AERCON® LF

Operating & Maintenance Instructions

Please read these instructions before installing or attempting adjustment of this *Aercon*® stabiliser which is a sensitive instrument that has been tested and accurately pre-set to pressure prior to despatch to you.

- Scope : Models LF 300/1 - LF 610/7 inclusive and 50LF 320/1 - 50LF 550/4 inclusive.

- General description.

The *AerconÒ LF* Pressure Stabiliser comprises from one to seven finely balanced stainless steel blades pivoting on sealed for life ball bearings each with a centrally located balance weight assembly, adjustable for pressure within the range of 5 to 35 Pa or 30 - 50 Pa with additional control for sensitivity. The blade(s) is fully contained within the housing which is fabricated in carbon steel with white Polyester coating (to RAL 9010) or a Grade 304 or 316 stainless steel housing. The front flange is pre-drilled for screw fixing direct to the wall.
The stabiliser assembly is supplied with a mating slip -over rear flange section which is also pre-drilled for screw fixing.

- Installation - Please also see the *LF* Installation Notes.

Important Notes :
Where the stabiliser is installed in a location accessible to the public consideration should be given to fitting inlet and/or outlet grilles to avoid trapping/cutting of fingers by the blade(s).

DO NOT lift or move the stabiliser by means of the blade(s) as you may easily damage it.

It is recommended that the stabiliser should only be installed when all building, decorating and cleaning-up operations are complete.
The stabiliser housing should be inserted from the room at higher pressure, carefully levelled in both planes and then fixed to the wall with No. 8 wood screws. The rear flange should now be slipped over the stabiliser housing and similarly fixed to the wall. It is recommended that the gap between the housing and the rear flange be sealed with white silicon mastic.

- Operation.

AerconÒ LF stabilisers are self actuating, sensing a pre-set pressure and require no external power source. They are not volume dependant provided that the volume they are passing is at least 10 % of the unit's rated maximum at the given pressure. (See brochure)
Ensure that the inlet and outlet of the stabiliser are free from any obstructions.

- **Routine Maintenance and Cleaning.**

Weekly.
The stabiliser should be regularly cleaned using a vacuum cleaner to remove any dust or by wiping down with a soft cloth moistened with dilute disinfectant solution.

Under no circumstances should the stabiliser be immersed in any fluid nor should it be autoclaved.

At least annually.
Ensure that the blade(s) moves freely within the housing by applying light finger pressure to the bottom edge of each blade when viewed from the high pressure side. Any "stickiness" in the movement of a blade should be investigated and rectified. (This may require replacement of the bearings the stabiliser to be returned to the Works for overhaul).

Examine the blade stops and renew if missing or showing signs of deterioration.

Check the operating pressure of the stabiliser using a calibrated manometer and if necessary reset as described below.

- **Adjustment of pressure setting - (described for one blade)**

Do not attempt adjustment of the stabiliser until you have slackened the locknut on the low pressure side of each blade assembly.

Do not exert undue force on the blade assembly during adjustment or pressure setting.

Stabilisers are supplied pre-set to pressure with the M5 locknut tightened to ensure retention of the setting in transit and to prevent unauthorised alteration.

Using an 8mm. A/F spanner, slacken the locknut sufficiently to allow the end caps to be rotated without undue force and with no end float.
Turn the end cap on the high pressure side of the valve (denoted by the **INLET TOP** transfer) anticlockwise to increase the pressure setting or clockwise to decrease the setting. Ensure that the end cap on the low pressure side of the valve is not permitted to move whilst the high pressure side end cap is being adjusted.
The end cap on the low pressure (outlet) side of the stabiliser controls the sensitivity operation and on it will be seen the end of the rotation pin which is eccentric to the centre pin. The position of this pin should be noted and maintained as far as possible. If it is necessary to adjust it to obtain a higher or lower pressure range only move it a few degrees at a time and check the pressure and stabiliser response after every adjustment.
Following adjustment the locknut should be re-tightened sufficiently to prevent the end caps being rotated and the pressure re-checked to ensure that it has not been altered during the tightening process. Repeat this process for each blade and finally recheck the operating pressure of the complete unit.

- **Problems?**

Aercon® valves and stabilisers are covered by a twelve month "return to factory" warranty against faulty workmanship and materials.

In the event of any malfunction or difficulty in obtaining the required pressure setting of a stabiliser please contact the *Aercon*® department of **Power Utilities Limited** for assistance.

Should you experience problems with the overall performance of an Operating Theatre suite please request a copy of our **Trouble Shooting Guide for Type W and LF valves.**

An on-site commissioning/re-setting/repair service is available in the U.K. or alternatively stabilisers may be returned, carriage paid, to the Works for these services.

AERCON®

Air Pressure Control Valves

Manufactured in England by

Power Utilities Limited

Established 1934