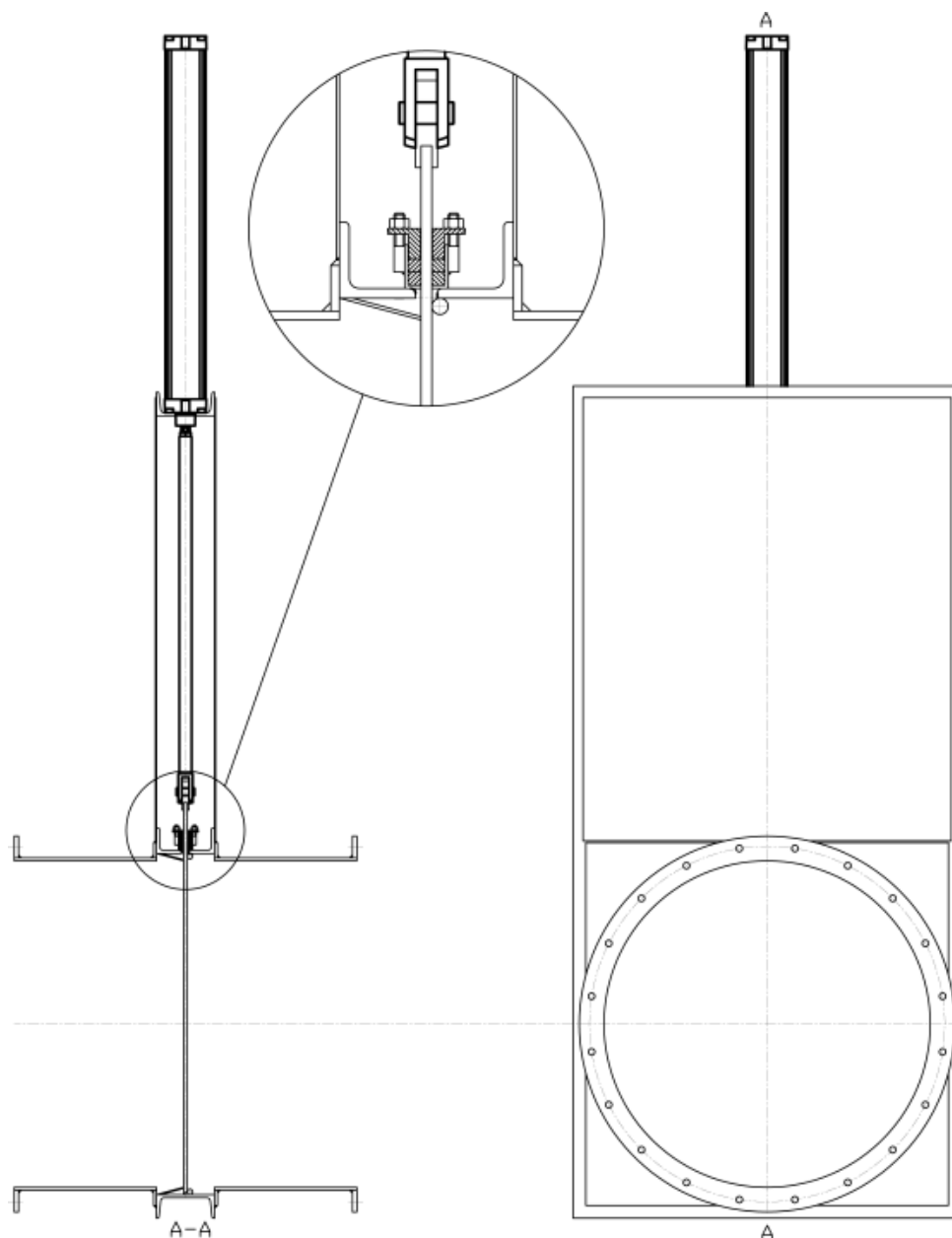


Control and Shut-off Dampers

SWEDSPJÄLL

Operating and Maintenance instructions for **SWEDSPJÄLL series 500** with actuator or pneumatic cylinder



GENERAL

These instructions apply to **series 500 with a pneumatic cylinder**.

Series 500 has a sliding damper for the gases where every damper is designed for certain conditions relevant for a specific application. See specifications for maximum working pressure and temperature.

Series 500 can be fitted vertically or horizontally in the pipe.

Damper seals are made of different materials, dependent upon permeability, temperature and media, see specifications for actual damper.

Areas of use:

- flue gases
- process gases
- hot air
- the damper may not be used in systems where the design pressure is greater than 0.5 bar.

SAFETY

Explanation of symbols

Warning

Working safety symbol

This symbol can be found next to the actions described which if incorrectly carried out many incur risks to life and limb. Read through the actions carefully which are marked with this symbol and be extremely careful when the work is being carried out. Ensure that everybody working with the damper is aware of the risks.

As well as the dangers pointed out in this instruction, all other safety regulations must be observed along with normal caution.

MANUFACTURER

The damper is made in Sweden and designed by AB GF Swedenborgs Ingeniörsfirma.

FACTORY INSPECTION

Functional inspection

Prior to delivery, an optical inspection of the damper seal along with a manoeuvre test is carried out, see also functional inspection certificate which accompanies this documentation.

INSPECTION PRIOR TO INSTALLATION

Before the damper is installed in the pipe line, the damper seal and damper disk should be inspected to ensure that no damage has occurred during transport. The damper's seal should also be inspected before assembly.

INSTALLATION

The damper is designed for installation either vertically or horizontally. Consider the fitting position if dust/flue dust is prevalent.

Check that there is no voltage present when installing in the pipe.

It is important that the pipe's connections **are parallel to each other** before installation.

For flanged dampers, the bolts should be tightened crosswise and within even torque, deformity must not occur.

Soft standard or steel-wound packings for flange seals should be used; dependent upon flange standard or operating temperatures.

For welded dampers, the damper should be spot welded at both ends of the pipe, thereafter welding should be carried out crosswise in order to reduce tension in the pipe to a minimum.

OPERATIONS

The damper is designed for continuous operation and requires very little superintendence, see further under "MAINTENANCE".

Prior to start up, an extra inspection should be carried out so that operating data agrees with those of the specified values for pressure and temperature.

If temperature and pressure values are exceeded, there is a risk for leakage and deformation which can lead to personal injury.

Warning:

- Pressure and temperature must never exceed specifications.
- Hand wheel or actuator may not be dismantled if flow or differential pressure is above the damper.
- For pneumatic devices, the air must be switched off and drained prior to repairs being carried out.

MAINTENANCE

PNEUMATIC OR HYDRAULIC ACTUATORS

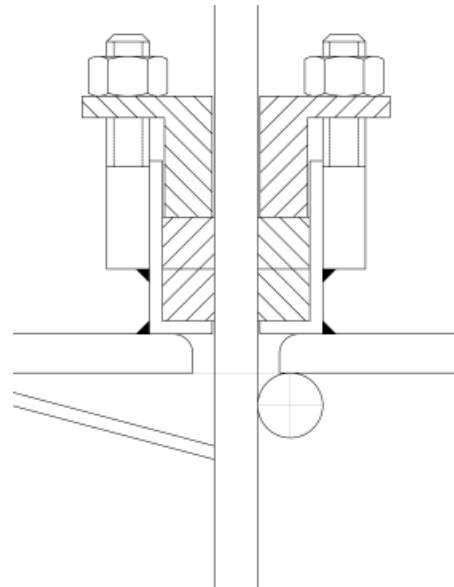
Remove the protective coverings (protective grating on certain models) in order to inspect the cylinder and adjust the packing box around the damper blades.

Adjustment of packing box

Check for leakage when working temperature has been reached.

Tighten packing box bolts $\frac{1}{4}$ revolution on all bolts and wait approx. 10 minutes (the box will expand). Repeat the procedure if it does not seal properly. Inspection and any possible adjustment of the box should be done once a month when required, dependent upon the number of manoeuvres.

Warning - Repacking of packing box (disassembly of all bolts) may not take place during operation.



INSPECTION

In case of media stoppages (downtimes) it is recommended that the seal on the damper is inspected: if it has to be changed, contact us.

SPARE PARTS

The following spare parts are recommended:

Spare parts / damper

- * Damper seal (if made of elastomer or other type of soft packing)
- * Packing box seals (applicable for pneumatic and hydraulic actuators)
- * Spare parts / actuators dependent on manufacture and type.