

# Operating Instructions for mechanical Pinch Valves OV series, type M, P, P2, PA and PA2

## Important information:

Please read these instructions closely before installing and commissioning the valve. Installation or commissioning not complying with the instructions may lead to damage to the installation or personal injury. AKO does not accept any responsibility for losses resulting from the failure to apply these instructions.

## Storage:

Store the valves in a dry place, protected against bad weather and away from the light (UV).

## Technical data:

The maximum pressure and temperature specifications on the type plate must be observed and strictly adhered to. A pressure regulating valve/pressure limiter is to be installed in the control pressure line and set to the control pressure to be calculated.

The medium operating pressure shall not exceed:

M		P / P2		PA / PA2	
DN15-100	5 bar	DN15-150	5 bar	DN15-32	5 bar
DN125-200	3 bar	DN200	4 bar	DN40-150	3 bar
DN250	2 bar	DN250	2 bar	DN200	2 bar



### Type P / P2:

#### Optimum control pressure (example calculation)

Operating pressure (pumping pressure)	2 bar
+ Differential pressure (see type plate)	1 bar
= Optimum control pressure to be set	3 bar

## Choice of material for the valve:

A number of factors have an influence on the choice of materials, for example: the mediums (pressure, temperature,...), the environment (temperature, weather,...) and the operating conditions specific to each application. The "Sleeve quality" data sheet and advice from AKO will help you make your choice. Make sure that you store the sleeves away from UV rays, as these will cause the elastomers to age prematurely.

## Maintenance:

The pinch valves do not need any particular maintenance; only the parts in contact with the medium may wear. Replacement of the wear parts is quick and easy (refer to the maintenance instructions for how to carry out this operation). The plant must be shut down and the pipe shut off before and during the maintenance operations. If required, we can replace the sleeves in our workshop. Every three months, valves that have not been operated should be submitted to a function check.

## Fitting in the installation:

A valve must be tested for operation before being installed. **THE VALVE MUST BE OPENED WHEN IT IS**

**INSTALLED! P, P2, PA, PA2: THE CYLINDER(S) MUST BE SUPPLIED WITH MIN. CONTROL PRESSURE FOR THIS PURPOSE.**

Make sure that the flanges and the mounting flanges are clean and correctly aligned before fitting the valve.

**Important:** Please use only pipe connection flange with nominal bore/diameter and adequate sealing surface. The sleeve acts as a seal and does not require additional seals. The bolts must all be tightened to 50 % and then to 100 % in pairs (diametrically opposite one another). It is possible that it will be necessary to retighten the bolts a number of times while the valve is in service to ensure that it remains leak-tight.

**Caution:** tension or vibration in the pipe can damage or even destroy the valve. Make sure that the elbows and the pinch valve are separated by at least twice the length of a valve to prevent turbulence damaging the sleeve. It is important that the valve is opened when it is commissioned and that the pipes are thoroughly flushed to wash out any foreign body that may have been left during the installation or maintenance work.

## Safety:

It is absolutely necessary to ensure that no part of the body, no tool and no other object can be introduced into the valve during operating tests on the valve. Drain the piping before any operation. The valve must be open before being removed. Consult the safety data sheet of the product being transported before carrying out any work on the valve. The plant shall incorporate adequate safety equipment (valves, expansion valves, pressostats,...) to ensure that permissible pressures are not exceeded.

An earthing system is required to prevent the formation of electrostatic discharges.

