



Type W

Operating & Maintenance Instructions

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

- **Scope : Models : 50W, 50WL, 100W, 100WL, & 200W.**
- **General description.**

The *Aercon*[®] Type W Air Pressure Control Valve comprises a finely balanced stainless steel blade pivoting on sealed for life ball bearings with a centrally located balance weight assembly, adjustable for pressure within the ranges of 5 - 35 Pa or 30 - 50 Pa with additional control for sensitivity.

The blade is fully contained within the valve housing which is fabricated in either white Deconyl SP 95 coated carbon steel or alternatively in brush polished Grade 304 or 316 Stainless Steel.

The valve assembly is supplied with a Wall Sleeve in which it is retained by leaf springs (supplied fitted to the valve body) for ease of installation and removal.

- **Installation - Please also see the Type W Installation Notes.**

Important Notes :

Where the valve 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.

Where the valve and Wall Sleeve are despatched together the valve will be already installed in the sleeve for economy of carriage. On receipt the valve should be carefully removed from the sleeve and if it is not to be installed immediately, placed in safe dry storage contained in its original packaging.

It is recommended that the valve should only be installed when all building, decorating and cleaning-up operations are complete.

The valve should be inserted from the room at higher pressure (except Wide Rear Flange Valves - inserted from the room of lower pressure) by being carefully pushed into the Wall Sleeve until its rear flange meets the seal at the rear of the sleeve.

After installing the valve, the foam inserts should be removed from each side of the blade.

It is recommended that the front flange of the valve be sealed back to the wall using Silicon mastic

- **Operation.**

Aercon[®] Type W valves are self actuating, sensing a pre-set pressure and require no external power source. They are not volume dependant provided that the volume is at least 10 % of the unit's rated maximum (see brochure).

Ensure that the inlet and outlet of the valve are free from any obstructions.

- **Routine Maintenance and Cleaning.**

Aercon[®] Type W valves only require minimal maintenance, being designed and engineered for a long trouble free life.

The valve 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 valve be immersed in any fluid nor should it be autoclaved.

An annual inspection and test is recommended, covering the following points:-

1. Ensure that the blade moves freely within the housing by applying light finger pressure to the bottom edge of the blade when viewed from the high pressure side. Any "stickiness" in the movement of the blade should be investigated and rectified. (This may require the valve to be returned to the Works for overhaul).
2. Examine the blade stops and renew if showing signs of deterioration.
3. The valve operating pressure should be checked using a calibrated manometer and if necessary reset as described below.

- **Adjustment of pressure setting.**

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

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

Valves 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 valve controls the sensitivity of the valve and on it will be seen the end of the rotation pin which is eccentric to the centre pin. This pin will be around the three o'clock position when the valve is set for low pressures and around the six o'clock position when the valve is set for high pressures. The actual position being determined by practical test. Move this control only a few degrees at a time and check the pressure and valve 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.

- **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 valve or 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.

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AERCON[®]

Air Pressure Control Valves

Manufactured in England by
Power Utilities Limited



Established 1934