

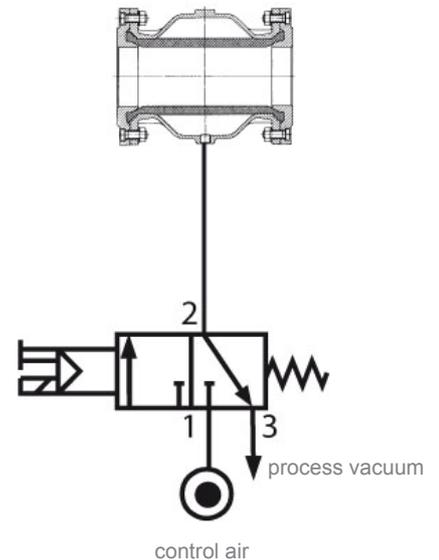
# Pinch Valve in Vacuum Applications

Dear Sir/Madam,

At a process vacuum of  $>-0,1\text{bar}$  the pinch valve sleeve cross-section starts to deform. On the one hand, this causes the pinch valve sleeve to narrow thereby impairing the product flow and, on the other hand, the abrasion/wear on the elastomer sleeve increases.

We would therefore like to point out that if a vacuum suction is applied at a process vacuum of  $>-0,1\text{bar}$ , this vacuum is always to be compensated for in the air operated pinch valve.

The easiest way to compensate is by means of pure process vacuum which is activated in the bleed side of the solenoid valve via a bypass.



If there is no pure process vacuum available, or the vacuum source is too far away from the pinch valves, we alternatively recommend using our AKOVAC control elements; see separate data sheet (Z002-AKOVAC)

We would also like to point out that the air operated pinch valves are to be controlled with a differential pressure (closing pressure) of 2 - 3 bar. Therefore, it is advisable in the case of pure vacuum application (suction) with no overpressure, to reduce/set the differential pressure (closing pressure) of the air operated pinch valves to an ideal closing pressure of 2 - 3 bar by means of a pressure-reducing valve. This measure will have a positive effect on the service life of the elastomer pinch valve sleeve.

