## Addition to the Operating Instructions for AKO air operated Pinch Valves When Used in Potentially Explosive Zones





## Important Information:

If a pinch valve is intended for use in potentially explosive Ex-Zones 1, 2, 21 or 22, an AKO pinch valve must be used in EX-type (x after type designation in article number) also observing the addition to the BAV001 operating instructions. Configuration upon request.

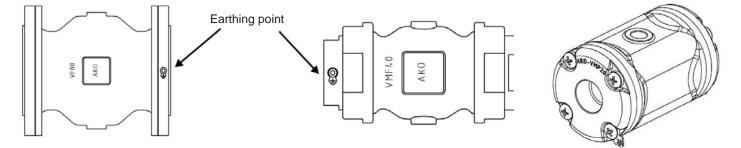
## Assembly Information:

- The potential equalisation between the pipeline and the pinch valve has to be checked (measuring tool) after installation.

- Only contact/locked tooth washers (such as in DIN 6797A) may be used to mount pinch valves with a flange in the unit to guarantee potential equalisation between the pipeline and pinch valve.

- The pinch valves have to be sufficiently earthed (at least 4mm<sup>2</sup> of flexible copper lead if wires are laid unprotected). There is a fastening screw marked for connecting up the earth on the flange/socket.





Earthing point

## **Safety Instructions:**

-Since the sleeve is a wear part, there is the possibility of a break or defect. This is the reason why the control line/triggering components have to satisfy the requirements of Ex-Zone 1, 2, 21 or rather 22 when using it for highly/slightly flammable media.

-Friction may cause an increase in temperature during operation (i. e., when the pumping medium flows through the pinch valve). The maximum temperature may not be in excess of the maximum surface temperature (80% of the medium's igniting temperature). Otherwise, the maximum temperature of the pinch valve is applied.

-If there is the possibility of particles of corrosion being in the pumping / flow medium (for instance, from rusty steel pipe lines), the operator has to guarantee that the pumping/flow medium does not come into contact with the aluminium of the pinch valve (for instance, by using stainless steel valves).

-The pinch valve and the unit the pinch valve is supposed to be installed in has to be sufficiently earthed against electrostatic charges (at least 4mm<sup>2</sup> flexible copper lead if wires are laid unprotected) to ensure that static electricity is discharged.

-Pinch valves consisting of non conductive individual parts (such as PVC) cannot be used in explosive Ex Zones. Pinch valves with the above mentioned non conductive individual parts can be used in non explosive Ex-Zones, where only the inside of the pipeline/machinery/plant is potentially explosive Ex-Zone, but all medium contacted individual parts has to be made out of conductive materials.

-Subsequent changes on the pinch valve (such as replacing the flange or sleeve) demands a new explosion prevention license / certification. The AKO manufacturer declaration expires. AKO will not be liable for any possible damages occurring due this.

Technical details subject to change without notice.

AKO UK Ltd.

12 Rutherford Way, Drayton Fields Industrial Estate, Daventry, Northants. NN11 8XW Tel: 0 13 27 31 27 47 • Fax: 0 13 27 31 25 65 • E-mail: sales@ako-valves.com • Web: www.pinch-valves.com

BAV002\_en-03/2010